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**ABSTRACT**

The 48 papers in this proceedings focus on aspects of non-formal adult education including international comparative adult education. The papers are: "Lifelong Learning in Perspective" (Knox); "Women in their Thirties: The In-Between Generation" (Caffarella, Freeman); "Development in Women: An Analysis of the Appropriateness of an Age-Related Life Phase Typology" (Knott); "Researching the Relationship between Life Satisfaction of Older Adults and Their Participation in Volunteer Activities" (Deaton, Blieszner); "The Role of Religious Institutions in the Lifelong Learning Process in Roxbury, Massachusetts from 1900-1980" (Dickens); "Political Adult Education: A Study of Community Legal Education in One Major City" (Marx-Singer); "Perceptions of Their Adolescence Held by Adult Incarcerated Males: Implications for Adult Education" (Dowling); "The Measurement of Organizational Climate in the Washington State University Cooperative Extension" (Fortner et al.); "Commitment and Systematic Approach Yield Progress in Civil Rights Compliance" (Gerken et al.); "Testing an Alternate Approach to Extension for Limited Resource Farm Families with Emphasis on Developing Countries" (Mercado, Carter); "Benefits of Noncredit Adult Education in Extension Pride and Non-Pride Groups" (Oaklief); "Factors for Agricultural Extension Success: Organizational, Interactive, and Contextual" (Rivera); "Class Attitudes, Adult Industrial Education,

and the 'New South' in Richmond, Virginia, 1884 to 1904" (Craver); "Nikolai Grundtvig: Eduard Lindeman's Denmark Connection" (Stewart); "Emerging Paradigms and Forms of Adult Education: A Classification Scheme" (Stubblefield); "Refugee Adult Education: A Case Study of an Appropriate Educational Approach in a Technical Society" (Mattocks); "The HRD Professional: A Macromotion Study" (Shipp); "Colleague Coaching to Support Lifelong Learning on the Job: Critical Issues and Implications for Expanded Practice" (Yakowicz); "The Implementation-Replication Extension System: A New, Low-Cost Fuelwood Energy Extension Strategy for Developing Countries" (Belson); "The Cooperative Movement and Greece's Development" (Boucouvalas); "The Role of Adult Education in Development" (Cookson); "The Involvement of Continental European Universities in Continuing Education" (Kulich); "Training for Taking Over: Three Asian Models for Educational Fieldworkers" (Marsick); "Professional Training through Collaborative Research: An Egyptian Case Study" (Rowntree); "The Distance Learning Program at Ikipujung Pandang, Indonesia: Problems and Recommendations for Its Improvement" (Sahide et al.); "Agricultural Extension for the Progressive or Marginal Farmer? The T and V System in Some Sri Lankan Villages (Schneider-Silwa); "A Model of Culture for Cross-Cultural Adult Education: Examples from Agricultural Research Management Training" (Werge); "An Analysis of Adult Learning Styles Using the Myer-Briggs Type Indicator" (Campbell); "Critical Review of Adult Learning Principles from a Self-Directed Learner's Point of View" (Danis, Tremblay); "Effects of Learning Styles and Learning Environment by Levels of Learning" (Korhonen, McCall); "The Relationship between Locus of Control and Value Orientation in Adult Learners" (Londoner et al.); "An Investigation of the Occupational Reading Demands of the Plumbing Trade" (Chang); "Assessing the Impact of Adult Literacy Education" (Copeland et al.); "Interpersonal and Institutional Support: The Impact of Significant Others" (Lewis); "Two Years After the GED Tests: Employment, Education, and Training Activities of GED Examinees" (Reed, Malizio); "Marginal Adult Educators: The Part-Time Instructors of Adults" (Draper); "Notes and Comments on the Panel 'Lifelong Learning--A Problem of Definition, Policy, and Value'" (Martell); "Government and Adult Education in Canada" (Thomas); "An Analysis of the Policies and Issues Which Resulted in the Formation of the Maryland Fire-Rescue Education and Training Commission Using the Systems Theory Model of Policy Formation" (Walz); "Clerical Women as Returning Students" (Bomboy); "Graduate Adult Education as a

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LIFELONG LEARNING  
RESEARCH CONFERENCE  
PROCEEDINGS

FEBRUARY 21, 22, 1985

DEPARTMENT OF  
AGRICULTURAL & EXTENSION EDUCATION

THE UNIVERSITY OF MARYLAND  
COLLEGE PARK, MARYLAND

COMPILED AND EDITED BY

WILLIAM M. RIVERA  
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## PREFACE

This publication is a report of the proceedings of the Seventh Annual (1985) Lifelong Learning Research Conference held at the University of Maryland in College Park, Maryland on February 21 and 22, 1985. The conference focus on non-formal adult education grew out of a concern with problems in this region and the need to facilitate dialogue between researchers and practitioners involved in their resolution. Papers dealt with adult/continuing education and concerns such as aging, literacy, teaching, learning, policy community development, human resource development, extension education, volunteerism, and research methodology. This year's conference focus was on international comparative adult education.

This conference was designed to build interagency linkages in the region but has developed a national reputation. Sponsoring agencies include the Maryland Cooperative Extension Service the University of Maryland's Department of Agricultural and Extension Education, the Conference and Institutes Division of University College (University of Maryland), the American Association of Adult and Continuing Education, the Metropolitan Washington Association for Adult and Continuing Education, the Maryland Association of Adult, Community, and Continuing Education, University of Maryland Center for Community Education Development, Maryland State Department of Education, Virginia Association for Adult and Continuing Education. The steering committee included representatives from the University of the District of Columbia, the University of Maryland, Virginia Polytechnic Institute, The Pennsylvania State University, George Mason University, the Maryland Cooperative Extension Service, the American Council on Education, the U.S. Department of Education, the Maryland State Department of Education, the U.S. Department of Agriculture, North Carolina State University, Virginia Commonwealth University, Virginia Tech, and Prince George's County Extension Service.

A major goal of the conference was to bridge the gap between theory and practice by providing a mechanism through which researchers and practitioners could share their concerns with each other. The conference had an interdisciplinary focus, bringing together people with different academic backgrounds who share similar concerns with lifelong learning issues.

The papers presented were selected "blind" by a peer committee that reviewed over 120 abstracts. The abstracts published in these proceedings were reproduced directly from copy provided by the authors. The authors' names and addresses are listed at the bottom of the first page of each abstract. If you desire more information, please correspond directly with them.

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The Department of Agricultural and Extension Education, University of Maryland, College Park, is a multidisciplinary department featuring graduate programs in Adult, Continuing and Extension Education. With a graduate faculty membership of 12, the department has specialties and interests in international education, community development, youth leadership and development, environmental education, community services, and teacher education in agriculture. The Department has traditionally maintained close working relationships with the Federal Extension Service, U.S. Office of Education, the National 4-H Center, the National FFA Center and the Maryland State Department of Education. In addition to the Adult, Continuing and Extension Education Graduate Program, graduate programs in Community Development and Rural Sociology, Environmental Education and Agricultural Education are offered along with an undergraduate teacher education program in agriculture. For further details write: Department of Agricultural and Extension Education, University of Maryland, Room 0220, Symons Hall, College Park, Maryland 20742.

The Maryland Association of Adult, Community, and Continuing Education

The Maryland Association of Adult, Community, and Continuing Education (MAACCE) is a professional association representing adult educators in the state of Maryland. MAACE is the result of a merger of MAAE, MAPSE, and MACE in January 1983, and is the Maryland affiliate of AAACE. MAACCE provides a variety of activities and interest areas for adult educators in public schools, colleges and universities, hospitals, correctional institutions, community organizations, government agencies, cooperative extension, and business and industry, through its five divisions: adult education, community education, continuing education, correctional education and literacy. An annual conference, several regional workshops, and three different publications are available to members, as well as a directory of consultants and an active legislation information network.

## Adult and Community Education Branch Division of Instruction, Maryland State

The Adult and Community Education Branch, part of the Division of Instruction, is responsible for the establishment and maintenance of federal and State-funded programs in adult and community education. The mission of the branch is to enhance and expand adult and community education offerings in the State of Maryland. This is accomplished through grant awards to local agencies, inservice and technical assistance, monitoring and evaluation processes, research, and dissemination. Program areas include Adult Basic Education, Adult General Education, GED Instructional programs, External Diploma Program, Evening High School, School-Community Centers Program, the Multi-Service Community Centers and Volunteer Programs. The branch office is located at the Maryland State Department of Education headquarters, 200 W. Baltimore Street, Baltimore, Maryland 21201.

## American Association for Adult and Continuing Education

American Association for Adult and Continuing Education (AAACE) was founded on 11/12/82 at the National Adult Education Conference in San Antonio, Texas, as a result of the consolidation of the Adult Education Association of the USA (AEA) and the National Association for Public Continuing and Adult Education (NAPCAE). These associations served members and the public for over 30 years and this historical consolidation has united over 8,000 members and subscribers.

The purpose of AAACE is to provide leadership in advancing the education of adults in the lifelong learning process. This goal is achieved by unifying the profession, developing and utilizing human resources, encouraging and using research, communicating with the public and individual and institutional association members, offering numerous member services and publications, and otherwise furthering the multiple causes of adult and continuing education.

AAACE's professional journal, Lifelong Learning, published eight times per year, offers authoritative articles covering current trends and issues in adult and continuing education. The journal keeps readers up-to-date on new books, innovative instructional strategies, and practical applications of research in adult education. AAACE also publishes Adult Education Quarterly, the major research and theory journal in the field. Its in-depth articles on research and evaluation provide a vital tool for professors, students and researchers. In addition, each member of the Association receives the AAACE Newsletter, published ten times per year. The Newsletter reports on developments in national and state legislation, innovative programs, conferences, job announcements and people-in-the news.

Each fall the AAACE in concert with a state affiliate association sponsors and conducts the largest national conference in the U.S. It also co-sponsors state affiliate regional conferences, and several regional seminars and workshops.

## Metropolitan Washington Association for Adult and Continuing Education

The Association for Adult and Continuing in Education of Metropolitan Washington is a "state" affiliate of the American Association for Adult and Continuing Education, which provides leadership in advancing adult education as a lifelong process. Membership offers opportunities to:

- o Participate in an active and growing organization of adult educators.
- o Exchange ideas with colleagues at regular meetings of the association.
- o Keep abreast of current trends and innovations in the field.
- o Voice individual and group advocacy for the future of adult education through the legislative process.
- o Receive the newsletter of MWAACE.

For further information write: Metropolitan Washington Association for Adult and Continuing Education, Washington, DC 20036.

## Virginia Association for Adult & Continuing Education

The Adult Education Association of Virginia, a vital, dynamic association of thirty years, is a comprehensive organization of individuals whose occupations and interests influence the education and training of adults. Membership (currently in excess of 200) includes educators from public and private schools, colleges, community colleges and universities as well as training directors from business, industry, the military and governmental agencies. The AEAV is committed to working for greater individual growth, a better Virginia and a better nation by encouraging, stimulating, and extending the continuing education of its own members and others throughout the state. The membership shares a determination to improve the quality of adult life in Virginia through continuing education.

## University of Maryland University College Conferences and Institutes Program

Informal short courses and intensive training programs are offered by the Conferences and Institutes Program for participants wishing to take course work on a non-credit basis at the University level. Programs address personal and professional development and advancement in general knowledge. Career oriented courses are awarded Continuing Education Units (CEU's) --a nationally recognized method of evaluating non-credit professional courses. Courses are offered in College Park, Baltimore, Annapolis, and other statewide and national geographic locations.

## American Council on Education

The American Council on Education (ACE), founded in 1918, is the nation's major coordinating body and principal voice for postsecondary education. It is an independent, comprehensive, voluntary association that is dedicated to the improvement of American postsecondary education. In cooperation with other associations, it serves as the locus of discussion and decision making on education issues of national importance. Composed of more than 1,600 postsecondary institutions and national and regional organizations, ACE has a thirty-seven member board of directors representing the diversity of American postsecondary education.

The Council acts as a coordinating body among national and regional education associations, while providing national leadership in cooperation with others, for improving standards, policies, programs, and services for post-secondary education; provides national leadership on equality issues for women, minorities, and older students in higher education; coordinates self-regulation initiatives; and offers technical information and advice on access for the handicapped; works with other associations in representing higher education to the federal government and serves as amicus curiae in judicial proceedings when appropriate; sponsors cooperative seminars to help presidents and other administrators improve management and leadership, offers a fellowship program to strengthen academic administrative leadership, and conducts national identification programs for the administrative advancement of women and minorities in higher education; facilitates access to higher education by evaluating and establishing credit recommendations for noncollegiate learning in the military, corporations, government agencies, labor unions, and associations; and operates the General Educational Development (GED) Testing Program for learning equivalency at the high school level; coordinates policy advice on issues of international education for ACE member institutions and the general higher education community and represents higher education interests in international education to the U.S. Government and foreign agencies; sponsors the Council for International Exchange of Scholars, which conducts the senior Fulbright program and promotes and encourages opportunities for international education exchange.



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## LIFELONG LEARNING IN PERSPECTIVE

Alan B. Knox<sup>1</sup>

The concept of lifelong learning provides a useful perspective to encourage planning and cooperation. As such this concept is not a goal or a program and makes a limited contribution to policy making and value judgments. Such judgments should focus on outcomes and benefits to individuals and society.

Most recent definitions of lifelong learning reflect the UNESCO perspective presented by Faure et al in Learning To Be (1972). In that definition, lifelong learning is an overarching concept that includes systematic learning by all people of all ages on all topics including informal self-directed learning as well as formal and non-formal educational programs by all types of providers.

In a pluralistic society, no one is able to define the purpose of lifelong learning. It is not a goal or a program, so much as a comprehensive perspective on learning and education by young people as well as adults, that helps us understand relations among the many parts. Without such a comprehensive perspective, we may restrict our concern for learning to formal education (and neglect informal self-directed learning), or our concern for education to preparatory education of children and youth (and neglect continuing education of adults).

Such a perspective may help us recognize important interrelationships among the parts (such as the continuum of professional education), as well as instances in which we are devoting insufficient attention to some parts. Examples of such neglect include content areas (such as values), life roles (such as citizen), and people (such as older adults).

What is the utility of such a comprehensive lifelong learning perspective, for an overarching national association such as the American Association for Adult and Continuing Education? The following potential benefits seem more than sufficient to warrant serious attention to a lifelong learning perspective by an association with a distinctive mission of advancing a shared vision and collaboration among the various segments of the adult and continuing education field (Knox, 1984, 1985).

1. A lifelong learning perspective encourages cooperation among preparatory and continuing education providers. We have tended to over-emphasize differences by comparing negative examples of preparatory education with positive examples of continuing education. More attention should be given to strengthening the continuum of education so that preparatory education contributes to a lifetime of learning and continuing education helps solve preparatory education problems.

2. Attention to both informal and formal aspects of lifelong learning can help us to appreciate the infrastructure of learning projects on which continuing education can build, as well as to recognize the potential contribution of helping people learn how to learn in order to facilitate self-directed learning.

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<sup>1</sup> Alan B. Knox, President, AAACE, 1201 Sixteenth Street, N.W. Suite 301, Washington, D.C. 20036

3. A comprehensive perspective on the variety of programs and providers can enable us to recognize and strengthen the distinctive contribution that can be made by each provider agency, and to refer adults to other programs likely to serve them better.

4. Understanding both similarities and differences among various types of providers can lead to collaboration, especially when there are shared goals, complimentary contributions, and mutual benefits.

5. Recognition of the potential contributions and benefits for all educators can encourage concerted efforts to encourage and support policies to strengthen a learning society.

However, having a comprehensive perspective on lifelong learning makes a limited contribution to policy making and value judgments. This takes attention to outcomes more than relationships. Rekindling our historic commitment should focus on responsiveness to adult learners, especially those who are less advantaged or hard to reach. Continuing education practitioners with such commitment are not just functionaries who only make arrangements for education participation by adults. Instead we should be advocates on behalf of adults' educational goals. In addition to external advocacy (oriented toward public understanding and policy) we should be effective internal advocates so that our programs are well aligned with goals and well supported by policy makers within our parent organizations.

Too often in the past we have reacted to external demands and constraints. We should give more attention to strategic planning and deliberate priority setting (Keller, 1983). That is where the important policy making and value judgments should be made. A lifelong learning perspective should increase our collective impact, in large part by encouraging providers to emphasize their distinctive contributions as they match client needs and organizational purposes.

#### References

Farue, E. and Associates, Learning to Be, UNESCO, Paris, Harrop London, 1972.

Keller, G. Academic Strategy, Baltimore: Johns Hopkins University Press, 1983.

Knox, A. "The Distinctive Mission of AAACE," Lifelong Learning, 8 (2), October, 1984.

Knox, A. "Our Shared Vision," Lifelong Learning, 8, (4), January 1985.

## WOMEN IN THEIR THIRTIES: THE IN-BETWEEN GENERATION

Rosemary S. Caffarella,<sup>1</sup>  
Stanley Freeman

### Abstract

The purpose of this study, grounded in the naturalistic paradigm, was to investigate how women, ages 30 to 39 years of age, perceive their lives. In-depth semi-structured interviews were conducted with twenty-three women from a rural northeastern state. Major themes emerged from the data including: 1) the importance to these women of relationships and caring for others; 2) the lack of consistent life goal setting for most of them; and 3) a confirmation that these women feel good about being a woman today in spite of role conflicts.

The purpose of this study was to investigate how women, ages 30 to 39 years, perceive their lives. This cohort of women is unique in a socio-cultural sense. Born in families with traditional basic values and attitudes toward gender roles, they came of age in the transformational years of Vietnam and militant feminism. Thrust as young adults into a world of seemingly infinite variability in roles and life styles for women, the traditional role models still remain powerful for them. Bardwick (1980) believes that this generation will have a more profound and prolonged transition period than cohorts either younger or older than they.

In studying adult development in women, two approaches have been used. The first is to base that study in accepted developmental theory (Alexander, 1980; Goodman, 1980; Stewart, 1977; and Zubrod, 1980), primarily that of age/phase theory. The alternative view questions the appropriateness of this theory for women's experience and proposes to begin with descriptive or ethnographic accounts of women's experiences to expand our understanding of what constitutes adulthood. Fewer studies have been conducted within this latter framework (Estes, 1977; Gilligan, 1982; and Rubin, 1979).

Regardless of which assumption underlies the study, the subjects have been for the most part women 40 to 55. Only four studies have included women in their thirties as the primary subjects. Three studies (Alexander, 1980; Stewart, 1977; and Zubrod, 1980) were grounded in the work of Levinson, and focused on his period of Early Adulthood. All three confirmed Levinson's construct of life structure and stable and transitional periods at this stage of life, although emphasis was given to different aspects of that life structure. These women's choices in life were more relational in orientation. The fourth study (Estes, 1977), phenomenological in nature, focused on three categories of women in their 30s: "traditionalists," "career committed," and "recast." One significant theme emerged from her data for all subjects: an expanding awareness of life possibilities with movement toward more of what "I want to do."

### FOCUS AND METHODOLOGY

The study was grounded in the naturalistic paradigm of research. The intent was to capture in her language what each subject perceived as central in her life and the effect this

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might have on her perception of the future. Questions for the study focused on three primary themes: 1) orientation towards life in terms of self, relationships and occupations; 2) conflict arenas; and 3) perception of near and far future. The interrelationships among these basic themes changed through the process of data collection and analysis. The result was enriched presentation of two of the themes (orientation towards life and perception of the future), a submersion of the conflict theme into other parts of the data, and the emergence of three additional themes: 1) goals setting; 2) feelings about being a woman; and 3) self perception.

The subjects included twenty-three women born between 1943 and 1952 and living in one northeastern state in 1982. They were chosen through a process using the purposive role sampling and snowballing technique. A cross-section of the population was sought in terms of age, marital status, being a parent, present employment, income and education. The latter two variables in the sample were not congruent with the general population. Half the sample was college educated and about two thirds were of the middle income range.

The data were collected by tape-recorded in-depth three hour interviews with each subject. The interview team members designed and utilized an interview guide consisting of a genogram and open-ended questions. Case records, organized in a topical fashion, were developed for each subject from notes of impressions during the interviews, transcriptions of audio-tapes, and demographic material. Based on reviewing the case records and listening to all of the taped interviews, coding categories were derived. The data, in the form of mostly verbatim transcripts and case records, were then divided into the agreed upon categories and analyzed to determine the patterns and themes related to the major issues of the study.

#### THEMES THAT EMERGED FROM DATA

##### Self Perception

These women most often described themselves in affective terms. They used words such as sensitive, caring, happy and loving. For example, Theresa, a 37 year old mother of three, who works full-time as a proofreader and binder, saw herself as "compassionate, extremely so. Too much I think. I get hurt easily. So sensitive, too, and moody." Many also conveyed a more instrumental side using descriptions like energetic, intelligent, achiever and independent, used in concert with the more affective terms. For some, describing themselves came easily, for others it was more difficult, and for a few it was a task they definitely did not like doing.

##### Orientation to Others

Most of these women revealed a primary orientation in their lives of being other rather than self-oriented. Some spoke in general terms about this life orientation. "I have always been extremely invested of myself in other people and very concerned with the really significant things in life like caring for other people and sharing." (Marjorie, a 36 year old mother and full-time job holder). Others related this life orientation toward others to their present role in life.

Only because of the ages of my children. I think right now I am still very much geared to them. Only because I want to be. I know I don't need to be. I know I could make circumstances different but both my husband and I don't/we just don't feel that way now. And I think some time soon I'll have my chance again. (Elvira, a 35 year old homemaker with four children)

##### Relationships

The various relationship networks, including family and friends, provided primarily support, care and love for the subjects. In addition, spouses and children gave these women a sense of security and acceptance, while their friends provided them an outlet for sharing and talking. Their most important relationships tended to be with their husbands or significant others, with a few of the married women citing both husband and children. The single women



with children usually identified their children as the primary relationship while childless single women reported connections with friends.

Mary Ann, a 32 year old woman with no children, describes what she receives from her husband this way:

Lots of pats, my husband will tell you. Love, material and emotional support. Maybe a lot of ego building.... He tells me I'm very special.... and that's a nice thing to have someone tell you that. Companionship.... most of the things that you need out of a relationship and he's pretty good.

Though friends, except for the single women without children, were not cited as their most important relationships, having friends for most of these women was extremely important. For the most part, friendships were with other women, with only a few noting other couples and males as friends. As Janice, a 34 year old woman responded when asked "How important is it for you to have friends?"

Really important. It's hard to admit that sometimes because I'm afraid I won't have any, and I want to be able to say it doesn't really matter, but that's not true. I think friends are very important. I think it's important to have women to talk to. Women are much more supportive of women than men.

### Working for Pay

For those women who worked for pay, their work for the most part was enjoyable and important to them. From their paid work they received a sense of accomplishment, self-esteem, self-confidence, contact with people and money. Except for the money, these same themes emerged for those engaged in volunteer work. Penny, a full-time waitress, put it in these terms.

I'm working. I'm lucky. If I wasn't working I wouldn't be where I am today. ... I get satisfaction that I'm doing this on my own with no help from anybody. That I have proved to people.... that I can do things on my own without asking for any help.

For those with families, work tended to be secondary.

I chose to get married, to have children. I chose to have a career but to make it of lesser importance than my family and I'm happy about these choices. Five years ago I didn't feel that way. I questioned whether or not the choices that I made were the right ones. I think the 30s are a time of reappraisal and still the potential for growth. (A 36 year old mother of three, and full-time job holder).

### Goal Setting

Most of these women lacked consistent goal setting in their lives. As teenagers, many of these women saw themselves becoming wives and mothers. While some had very specific educational goals, and a few spoke in terms of having both a career and a family, the career was usually thought of as secondary. Only two as teenagers, both college educated, spoke primarily in terms of a career/job orientation. There were a few who had vague or no specific life goals as a teenager. A sampling of how these women reflected back on their life goals as teenagers follows:

Getting married... can't imagine doing anything else. (Kristen, a 37 year old full-time social service worker and mother of one)

I figured that I would go to college, maybe work, hopefully fall in love and get married and have a family, and/but have some kind of career training, so if my husband died... (Rosemary, a 35 year old divorced woman with no children)

An idealized fairy tale, that I would live happily ever after. But I didn't have any idea of what that meant. (Mimi, a 39 year old divorcee, with one child)

In their twenties, the goals of some of these women shifted. Some thought more in terms of their work life, though not in a sense of life-long career building. "I think at the age of 25 I sort of thought to be married isn't that important. I kind of got into working and enjoyed that. I knew I wanted a primary relationship, but marriage didn't necessarily have to be it." (Candace, a 39 year old nursing administrator). Others shifted their emphasis towards husband and children. "I married, still worked for three years, but then we started having children when I was 25... Then my later twenties, I was entirely wrapped up with children and babies." (Sara, a 31 year old homemaker, part-time freelancer, with two children).

Many reported a shift beginning in their thirties towards a greater awareness of self and their own needs and a questioning as to what they wanted to do with their lives. There appeared for some also a better sense of who they are.

I think by the time you reach your mid-thirties your children are growing and you have more time to think about yourself. That's what I did. I kinda forgot about myself with everybody else's problems and I've just started. I say, why, I'm thirty-five, there's still a little time to think about yourself. (Tosca, a 38 year old, married with one child, part-time worker and homemaker)

But for a few, there was still that feeling of aimlessness and feeling unsure. "I really don't know where I'm going. I need to make myself sit down and think about it." (Aida, a 31 year old divorced woman, with no children).

#### Future Directions

About two thirds of the respondents were fairly optimistic about their personal futures. The other third were vague and confused or uncertain about what the future would hold. Those women who felt good about their personal futures were able to outline specific goals or directions for their lives; those who did not had at best only vague ideas of where they wanted to go. Sally, a 32 year old teacher's aide, described it as follows: "I feel good that I finally know what I'm going to do; what would be good for me and just knowing feels like I jumped over the biggest hurdle of all."

#### Being a Woman Today

Each of the women stated she felt good about being a woman today. Reasons given ranged from feeling grateful for being able to give birth to children to believing women can now do more things than men can do. As Janice, a 34 year old wife, mother and part-time worker put it:

I'm glad I'm a woman. I think women are amazing - more flexible - basically more intelligent. They seem to handle a lot more stress than the average man, responsibility - different types of stress at one time.

Elvira, a 35 year old wife, mother, and homemaker, sees advantages for her four daughters. "I'm so thankful that times are as they are and that they/they are going to have so many more freedoms and so many more things available to them."

The sense that life choices are very different for women today was felt by many of these women. About half of them noted conflict from the shift in women's roles, feeling out of step or an "in-between" generation. A 37 year old woman said:

If I were born two years either way, my life would have been much different than it was. I was on the dividing line between, well, I was probably the last class of women at my particular college that assumed that they would not have to work. If I were two years younger - I think I would have assumed I had to work. My grades would have been a whole different thing and I probably would have followed a different course.... If I were two or three years older, I probably would not have gotten a divorce and I would probably not be working.

Yet the homemaker role identity remains.

When women's lib came out and I think homemakers were made to feel like what I'm doing isn't important and I felt that way for a while but I finally said to someone once. I like what I am doing and that's the most important thing. Since I said that, when someone says to me you'll have to find yourself - I say I'm not lost. I think it's interesting the evolution of women in their 30s - through women's lib in the 1960s and what they are coming back to. The home is sort of resurfacing as an O K place to be and it's alright. (Gloria, a 37 year old wife and homemaker with two children)

#### DISCUSSION AND IMPLICATIONS

The majority of women in this study clearly reported the importance of relationship and caring for others in their lives. This sentiment was echoed in earlier studies of women in their thirties (Alexander, 1980; Stewart, 1977; and Zubrod, 1980). This orientation towards others has been confirmed in other studies on adult development in women at various life stages (Gilligan, 1982; Rubin, 1979).

Women in the present study did not set consistent life goals for themselves. The majority had shifted and changed their goals a number of times depending upon the life circumstances in which they found themselves and their primary life focus on others. It did appear that many of these women during their 30s were becoming more self-oriented and questioning what they wanted to do with their lives. This agrees with findings of Estes (1977) and Zubrod (1980) that this age group appears to have expanding awareness of life possibilities and a developing sense of what "I want to do."

These women for the most part like themselves and felt good, even proud, about being a woman in today's society. Those in their later 30s felt more conflict between traditional and new values and roles. It will be interesting to study the next younger cohort to learn whether these conflicts and pressures disappear with socialization into the new women's roles.

The primary implications from this study related to theory building in adult development, especially adult development in women. Three major questions that emerge are: 1) Is this age 30 cohort of women a product of a unique period in history or will the sentiment of these women appear in younger generations? 2) If women are predominately relationship and other-oriented, what is the pinnacle of human development - autonomy and independence; interdependence and cooperation; or some yet to emerge combination of these two polarities? 3) How does relationship orientation of women relate to being individually goal directed in life, reconceptualized for women, both in terms of basic processes and strategies?

#### References

- Alexander, K. (1980). Psychosocial development in women in early adulthood. Dissertation Abstracts International, 41, 2326A. (University Microfilms no. 80-24070).
- Bardwick, J. (1980). The seasons of a woman's life. In D. G. McGuigan (Ed.), Women's lives. Ann Arbor: University of Michigan Center for Continuing Education of Women.
- Estes, B. (1977). A descriptive study of the developmental phases of women in their thirties. Dissertation Abstracts International, 38(9)-B, 4426. (University Microfilms no. 780-1800).
- Gilligan, C. (1982). In a different voice. Cambridge: Harvard University Press.
- Goodman, S. (1980). Women in their later years: A study of the psychosocial development of women between 45-60. Dissertation Abstracts International, 41, 1973B. (University microfilms no. 80-24103).
- Rubin, L. (1979). Women of a certain age. New York: Harper Books.
- Stewart, W. (1977). A psychosocial study of the formation of the early adult life structure of women. Dissertation Abstracts International, 38(1)-B, 38(1)-B.
- Zubrod, L. (1980). A study of the psychosocial development of women: Transition into middle adulthood. Dissertation Abstracts International, 41, 1899-B. (University microfilm no. 80-24171).

DEVELOPMENT IN WOMEN: AN ANALYSIS OF THE  
APPROPRIATENESS OF AN AGE-RELATED  
LIFE PHASE TYPOLOGY

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Abstract

Adult education writings advocate the use of adult development theories as a guide in program planning. Much of the research into age-related development of adults has been done with men and then generalized to women. The primary purpose of this study was to investigate the appropriateness of a current life phase typology for use with women.

INTRODUCTION

In the adult education literature, life phases and developmental tasks are often referred to as central to program planning. Knowles' (1970) assumptions of andragogy include a readiness to learn which arises in part from developmental tasks. Knowles states that there are two major implications of adult development for educational programming: the timing of the learning and the grouping of learners. Other implications include establishing certain program content for learners at certain times in the life cycle (Glass and Knott, 1982; Knowles, 1970; Knox, 1979; Weathersby, 1976), motivation on the part of the learner to participate (Aslanian and Brickell, 1980; Cross, 1981; Weathersby, 1976), and a rationale for scheduling and providing supportive services such as peer groups and counseling (Lasker and Moore, 1980; Weathersby, 1976).

If adult development is to be used in such varied ways, it is essential that adult educators have an understanding of the scope, function and appropriateness of such theories. Research in this area is at best formative and scattered across disciplines. In organizing the research in adult development, Lasker and Moore (1980) have distinguished between differing conceptualizations of development through life-cycle phases and developmental stages. Phasic development involves the individual adaptation to external, age-related factors, such as role expectations, social relationships and occupational status, through the transformation of the life structure. Stage development is the internal unfolding of cognitive and psychological structures from a lower, less complex form to a higher, more complex and subsuming form. While the changing conditions of adult life are experienced, each individual's experience is unique, depending on his or her psychological development. Both stages and phases are seen as valid ways to conceptualize development. While the research to be reported focuses mainly on the phasic, age-related dimensions of development, it is recognized that there is a need for greater understanding of both.

The most notable research done on age-related development in adulthood has been Levinson's "seasons" of life (1978). While the findings from Levinson's research are important because of their heuristic nature, there are limitations in generalizing his results to the population as a whole. His sample consisted of 40 men. Levinson does make statements regarding the universality of his framework; however, he also states that the decision to exclude women was a deliberate, but difficult one. "Ultimately, it is essential to study the adult development of both sexes if we are to understand either" (Levinson, 1978, p. 8). The use primarily of men as subjects can be found in other life phase research. Yet, Moss et al. (1982) found their sample of professional women did not

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fit a typology arrived at through research on professional men. As the group evidencing the greatest increases in participation (Cross, 1981), women should actually warrant extra attention in the field of adult education.

Bernard (1981, p. 259) states, "It has become apparent that the traditional conception of the life cycle, based as it is on male life experiences, does not tell us much about women." In discussing the normative timing of life cycle changes, Chickering and Havighurst (1981) note that this timing is socially defined and tends to be determined by male career patterns. For women, there appear to be very basic differences. "The reports from women pursuing continuing education tell us that they are encountering a decade or more later the experiences that Levinson's male subjects went through in the early periods of adulthood" (Chickering and Havighurst, 1981, p. 22). In the past, the sequencing of life events for women was related to fertility, and the female life cycle has often been equated with the family life cycle (O'Rand and Henretta, 1982). Contemporary women may arrive at varying life structures as they piece together the contingencies of childbearing, marriage, education, work and/or careers. Any life-phase typology dealing with life cycle changes would need to accommodate the development of both men and women.

#### METHODOLOGY

The primary purpose of this research was to investigate the appropriateness of a current age-related life phase typology, arrived at mainly through research and writings on men, for use with women. This research would add to the unfolding body of knowledge in adult development. Also, the findings would have meaning in adult education when planning programs for, or to include, women.

The population of this study was registered nurses (RNs) in a large, urban area in the Southwest. This predominately female group was chosen because they would be professionals relatively homogeneous in socio-economic status and level of education. From a mailing list purchased from the Board of Nurse Examiners for the State of Texas, a sample of 900 RNs was randomly selected.

The study used a mailed questionnaire format. The first page of the questionnaire collected data on the socio-economic status of the respondent: age, sex, race, marital status, educational level, income, and occupational status. The remainder of the questionnaire elicited the respondent's self-determined life phase. This instrument was developed using the age-related life phase typology synthesized by Cross (1981, pp. 174-175) from writings and research in the field. Cross' meta-analysis includes seven levels delineated by chronological age and three categories: marker events, psychic tasks and characteristic stance. Characteristic stance was omitted from the questionnaire as being more abstract and less applicable for a questionnaire format.

Separate parts of the questionnaire dealt with marker events and psychic tasks (Part I and Part II). The events and tasks for each age grouping were listed but no identifiers were given. Thus, Cross' "Leaving Home (18-22)" became "Stage One." By doing so, no cues were given as to any socially preferred rating. Minor changes in the wording of the typology were made and the term "mentor" was defined.

The respondents were asked to assign themselves on Part I and Part II to a "stage" which best described them on the basis of the events they were experiencing and the tasks they were facing. To avoid their feeling categorized, the respondents were told, "No one fit; one category alone, but there is often one life stage that describes you better than others." They were also asked to list the other stages, if any, that they were involved in at that time.

Nine hundred questionnaires were mailed with a cover letter from the researcher and a stamped, self-addressed envelope. Two weeks later, follow-up letters and another questionnaire were sent to those who had not responded. The final return rate was 423 (47%) with 385 questionnaires being usable.

## DATA ANALYSIS AND IMPLICATIONS

The data are currently being analyzed using the Chi-square "goodness of fit" test and post hoc procedures to test the relationship between the self-reported life phases of women and a theoretical distribution of life phases for men. Descriptive statistics will be used to report the socio-economic characteristics of the respondents. The conference presentation will give a fuller account of the methodology, the findings derived from the data analysis, and the implications for future research and for adult education practice.

### References

- Aslanian, C. B., & Brickell, H. N. (1980). Americans in transition: Life changes as reasons for adult learning. New York: New Directions for a Learning Society, College Board.
- Bernard, J. (1981). Women's educational needs. In A. W. Chickering & Assoc. (Eds.), The modern American college (pp. 256-278). San Francisco: Jossey-Bass.
- Chickering, A. W., & Havighurst, R. J. (1981). The life cycle. In A. W. Chickering & Assoc. (Eds.), The modern American college (pp. 16-50). San Francisco: Jossey-Bass.
- Cross, K. P. (1981). Adults as learners. San Francisco: Jossey-Bass.
- Glass, J. C., Jr., & Knott, E. S. (1982). Effectiveness of a workshop on aging in changing middle-aged adults' attitudes toward the aged. Educational Gerontology, 8(4), 359-372.
- Knowles, M. S. (1970). The modern practice of adult education: Andragogy versus pedagogy. New York: Association Press.
- Knox, A. B. (Ed.). (1979). Programming for adults facing mid-life change. San Francisco: Jossey-Bass.
- Lasker, H., & Moore, J. (1980). Current studies of adult development: Implications for education. In H. Lasker, J. Moore, & E. L. Simpson (Eds.), Adult development and approaches to learning (pp. 1-41). Washington, DC: National Institute of Education.
- Levinson, D. J., & Assoc. (1978). The seasons of a man's life. New York: Ballentine Books.
- Moss, G., Pardoe, C., & Rose, L. (1982). Learning activity and life stage: Two studies of women professionals. Lifelong Learning Research Conference Proceedings, pp. 177-181. College Park, Maryland.
- O'Rand, A. M., & Henretta, J. C. (1982). Women at middle age: Developmental transitions. In F. M. Berardo (Ed.), Middle and late life transitions (The Annals of the American Academy of Political and Social Science, Vol. 464). Philadelphia, PA.
- Weathersby, R. E. (1976). A synthesis of research and theory on adult development: Its implications for adult learning and postsecondary education. (A special qualifying paper for Harvard University, Graduate School of Education, New Haven, CT.) (ERIC Document Reproduction Service No. ED 165 678)

# RESEARCHING THE RELATIONSHIP BETWEEN LIFE SATISFACTION OF OLDER ADULTS AND THEIR PARTICIPATION IN VOLUNTEER ACTIVITIES

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## Abstract

This paper presents the relative merits of disengagement, activity, and personality continuity theories for predicting the older adult's propensity to volunteer and the effects of volunteer activity on life satisfaction.

## INTRODUCTION

Older adults (OAs) represent a rapidly growing subgroup of the population from which volunteers can be recruited. The Bureau of Census has estimated that the value of services rendered by people aged 65 and older through formal ACTION programs alone was 2.6 billion dollars. When informal volunteer activities were included in the estimate, the contribution of OAs rose to services worth 7.8 billion dollars (Allan & Brotman, 1981).

Many gerontologists contend the benefits of volunteerism are reciprocal for the OA in terms of a heightened sense of life satisfaction (LS). That is, by acquiring these socially useful and status bearing roles, volunteers are likely to have higher levels of LS than nonvolunteers (Payne, 1977). Butler (1977) acknowledged social uselessness as a major problem of aging, and noted the importance to gerontological literature and volunteer program development of undertaking studies which would identify factors conducive to and impeding the appropriate utilization of a wide range of skills possessed by OAs. Specifically, research is needed to (a) identify factors which facilitate or frustrate participation by the OAs in volunteer activities, and (b) determine the relationship between participation in volunteer activities and LS among OAs. How should such research be conducted? What theoretical foundations exist in which to ground investigations of volunteer work and subjective well-being in late adulthood? In an initial attempt to answer these questions, this paper (which has been abbreviated for publication) reviews some of the relevant literature and suggests an orientation for future research.

It should be noted that most of the early research reviewed here utilized a very broad concept of voluntary association that included both formal and informal volunteer associations, though it rarely accounted for the differential impact each type of association might have on LS. Equally slighted was the distinction of OAs who commonly lend their name to the rosters of volunteer organizations, but are largely inactive members versus OAs who are regularly active and feel a strong personal commitment to the activity. Much early research was also limited by the use of nonrepresentative samples and an exclusion of variables which could reasonably be expected to mediate the relationship between volunteer participation and LS.

## RESEARCH BASED ON DISENGAGEMENT AND ACTIVITY THEORIES

Disengagement theory emphasizes a process of mutually functional withdrawal of the aging individual and society (Cumming & Henry, 1961). It implies that the OAs are not likely to seek compensation for lost work or social roles through increased or new participation in

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volunteer activities. Early research on adult voluntary association membership seemed to support disengagement theory with its findings that the participation rate was lower for persons in the retirement years than for middle aged persons (Beyer & Woods, 1963; Fosket, 1955). Unfortunately, these studies focused exclusively on chronological age as the key determinant of participation in voluntary associations. In contrast, Edwards et al. (1977) examined multiple predictors of social involvement across adulthood (with respondents aged 45 to 91 years), including formal and informal voluntary associations. They discovered that socioeconomic status, not age, was the most important determinant of participation. Cutler (1980) obtained the same results with a large national sample of adults and aged 21 to over 70: the higher the income, the higher the rate of voluntary association membership.

Cutler (1980) pointed out that past research on voluntary association membership in late adulthood was based on lists of social activities which, by their very nature, were unlikely to involve or be attractive to the OA (e.g., professional and business organizations, unions, youth sport clubs, Parent-Teacher Associations). He maintained that such lists lead to inaccurate conclusions about the extent of disengagement from social participation by the OAs. To correct this problem, Cutler developed a very broad list of voluntary associations and volunteer activities. He found a distinct preference between young adults (21 to 29 years) and old (70 or more years) for different types of activities. This research provides further evidence that a variety of demographic and other characteristics influence participation rates, and no firm conclusions about the inevitability of OAs' disengagement from voluntary associations can be drawn.

Regarding disengagement and LS, Carp (1966) explored personality attributes and happiness among voluntarily disengaged OAs and those who were not disengaged (workers and volunteers). Contrary to the predictions of disengagement theory, it was the paid workers who exhibited the most positive self-concept and the highest LS of the three groups. We conclude that disengagement theory does not appear to be useful for explaining why some OAs participate in volunteer work, which other OAs might be motivated to engage in volunteering, or how such activity relates to LS in old age. Actually, the results of Carp's (1966) study tend to support the activity theory of aging.

Activity theory (Lemon et al., 1972) is based on the assumption that adults maintain their self-concepts through the performance of socially valued roles. From this perspective, OAs who retain the activity patterns of their middle years or acquire compensatory roles in place of those which are lost, are likely to remain happy and satisfied with life (Havighurst, 1963; Schooler & Estes, 1972; Payne, 1977).

Some early research based on activity theory did find a high correlation between voluntary association or volunteer activity and LS among OAs (Freund, 1971, Lebo, 1953; Palmore, 1968); a more recent study by Hunter & Linn (1981) supported the correlation. Unfortunately, these studies did not control for past volunteer behavior or personality type. On the other hand, a study designed as a formal test of the theory with a sample of 411 OAs (Lemon et al., 1972) failed to find statistically significant relationships between participation in formal organizations and LS. More recent studies, some using national samples and employing multivariate techniques to control for the effects of key variables (e.g., health, work and socioeconomic status) have concluded that voluntary association membership does not bear a significant positive relationship with LS (Bull & Aucoin, 1975; Cutler, 1973; Ward, 1979; McLaughlin, 1983; Fengler, 1984; Chambre, 1984).

Thus, activity theory also fails to provide a strong rationale for volunteerism among OAs. In fact, when Lemon et al. (1972) interpreted their results, they made the observation that exclusion of concepts relating to previous life-styles and to individual personality traits severely weakens the predictive power of activity theory. They suggest that personality factors may be stronger indicators of late life LS than mere subscription to either a disengagement or activity mode of behavior.

If the latter conclusion is correct, researchers and practitioners who subscribe to the activity theory may risk applying social pressure to OAs to retain their middle-age life styles and attendant social roles as long as possible. Such an orientation limits the OA's choice of life style as assuredly as do the social ramifications of disengagement theory (Estes, 1979; Ta & McCrae, 1980). Therefore, we remain in need of a theoretical perspective on the



motivations and outcomes of volunteering which (a) avoids monolithic statements about the connection between social activity and LS and (b) embraces the impact of a variety of behavioral styles on the subjective well-being of different OAs.

### A NEW ANGLE: PERSONALITY CONTINUITY THEORY

A conceptual framework which meets the preceding criteria can be found in personality continuity theory. The tenets of personality continuity posit that patterns of behavior are established over the life course, and these modes of reacting and adapting are carried into old age. Within this established range of personality characteristics, new behavioral styles emerge as individuals confront novel situations and demands.

Research within this framework has examined the link between personality, social role activity, and LS in old age. Neugarten et al. (1968) constructed a classification of personality types and the adaptive responses within each type. Those OAs who had "integrated" personalities were all happy, but not all of them were extensively involved in community activities, including volunteer activities. Conversely, some of those who were less well adapted to aging were still engaged in social activities, but were not too happy. The investigators believed that the adjustment styles employed by individuals with various personality types were extensions of life long behavior patterns. Another example of related research comes from the Normative Aging Study (Bell et al., 1976; Costa & McCrae, 1980) which identified clusters of personality traits representing general tendencies toward thoughts, feelings, and behaviors. Three clusters of traits (neuroticism, extraversion, and openness to experience) were considered to be basically stable over adulthood and into old age, although the specific behaviors which reflect the various traits may change over time. Subsequently, Costa and McCrae (1980) maintained that activity per se does not cause high LS; rather, both activity and life satisfaction are expressions of extraversion.

Few studies have focused primarily on personality as the critical determinant of participation in volunteer activities. George's research (1978) did combine the impact of personality and social status over an eight year period upon levels of activity and psychological well-being among 197 white males and 183 white females (aged 50 to 76). George's results indicated activity, per se, was only weakly correlated with LS. Personality proved to be the best indicator of LS, whereas social status emerged as the better predictor of "activity" (which would include volunteer activity).

Indirect support for employing the personality continuity perspective does exist especially in research designed to test activity theory. Dye et al. (1973) compared older volunteers to nonvolunteers. Based on multivariate analysis, only two variables significantly correlated with participation in volunteer-activities: sex and past patterns of behavior relative to participation. Moreover, volunteers did not have higher LS scores than non-volunteers. Overall, these findings suggest that volunteers who did experience high LS did so as a result of the opportunity volunteerism offered them to continue in past volunteer behavior patterns (which continued to express a personality type) established over a life-time. Conversely, non-volunteers were exhibiting association behavior which was consistent with their past reluctance to volunteer. The fact that the non-volunteers did experience a sense of too much free-time in contrast to volunteers and still did not turn to volunteering further suggests that participation in volunteerism is not a panacea for providing meaningful use of leisure time for all older adults. Binstock and Shanas (1976) also claimed that despite the development of senior center programs to draw on the services of older volunteers ostensibly to reduce the incidence of social isolation, the majority of the members are life-long joiners. A study of the characteristics of older volunteers (mean age, 67) at the Andrus Gerontology Center in Los Angeles also indicated that older volunteers were likely to have had a life history of volunteerism and had always viewed volunteerism as a highly enjoyable and meaningful use of time (Sequin, 1976)

### CONCLUSION

Though only minimally researched in connection with volunteer activity among older adults, personality continuity theory clearly merits more emphasis in future longitudinal research. If personality is proven to be one of the best predictors of LS and if older volunteers do not exhibit higher levels of LS than nonvolunteers when past volunteer involvement is held constant.

then the value of volunteer recruitment campaigns among the general OA population should be the general social pressure to participate could be psychologically abusive for OAs who have not traditionally looked to volunteerism for instrumental or expressive benefits in order to achieve LS.

It is further recommended that future research (a) clearly define the concept of volunteer activity and devise research techniques to accurately convey this concept to the subject; (b) determine by self-reports rather than predetermined checklists the OA's current range of volunteer activities; (c) go beyond "age" in pursuing the probable impediments (internal and external) to current or future participation; and (d) determine the value any volunteer activity holds for the older volunteer rather than correlating its importance and contribution to LS with frequency of contact.

Armed with the findings of such research, advocates for volunteer activity among the OAs will move closer to developing volunteer programs and roles which become, by design, mutually supportive of both the community's and the individual's needs.

#### References

- Allan, C. & Brotman, H. (1981). Chartbook on aging in America. Washington, DC: The White House Conference on Aging.
- Bell, B. et al. (1972). The normative aging study. Aging & Human Development, 3, 5-17.
- Beyer, G., & Woods, M. (1965). Living and activity patterns of the aged. Cornell University: Center on Housing and Environmental Studies.
- Binstock, R. & Shanas, E. (Eds.). (1976). Handbook of aging and the social sciences. New York: Van Nostrand Reinhold.
- Bull, N. & Aucoin, J. (1975). Voluntary association participation and life-satisfaction. J. of Gerontology, 30, 73-76.
- Butler, R. (1977). Toward a psychiatry of the life-cycle. In S. Zarit (Ed.), Readings in aging and death. New York: Harper & Row.
- Carp, R. (1968). Differences among older workers, volunteers and persons who are neither. J. of Gerontology, 23, 497-501.
- Chambre, S. (1984). Is volunteering a substitute for role loss in old age? Gerontologist, 24, 292-298.
- Costa, P. & McCrae, R. (1980). Still stable after all these years: Personality as a key to some issues in adulthood and old age. In P. Baltes & O. Brim, Jr. (Eds.). Life span development and behavior (pp. 65-102). New York: Academic Press.
- Cumming, E., & Henry, W. (1961). Growing old: The process of disengagement. New York: Basic Books.
- Cutler, N. (1980). Toward an appropriate typology for the study of the participation of older persons in voluntary associations. J. of Voluntary Action Research, 9, 9-19.
- Cutler, S. (1973). Voluntary association participation and life satisfaction: A cautionary research note. Journal of Gerontology, 28, 96-100.
- Dye, D. et al. (1973). The older adult volunteer compared to the non-volunteer. The Gerontologist, 13, 215-218.
- Edwards, J. et al. (1977). Age and social involvement. J. of Voluntary Action Research, 6, 127-130.
- Estes, C. (1979). The aging enterprise. San Francisco: Josey-Bass.
- Fengler, A. (1984). Life satisfaction of subpopulations of elderly. Research On Aging, 6, 189-212.
- Foskett, J. (1955). Social structure and social participation. American Sociological Review, 20, 431-438.
- Freund, J. (1971). The meaning of volunteer services in the schools--to the educator and to the older adult. The Gerontologist, 19, 205-208.
- George, L. (1978). The impact of personality and social status factors upon levels of activity and psychological well being. J. of Gerontology, 33, 840-847.
- Havighurst, R. (1968). Successful aging. In R. William et al. (Eds.), Process of aging. New York: Atherton Press.
- Hunter, K. & Linn, M. (1980-81). Psychological differences between elderly volunteers and non-volunteers. Int'l J. Aging & Human Development, 12, 205-213.
- Lebo, D. (1953). Some factors to make for happiness in old age. J. of Clinical Psychology, 9, 387.

- Lemon, B. et al. (1972). An exploration of the activity theory of aging. J. of Gerontology, 27, 511-523.
- Payne, B. (1977). The older volunteer: Social role continuity and development. The Gerontologist, 17, 355-361.
- Palmore, E. (1968). The effects of aging on activities and attitudes. The Gerontologist, 8, 259-263.
- Schooler, K. & Estes, C. (1972). Differences between current gerontological theories. In D. Kent et al. (Eds.), Research, planning, and action for the elderly. New York: Behavioral Publications.
- Sequin, M. (Ed.). (1976). Releasing the potential of the older volunteer. Los Angeles: University of Southern California Press.
- Ward, R. (1979). The meaning of voluntary association participation to older people. J. of Gerontology, 34, 438-445.

THE ROLE OF RELIGIOUS INSTITUTIONS IN THE LIFELONG  
LEARNING PROCESS IN ROXBURY, MASSACHUSETTS FROM  
1900-1980

Carrie N. Dickens<sup>1</sup>

Abstract

The purpose of this study was to determine the role of religious institutions in providing lifelong learning experiences for black adults in the Roxbury Community from 1900-1980. Data were collected from university, public, state, community, and theological libraries throughout the city of Boston and surrounding areas. Literature from adult-continuing education, sociology, theology, psychology, philosophy, statistics, history, and community development were examined along with community newspapers. The descriptive component consisted of a combination of structured and unstructured interviews with church members and pastors of local religious institutions.

The role of religious institutions in the lifelong learning process has not always been clearly defined. Many activities that took place in religious institutions were considered to be educative activities, but they were rarely identified as being adult education activities.

The core of the religious education activities in the Roxbury community from a continuing-adult education perspective, was the Sunday School Class for adults and the church services. The church services often incorporated other features that were educational such as the reading of a paper by a church member on some subject of interest.

Knowles (1962) offers another theory about the role of adult education in religious institutions when he indicated that "the adult education role of the churches was traditionally limited largely to indoctrination in the precepts and tenets of particular faiths" (p. 72).

Of the early years in Roxbury, one long-time resident described the situation as being one where the church was all anyone actually owned, and that ownership was shared with neighbors. Going to church was the same thing as going home. Church was home and everything else.

FOCUS OF THIS STUDY

The purpose of this study was to investigate the role of religious institutions in providing educative activities for black adults in Roxbury, Massachusetts. Four research questions were addressed in the study as follows: 1) What were the educational needs of black adults in the Roxbury community from 1900-1980? 2) What was the nature of adult-continuing education activities in the Roxbury community during this eight-decade period? 3) What was the role of religious institutions in meeting the educational needs of the community?

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4) What was the role of religious institutions in providing educational activities that were not identified as religious in nature?

#### METHODOLOGY

As a part of the historical methodology, data were collected from several sources including university, public, state, community, and theological libraries throughout the city of Boston and surrounding areas. In addition to community newspapers dating back to the turn of the century, literature from adult-continuing education, sociology, theology, psychology, philosophy, statistics, history, and community development were examined. Structured and unstructured interviews were also used in this study. Long-time residents of the Roxbury community, members of several religious institutions, and pastors comprised the population for the descriptive part of this study.

#### FINDINGS

An examination of selected religious institutions within the Roxbury community revealed five broad categories of educative activities. The first of these was Career Education. Career Education in this study is viewed broadly as "an effort aimed at refocusing...the actions of the broader community in ways that will help industries acquire and utilize the knowledge, skills, and attitudes necessary for each to make work a meaningful, productive, and satisfying part of his or her way of life" (Hoyt, 1978). Religious institutions in Roxbury were not only concerned with spiritual and material development, but they reached out into the larger community to provide help in terms of employment opportunities. Such efforts were on-going church programs.

The second broad category of educative activities was Community/Civic Education. This refers to any educational activity available to the community as a whole to enhance and upgrade the community through its members. Religious institutions broadened their scope for community service and involvement through civil rights activity. Nelsen and Nelsen (1975) report that "a spirit of militancy had long been present in the black community nurtured... especially by the Black Church which had reminded its followers that they were God's people, and that justice would eventually come to exist on earth" (p. 57).

The third broad category was Cultural Education. In this study cultural education refers to those adult-continuing education activities which will improve one's ability to socialize both within and outside the community in whatever manner is considered to be acceptable for the period involved. One long-time resident of the Roxbury community commented, "We had more adult education in church than we could afford outside. There were at least forty different clubs at Charles Street Church twenty years ago." There were a variety of activities in religious institutions with a cultural emphasis.

The fourth broad category of educative activities was Family Development Education. In this study, Family Development Education is characterized as education for the family to guide the development of individual family members, parents, children, or the entire family unit. Brown (1948) adds that "it has for general objectives the enrichment of family experiences through the more skillful participation of all family members in the life of the family group" (p. 83). Religious institutions in the Roxbury community have a history of helping the family. These institutions were concerned with such issues as juvenile delinquency, divorce cases, and problems resulting from substance abuse. Such issues were a part of the regular programming for religious institutions in the Roxbury community.

The final broad category of educative activities in the Roxbury community was Religious Education. The core of the religious education activities from a continuing-adult education perspective, was the Sunday School Class for adults and the church services.

The above mentioned broad categories of educative activities in the Roxbury community were examined within four segments of time. They were: 1) 1900-World War I -- a period when black people were beginning to move into Roxbury; 2) Post World War I - World War II -- a period when the migration of lower income blacks from the southern part of the United States and the

Great Depression created additional needs for continuing education in the Roxbury community; 3) 1946-1959 -- a period which marked the continued rise of the black population, thereby, placing considerable demands on religious institutions in the community in terms of the volume and range of educative activities; and 4) 1960-1980 -- a period of social upheaval, and a period when the population characteristics of Roxbury changed from predominantly white to predominantly non-white.

In summary, it appears that continuing-adult education activities in religious institutions flourished from the turn of the century through 1980. "Black Churches in Boston have deep historical roots. Individually they represent pillars of strength, the foundations on which black life in Boston have been built and survived" (NAACP, Pamphlet, 1983).

### CONCLUSIONS

Several conclusions can be drawn from the findings. The first is that the role of religious institutions in the lifelong learning process in Roxbury, Massachusetts was of utmost importance to the community in the sense that a large portion of the educative activities for the community came out of religious institutions and organizations affiliated with these institutions. This includes clubs and societies (e.g., The Saint Alphonsus Association of the Mission Church Parish, The Saint Mark Musical and Literary Union of the Saint Mark Congregation Church).

The second conclusion was that adult-continuing education activities in religious institutions in Roxbury have progressed over the past eight decades as one might expect. This is not to say that some of the conditions that existed at the turn of the century which adult-continuing education sought to ameliorate are not still present in the community today to some extent. For example, in the early 1900s job equality was a problem, and career and job development efforts were initiated both by religious institutions and other community organizations. Yet, during the latter part of the century, many decades later, efforts are still needed to battle this same problem.

The third conclusion was that adult-continuing education activities in religious institutions have been bountiful since the turn of the century. Religious institutions and other agencies offering the activities have likewise multiplied to meet the changing needs of the community. Kempfer (1955) describes the reasons for growth in continuing education as being due to 1) rise in educational level; 2) demands of the changing culture; 3) the influence of war; 4) the need for human association.

The third conclusion was that religious institutions often joined together with other community agencies in providing adult-continuing education activities. Each of these agencies provided expertise from their own areas.

The final conclusion was that throughout the five categories of activities identified in this study, there was not a category where religious institutions or some organization which had emerged from religious institutions was not represented. This point adequately supports the view that religious institutions were important to the overall development of the community.

In summary, it appears that the adult-continuing education activities provided by religious institutions in Roxbury from 1900-1980 included everything from literary programs, church services, Sunday School, lectures, and reading rooms to Reading Circles.

This study has implications for both educators and practitioners interested in working with religious institutions to develop, design and implement community programs. It provides a historical basis for planning new efforts; 2) an experiential base from which to do programming, and 3) guidance for developing similar studies in other inner-city communities throughout this country and developing countries around the world.

## References

- Brown, M. Education for family living. Handbook of adult education in the United States. Edited by Mary L. Ely. New York: Columbia University Teacher's College, 1948.
- Bryant, J. R. The black church as hub of a black nation. Unpublished Master's of Theology, Boston University, 1970.
- Bushee, F. A. Ethnic factors in the population of boston. New York: 1903.
- \_\_\_\_\_ Christian Advocate, 1918, 93 (2), pp. 1146-1147.
- \_\_\_\_\_ Christian Science: a century later. Boston: The Christian Science Publishing Society, 1982.
- Coleman, C. L. A history of the negro baptist in boston 1800-1875. Unpublished Master's Thesis, Andover Newton Theological School, 1956.
- Dennis, N. The popularity of the neighborhood community idea. In R. E. Dahl (Ed.), Readings in urban sociology. Pergamon Press, 1968.
- Ellis, C. M. Roxbury Town. Boston: Samuel G. Drake, 1847.
- Frazier, E. F. The negro church in america. New York: Schocken Books, 1964.
- Fry, C. L. The U. S. looks at its churches. New York: Institute of Social and Religious Research, 1930.
- Haith, T. People in the pulpit. The black church, 1974, II, (11), pp. 29-30.
- Hallenbeck, W. C. Introduction. In Community and adult education by W. C. Hallenbeck et. al. Chicago: Adult Education Association of the U.S. A., 1962.
- Horton, J. Generations of protest. New England Quarterly, 1976, 69 (2), pp. 242-256.
- Hoyt, K. B. A primer for career education. Washington, D. C.: Office of Career Education, U. S. Office of Education, 1978.
- Knowles, M. S. The adult education movement in the united states. New York: Holt, Rinehart and Winston, Inc., 1962.
- \_\_\_\_\_ National Association for the Advancement of Colored People. Boston's NAACP History 1910-1982, Pamphlet, 1982.
- Nelsen, H. M. & Nelsen, A. K. The black church in the sixties. Lexington, KY.: The University Press of Kentucky, 1975.
- Owens, B. Son of alabama preacher. The Black Church. 1974, 2 (4), pp. 5-6.
- White, A. O. The black leadership class and education in antebellum boston. Journal of Negro Education, 1973, 62 (4), pp. 504-515.

POLITICAL ADULT EDUCATION: A STUDY OF COMMUNITY LEGAL  
EDUCATION IN ONE MAJOR CITY

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Abstract

This study examined community legal education, a form of political adult education designed to inform people about their legal rights. CLE programs in eight government-funded legal services projects were studied, using survey and grounded theory methodologies. Among the significant findings were: resource allocation for CLE was insufficient; project directors controlled decisions concerning CLE; programs were implemented by lawyers who lacked pedagogic expertise. Recommendations for upgrading practice included: orienting lawyers in adult education theory and practice; augmenting community participation; developing non-government funding sources; forming permanent links with local adult education programs; and building a vigorous and diverse CLE constituency.

INTRODUCTION

Community legal education programs have been established in many neighborhood legal services offices in the United States for the purpose of educating and empowering community residents about their legal rights. Advocates of these programs believe that increasing the legal competency of those who are poor will have a significant impact on their ability to cope with and possibly avoid the many legal problems they are regularly confronted with, such as eviction, consumer fraud, welfare eligibility, and violations of civil rights. These legal problems are substantially different from those confronting the middle class, because failure to resolve them often means not being able to feed a family, obtain a job, or have a place to live (Caplovitz, 1967, Carlin, 1966, Wald, 1966). These community legal education (CLE) programs are funded for the most part by Congress as part of its yearly appropriation for the Legal Services Corporation (1974).

CLE programs are scarcely known among adult educators, because they function within legal rather than educational institutions. For eighteen years legal services has been nationally mandated to "educate the target community about their legal rights and responsibilities" (U.S. Office of Economic Opportunity, 1966). There is an essential need for adult educators to become aware of and assist CLE programs within local legal services offices. These programs have been charged with an enormous responsibility--that of educating the poverty population of approximately 35 million (Kilborn, 1984) about legal rights and remedies.

POLITICAL ADULT EDUCATION

This study views CLE as a form of political adult education, an area that has been designated in England as "a vital part of adult and continuing education deserving greater priority of attention than it has received in

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recent years;" Advisory Council, 1983). In the United States, political adult education, though not yet a separate discipline as it is in England, is gradually emerging as an area of interest and debate. This is largely due to the influence of the writings of the Brazilian educator, Paulo Freire (1973, 1974, 1976) on adult education and empowerment for social change.

The term "political adult education" is open to a variety of interpretations. These range from a traditional approach (e.g. civics or government), where students learn about the constitution and governmental processes, to a radical perspective. In the latter approach, the poor are taught that their positions of powerlessness are due not to their individual shortcomings, but to inherent inequalities within a capitalistic structure. This perspective is always activist and aims to create social change on a local level (Lovett, 1980, Heaney, 1982). In this study, political adult education is broadly defined as education that engages adults in expanding understanding of their political environment so they will be able to actively participate in decision-making. F.F. Ridley (1983) views legal education as political education, maintaining that "law should form the central part of any political education intended to help ordinary people defend their interests." CLE is currently the most widely practiced form of publicly funded political adult education in the United States. It signifies the first time federal monies have been used to sustain educational projects to develop political awareness in poverty communities.

#### PURPOSE OF THE STUDY

Extensive funding cuts in legal services programs, coupled with continued threats by the Reagan Administration to eliminate government-funded legal representation of the poor, have created demands for new ways of meeting the legal needs of the growing poverty population. Legal services regards CLE as a viable alternative to individual legal representation, but to date there has been little research that has focused on the delivery of CLE programs within legal services offices. The purpose of this research was to describe and analyze CLE practice in one major city, and subsequently, to generate a theory of CLE in relation to legal services and adult education. The research was also designed to contribute to general theory on political adult education, and to aid in the development of more effective CLE programs by identifying, comparing and analyzing those factors that have impeded or facilitated program delivery.

#### DESIGN OF THE STUDY

The study utilized both grounded theory and survey methodologies. A survey approach was chosen for part of the study because little was known about CLE, and this method would produce reliable descriptive data, such as area served, number on staff, and levels of funding. Three surveys were developed: a General Survey, administered to eight project directors; a Staff Survey, administered to the staff of one project that had an extensive CLE component; and a Client Survey, designed to assess the legal needs of potential clients. However, the need was felt to probe beyond merely descriptive data, in order to develop an analytical description of CLE that could lead to theory-building and to ultimately upgrading practice. A method was sought that emphasized understanding social interaction. Grounded theory, as outlined by Glaser and Strauss (1967) was selected to supplement survey methodology. This qualitative empirical approach starts with the premise that theory should provide some control over real life situations (Glaser and Strauss, p. 3). It should be inductively generated through systematic analysis of empirical data (Darkenwald, 1980, p. 67). This data generally emerges from participant-observation, a fieldwork strategy in which "the researcher gets to know the situation and the people involved at first hand, and collects data largely through careful observation of behavior and informal interviewing" (Darkenwald, p. 75).

## FOUR BASIC MODELS

The study revealed four basic CLE models: Preventive Legal Education; Pro Se Training; Lay Advocacy Training; and Empowering Community Groups. Preventive Legal Education, the most widely practiced form of CLE, operates on the premise that the more people know about the law, the less likely they are to be victimized by it. General legal information is given to a group in a relevant legal area (housing, consumer law, family law). This model is appropriate for clients or students who have no pressing legal problems. On the other hand, Pro Se Training prepares clients to represent themselves in their immediate problems (tenant actions, divorce, welfare terminations). The classes are limited to pre-screened clients who are considered capable of self-representation, and focus on the details of legal procedures.

Lay Advocacy Training prepares community workers to advise clients on basic legal matters and to represent them at administrative hearings. This approach is widely endorsed in legal services as partial remedy to the current crisis in legal representation of poor people--one legal services attorney for every 9,585 eligible clients--(Pollack, 1983). Lay advocates are frequently employed by local community service agencies, but can also be volunteers. The last model, Empowering Community Groups, holds the most promise of achieving social change. The other models function within an individual framework of educating participants concerning their rights (or their client's rights) and developing the skills necessary to secure them. This model emphasizes broadening this strategy to assist clients and advocates who have a communality of concerns to organize into groups; or to help those groups that have already formed to function more effectively. This model has the most in common with the Community Action Programs (Levitan, 1969) that were the hallmark of the War on Poverty and the current liberatory education movement (Freire, 1973, 1974, 1976; Heaney, 1982; Law, 1982; and Shor, 1980). In legal services this model usually means working with tenants' groups. However, a unique example was an "SRO" Project that provided legal council, social work, and organizing and educational services to tenants living in single room occupancy hotels and rooming houses. This project was the only one with a built-in organizing component, and was funded separately, using no congressional allocations.

## FINDINGS

Grounded theory was used to generate categories and properties from the data and to analyze their interaction. The major category that emerged was the marginality of community legal education within legal services programs. This finding was signaled early in the study when the general Survey revealed that only 3 to 5 percent of budgets for the eight programs were allocated for educational activities, and that lawyers devoted only 1 to 10 percent of their time to CLE. Although there was considerable variation among projects, this marginality was a constant that led to inadequate planning, implementation and evaluation of programs. CLE has always played a tertiary role in legal services because programs have been established for the primary purpose of providing legal representation and engaging in law reform.

Authority conservation, the tendency of project directors to conserve or expand their authority, was observed in seven out of eight programs. Regarding CLE, directors insisted on deciding themselves whether there would be a program, the nature of that program, whether to hire a CLE coordinator, which staff members would participate in the program, and who the program would be for. Two properties associated with authority conservation were role overload and role stress (Biddle, 1979), reported by all eight project directors. Those that were better managers were able to conserve their authority with greater ease, and even occasionally delegated authority to staff attorneys. However, in the majority of offices, attorneys had little opportunity for decision-making and this led to low morale among the staffs.

The third major category to emerge from the data was legal professionalism, the identification of legal services attorneys with a high status, high competency group. This is particularly significant because of the marginal status of legal services within the legal profession. The five properties generated from this category were arcane knowledge, role expectations, role ambiguity, role refusal, and ideological commitment. Arcane knowledge, the concepts, procedures, and terminologies that set lawyers apart from the lay public, must be simplified by those who teach CLE, and communicated to classes. But the role expectations of lawyers do not include teaching. This results in role ambiguity, and often teacher role refusal, when an attorney refuses either to teach or to improve teaching performance. Thus a constant feature of CLE was the pedagogic inadequacy of those responsible for implementing programs. Finally, an attorney's ideological commitment to values, such as equal justice, sometimes includes an accompanying commitment to CLE.

The category of local control describes the basic structure of legal services; independent local offices with separate boards representative of the community. However, the role of the community in determining legal services' policy has always been ambiguous. Role ambiguity, incomplete or insufficient expectations to guide behavior (Bidle, 1979) is a property of local control and serves to weaken the impact of community participation (another property of local control).

All of these categories and properties interact. For example, the category of legal professionalism acts as a property of CLE marginality, and the authority conservation of directors in six out of eight programs functioned to keep CLE within their direct control, thus inhibiting the projects from expanding, and perpetuating their marginality.

## DISCUSSION

The fundamental disparities between law, education, and community action have not been sufficiently acknowledged; nor have the tentative, ad hoc, and not usually very successful ways in which they have interacted been sufficiently examined and criticized. Any theory of CLE must take this radical dissociation into account and try to arrive at some integrative strategies. Different philosophy, training, orientation, and skills have been generated from three different traditions, which are very real forces functioning against this integration. Community action, must by its very ideal of local control, maintain independence; while legal professionalism is an almost inviolate category for attorneys. And education in the United States attempts to be neutral and non-activist, and is deeply rooted in a public system geared to maintaining the status quo (Giroux, 1981). It is even less geared than the legal profession--which has activist, adversarial, and law-confronting components--to give legal knowledge to poor communities.

## CONCLUSIONS AND RECOMMENDATIONS

The study concluded, that in spite of the marginality factor and government restraints, that legal services still offered the best avenue for teaching the poor about the law. First, because of its national institutionalization and its local structure, legal services offers the best network for reaching the poor. Second, legal services staff members have not only the legal knowledge that is required for CLE programs, but also the ideological commitment to work toward furthering equal justice. Third, this is the only legal organization that has a legislative mandate to teach CLE as well as practice law. However, there must be a concerted effort to bring CLE out of its marginal status. And because of legal services' political vulnerability, it needs to link up with as many groups as possible to maximize its CLE efforts.

A number of recommendations were made for the overall improvement of CLE practice. These included: hiring full-time professional coordinators for local offices, and one central coordinator for each region; conducting legal community needs assessments; increasing community participation; recruiting and training members of the community as CLE staff; integrating CLE more effectively with traditional legal services practice; orienting legal services lawyers in adult education theory and practice; and involving the staff in CLE decision-making. General recommendations included: expanding CLE through developing local government and private funding sources; forming permanent links with local adult education programs; and building a strong and diverse CLE constituency.

### References

- Advisory Council of Adult and Continuing Education. Political Education for Adults. Leicester: ACACE, 1983.
- Biddle, Bruce J. Role Theory: Expectations, Identities and Behaviors. New York: Academic Press, 1979.
- Carlin, Jerome; Howard, Jan; and Messinger, Sheldon. "Civil Justice and the Poor: Issues for Social Research." Law and Society Review 1, Nov. 1966.
- Caplovitz, David. The Poor Pay More: Consumer Practices of Low Income Families. New York: The Free Press, 1967.
- Darkenwald, Gordon G. "Field Research and Grounded Theory." in Changing Approaches to Studying Adult Education. ed. by Huey Long; Roger Hiemstra; and Associates. San Francisco: Jossey Bass Publishers, 1980. p. 67, p. 75.
- Freire, Paulo. Pedagogy of the Oppressed. New York: The Seabury Press, 1970.
- Freire, Paulo. Education for Critical Consciousness. New York: The Seabury Press, 1973.
- Freire, Paulo. Cultural Action for Freedom. Cambridge: Harvard Educational Review and Center for the Study and Development of Social Change, 1974.
- Giroux, Henry A. Ideology, Culture and the Process of Schooling. Philadelphia: Temple University Press, 1981.
- Glaser, Barney, and Strauss, Anselm L. The Discovery of Grounded Theory: Strategies for Qualitative Research. New York: Aldine Publishing Company, 1967.
- Heaney, Thomas. Adult Learning for Empowerment: Toward a Theory of Liberatory Education. Reston: Latino Institute Research Division, 1982.
- Kilborn, Peter. "Four Years Later: Who in the U.S. is Better Off?" New York Times. 9, Oct. 1984. sec. 1, p. 1.
- Law, Michael; and Sissons, Linda. "Adaptation or Change? The Social Purpose of Continuing Education." Continuing Education in New Zealand. V. 14, No. 1, 1982.
- Legal Services Corporation Act of July 25, 1974. Public Law No. 93-355.
- Levitan, Sar. The Great Society's Poor Law. Baltimore: The Johns Hopkins Press, 1969. pp. 109-131.
- Lovett, Tom. "Adult Education and Community Action." in Adult Education for a Change. ed. Jane Thompson. London: Hutchinson, 1980.
- Pollack, Ronald F. "Lawyers for the Poor." New York Times. 17 June, 1983, sec.1, p. 27: 1.
- Ridley, Frederick. "What Adults? What Politics?" in Political Education for Adults. Leicester: ACACE, 1983.
- Shor, Ira. Critical Thinking in Everyday Life. Boston: South End Press, 1980.
- U.S. Office of Economic Opportunity. Guidelines for Legal Services Programs. Washington, D.C., Government Printing Office, 1967.
- Wald, Patricia. Law and Poverty. Working Paper for National Conference on Law and Poverty. Washington, D.C., June, 1966. .

PERCEPTIONS OF THEIR ADOLESCENCE HELD BY ADULT INCARCERATED MALES:  
IMPLICATIONS FOR ADULT EDUCATION

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Abstract

Interviews with 100 male inmates provide data concerning characteristics important to educators of adults. Perceptions of their adolescence and demographic data are the bases for conclusions and implications. The men are not high school graduates. Most have completed 9.2 years of school, read at the 5.2 grade level, are serving their second sentence, are 26 years old, and believe their families and community members were very supportive of education.

INTRODUCTION

The need to know as much as possible about the adults they help learn has been a constant for educators of adults. The desire to construct learning experiences that contribute to the needs of the unique individuals adults are has caused adult educators to conduct surveys, examine psychological and sociological literature, and occasionally obtain information about the learners from the learners themselves.

The characteristics of incarcerated adults is of special interest and has great importance to those who help them learn. Marsh (1976) suggested defining the student in correctional education in at least five dimensions: age, ability to learn, socio-economic status, ethnic origin, and sex. According to Marsh, these learners range in age from early adolescence to old age. While their educational achievement is low, their ability to learn does not differ from people on the streets. They most often come from the lower ranges of the economic order, are more often members of an ethnic minority and male.

Reagen and Stoughton (1976) reported their research, the purpose of which was "to: (1) provide answers to basic questions concerning prisoner educational programs, (1) suggest alternative ways of improving and expanding current programs, (3) discuss how the prison system impacts on prisoner education, and (4) uncover crucial topics for further exploration and development." Administrators were interviewed and 55 institutions and systems were visited. They found it difficult, because of limited available data, to make conclusive statements about the characteristics of the prisoners who participate in educational programs, but they believe the majority of prisoners do not participate, and those who do not become even more alienated from the general culture and more inclined to "antisocial behavior and values" than before being incarcerated.

The data they gathered about the correctional educational system enabled Reagen and Stoughton to make several recommendations. One of them relating to prisoner education is that research on "practical ways to deal with the 'educational pathologies' of the majority of prisoners" should be conducted and the findings disseminated as practical handbooks for teachers.

The valuable recommendations of Reagen and Stoughton derive from data obtained from many sources within the correctional education system, but little from the incarcerated themselves. If educational programs of increasing value are to be developed, it is important to learn more and more about the potential clientele. Research is needed about the characteristics of those who decline to participate as well as those who do.

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The research reported here uses data obtained directly from prisoners. Hinck (1975) and McGlone (1984) analyzed data and reported findings using information gained about prisoners from files in the institutions. The research reported here uses information derived from the prisoners using a structured interview format. The relaxation of some human subjects regulations allowed this more direct approach to data gathering.

It is not intended that the research reported herein will address the reasons the men were incarcerated. The purpose is to begin to describe in useful ways the characteristics of men who, for a great number of reasons, are on the inside looking out and who also are in need (recognized or unrecognized) of additional education. How did they become the persons they are? What predisposing factors of their development may be related to each other and allow some conclusions to be reached that have implications for those who help these people learn before, during and after incarceration?

An effort has been made to gain insight into the influences that have created the men who were interviewed. How do they, as adults, perceive the forces in their younger lives that played a role in their development? What is their concept of self? Rosenberg (1979) defines self-concept as: "the totality of the individual's thoughts and feelings with reference to himself as an object . . . it has major significance for his thoughts, feelings and behavior . . . (It) is not the 'real self' but, rather, the picture of the self." An alternative to actual life histories of these men consists of their recollections. The validity of their memories is somewhat questionable. They may not want to remember their earlier life as being better than it actually was. Pride may force them to not admit truths that are not palatable. In any event, the respondent's recollection is a place to start to increase understanding about these adult learners.

#### METHODOLOGY

In an effort to get a "picture of the self" as these men saw themselves, interviews were conducted with 100 randomly selected men in an Ohio medium security correctional institution. The men were asked to recall situations from their growing up years, as they perceived them from the perspective of their adult status. Seven areas of questions were developed in consultation with the teachers and administrators of the educational program. They are:

- (1) Peer relationships
- (2) Crime and its importance to family
- (3) Family and community support for education
- (4) Employment
- (5) Environment of family of orientation
- (6) Success in school
- (7) Age

The correlation of the various interview items will be reported in some cases. A five-point Likert scale was used to obtain the interviewees' perceptions of the various phenomena. Only those correlations that were significant at the .05 level or above are reported. Means will also be reported to indicate the levels of perceptions reported.

#### FINDINGS AND CONCLUSIONS

##### General Data

Half the men were enrolled in the adult basic education program and half had declined to enroll. None were high school graduates. Their mean age was 26 years. Ethnically, half were black and half white. They had been at this prison for about one month during which they were interviewed by the educational personnel and decided whether to enroll in the school.

##### Peer Relationships

The men appeared to remember themselves as being rather independent during adolescence. The mean of their responses to five Likert scale choices was 3.04, with a standard deviation of 1.23, indicating two-thirds of the men recalled their friends seldom helped them decide a course of action.

As incarcerated adults they seemed to be a little more independent when asked about enrolling in an institutional education program that would necessitate moving away from the friends they made in the institution. The mean was 3.68. The standard deviation was 1.20, indicating a similar amount of variance, but tending more to dispense with friendship as a consideration in the move.

At the time the data were gathered, there was a regulation that all men enrolled in the educational program had to live in a dormitory conveniently located one floor above the school. The school, and consequently the dormitory, had a reputation of being populated by more blacks than whites. The attitude of some whites was thought to be negative toward leaving living areas to which they had become accustomed to move to the school dormitory. The mean of their responses was 2.7 with a standard deviation of 1.42, indicating more men tended to feel neutral about the move, but a little more negative than positive. It should be noted that half the men were already enrolled in this school and therefore had experience with living in the dormitory the other half had not. Therefore, it can be assumed the participants and the non-participants would differ somewhat.

There was a +.27 significant correlation between dependency during adolescence and attitude toward living in the school dormitory, indicating that as independence increased, the dislike of the prospect of living in the school dormitory increased. That is, the men who thought of themselves as more independent were more inclined to resist enrolling in the education program because of the dormitory regulation.

There was also a +.27 correlation significant at less than .01 between the attitudes toward living in the school dormitory and leaving their friends to do so. The more desirably the dormitory was viewed, the greater the likelihood they said they would enroll in the school.

Men in the institutional setting seem a little more attuned to peer relationships than they recalled being as adolescents. Their response to a racially mixed environment was not strongly negative or positive. The more independent men were more inclined to reject living in a housing area which was unknown to them.

#### Crime and Its Importance to the Family

How do the men perceive the attitudes of their families toward their incarceration? If there is a culture of crime, being in jail might be considered a cost of doing business. The mean of the five responses possible was 4.03, indicating most families were perceived as disliking the idea of being incarcerated "somewhat," not "very much" as 5 would have indicated. Seventy-one percent of the responses were 4 or 5.

The mean number of sentences served by these men in a state or federal institution, including the present one, was 1.9. Fifty-nine percent were serving their second sentence and twenty-seven their first. Fourteen percent had three or more sentences. A measure of the truthfulness of responses given is indicated by the fact that a check was made in the central office of the actual number of sentences being served. Ninety-nine of the one hundred men gave an accurate response. While it is true that this datum was one of the few the respondents knew could be checked by the researcher, it is meaningful that the two sources of information were nearly identical.

The degree to which other immediate family members were serving or had served sentences might also give some indication of the pervasiveness of crime as a way of life for these men. The mean for the 100 men was .75 family members. Fifty-seven percent were the first of their families to serve a sentence. Nineteen percent had 2, 3, or 4 family members incarcerated at some time.

The minimum sentence being served can be an indication of the severity of the felony committed. The range of terms was 5 to 180 months. The mean sentence was 38.3 months. Forty-two percent were serving sentences of 20 months or less, twenty-five percent - 21 to 40 months, twenty-one percent - 41 to 60 months, five percent - 61 to 80 months, and seven percent - 81 to 180 months.

None of these four measures correlated significantly with each other. It can be concluded that incarceration is viewed negatively, a majority of the men were serving other than a first sentence, were more likely to be the first of their family to be incarcerated and were serving less than 40 month sentences. The evidence is not strong that these men came from a culture of crime, even though more were serving other than a first sentence.

## Family and Community Support for Education

To what degree do these men see their families and community members as supportive of education? Their responses indicate they perceive their families as strongly supportive and community members less so. Eighty-nine percent of the men checked 5, meaning their families were "very much" in favor of education. Only forty-one percent of them gave the same response when asked how much other people in the community prized education.

Considering none of these men were high school graduates, the question arises as to what happened to them on the way to commencement if their families and others believe so strongly in education. Was the parental support, strong as it might have been, insufficient to overcome other forces in these young men's lives?

There is a positive correlation between these two measures but not at the accepted level of significance.

## Employment

Are these men economically deprived prior to their present incarceration? Twenty-five percent reported being self-employed, forty-six percent employed by others, and twenty-nine percent unemployed. Twenty-nine percent is greater than the national averages of unemployment. Considering that many of these men were serving sentences for burglary, the term "self-employed" or "unemployed" may have dubious meaning.

Only eighteen percent of the men had served in the armed forces. This is evidently not an entirely attractive alternative for employment and yet it must be remembered that nearly eighty percent of all men in Ohio prisons are not high school graduates and may in many instances be ineligible for the armed forces.

There seems to be a greater than might be expected incidence of unemployment than in the general population. Considering the low level of educational attainment, there may have been more armed forces members than might have been expected.

## Environment of Family of Orientation

Did these men perceive their homes to be happy places where money and work were not problems during their growing up years? Seventy-seven percent of the men recalled their homelife as "happy" or "very happy" during their childhood. On the other hand, fifty-two percent said that their families were "sometimes," "often," or "always" out of money but sixty-five percent of their families were recalled as being "seldom" or "never" out of work. Fewer families had work problems than money problems.

Is it likely that some of the work families had did not provide enough money for the size of the families? Were family resources always spent in the best way for the family?

These recollections by men in trouble do not provide strong evidence of poverty culture families or at least as perceived by these family members.

## Success in School

While it would appear none of the men were successful in school, what was their perception of their success in grade school? The mean score for this item was 3.49, indicating they believed they believed they were about half way between "Successful" and "Neither Successful nor Unsuccessful." Fifty-seven percent believed they were "Successful" or "Very Successful." Only sixteen percent believed they were at the lower end of the success scale.

The mean grade completed in school was 9.2, showing most dropped out during their second year of secondary school. This was also the year most of them became 16 years old. Only thirteen percent made it through the sophomore year to quit in the last two. Twenty-four percent did not make it to the ninth grade.

The mean score on the Otis-Lennon Test of Reading Ability was the 5.2 grade level. Sixty-eight percent of the sample had reading levels between the 3.3 grade level and the 7.1 grade level. This would seem to indicate that a considerable potential for learning exists. If they suffered any considerable inability to learn, they would probably have not achieved what they had.

If there is any amount of validity in their remembrance of success in elementary school, we must wonder what happened on the way to secondary school. Is their recollection faulty? Were they enjoying an illusory success? Was the change from elementary to secondary school too



difficult? Were other forces so strong that school became truly of secondary or less importance.

These men appear to have potential for learning. Their failure in the school system is probably related to a combination of personal and socially oriented influences which overwhelmed any motivation to learn when they were adolescents. The fact that most did not recall their elementary school experience as being unsuccessful needs to be considered by teachers at the elementary and secondary levels.

### Age

The mean age of the men was 26 years. The standard deviation was 4.5 years. The youngest was 19 and the oldest 38. The older men were more likely to have served in the armed forces. They were more likely to have been self-employed.

These observations might be expected with age.

### IMPLICATIONS

1. The data indicate these men perceive themselves as being more independent than they were as adolescents. Their learning modes may also need to reflect this and include more opportunities for independent rather than group oriented learning.
2. Teachers in prison educational programs need to have an orientation to the subcultures from which their students come. Crime, as a way of life, will most likely be foreign to many teachers raised in a middle-class milieu. The teachers will also need to know more about the general characteristics of adult learners.
3. The role of education in the rehabilitation process needs to be examined and reexamined continually. The fact that so many of these students and prospective students are repeat offenders indicates the need for this examination.
4. Existing family relationships from the homes of orientation these men recalled as being happy should be utilized in helping them become motivated to learn while incarcerated. If their families are as enthusiastic about education as they recall, they may be willing to assist the inmate in establishing objectives.
5. The world of work should be emphasized in the curriculum so that the men can build on the experiences they had as employed or self-employed persons before being incarcerated.
6. Grounded theory research should be conducted with these drop-outs to determine significant events during elementary and secondary school years that resulted in their failure to graduate from high school.

### References

1. Hinck, J. H. (1975). Differences in Selected Variables of Prison Inmates Who are Completers and Non-Completers of a Three Year College Program (Doctoral dissertation, The Ohio State University, 1975). Dissertation Abstracts International, 36, p. 1836.
2. Marsh, John J. (1976). Philosophical Considerations of Prison Education: "Pro and Con." In M. V. Reagen and D. M. Stoughton (Eds.), School Behind Bars: A Descriptive Overview of Correctional Education in the American Prison System (pp. 24-25). Metuchen, NJ: The Scarecrow Press, Inc.
3. McGlone, J. (1984). A Comparison of Selected Variables of Prison Inmate Participants and Nonparticipants in an Adult Basic Education Program (Doctoral dissertation, The Ohio State University, 1984).
4. Reagen, M. V. and Stoughton, D. M. (Eds.) (1976). School Behind Bars: A Descriptive Overview of Correctional Education in the American Prison System. Metuchen, NJ: The Scarecrow Press, Inc.
5. Rosenberg, M. (1979). Conceiving the Self. New York: Basic Books.

THE MEASUREMENT OF ORGANIZATIONAL  
CLIMATE IN THE WASHINGTON  
STATE UNIVERSITY COOPERATIVE  
EXTENSION

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Abstract

The paper explored the applicability to the Washington State University Cooperative Extension of organizational climate measurement. Variables used to measure organizational climate were adapted from R. L. Kert's book, The Human Organization. Organizational variables addressed in this study were leadership, motivation, communication patterns and channels, interaction influence, decision-making process, goal-setting, control and training. Statistical tests were used and significance was tested at the .05 level. The administrative style perceived by faculty was a low to middle system three (consultative).

ORGANIZATIONAL CLIMATE

Introduction and Background

Effectiveness, the accomplishment of more with a given amount of resources, to an organization is significantly influenced by the organizational climate, the tone or feeling, of a human organization. The relationship's have implications for the development of management of strategies in the field of education. Consequently, the purpose of this paper was to explore the applicability to the Washington State University Cooperative Extension of organizational climate measurement and to establish a bench mark for subsequent measurements.

Organizational climate measurement studies have been made in the industrial setting and formal education settings such as public schools. The distinctive organizational structure of Cooperative Extension raises a question as to whether Rensis Likert's methodology of organizational climate measurement would apply to an Extension service. Likert's theory describes four management patterns or systems. The patterns range on a continuum from one to four.

System four is described as a participative group style; system three is known as a consultive style. The benevolent authoritarian style and the exploitive style are names from systems two and one, respectively.

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In the words of Hershey and Blanchard; system one is a task oriented, highly structured authoritarian management system, while system four is a relationships/oriented management style based on team work, mutual trust, and confidence. Systems two and three are intermediate stages between two extremes which approximate closely Theory X and Theory Y assumptions. In Likert's theory, an organization is composed of three variables: a) casual variables, b) intervening variables, and c) end result variables.

Organizational variables addressed in the study were leadership, motivation, communication patterns and channels, interaction influence, decision-making process, goal-setting, control, and training. A statistical comparison of the main scores of the six processes were made.

### Purposes and Objectives

The general purpose of the study was a measurement of organizational climate in the Washington State University Cooperative Extension. The major objectives of the study were to identify and correlate the organizational variables of Likert's management patterns or systems to the major organizational variables of leadership, motivation, communication patterns and channels, interaction influence, decision-making process, goal-setting, control, and training.

### Procedures

The survey population consisted of all County and State faculty (N = 263) of the Extension service. The population included County Agents, Specialists, and Extension Administrators.

The survey instrument consisted of two parts. The first part consisted of variables used to measure organizational climate, and adapted from the work of Likert. The instrument was constructed by the writer and his committee. The survey instrument was delivered to the survey population with a cover memorandum from the organization's evaluation specialist. Respondents were asked to return the completed survey instrument. The rate of return was 82.5 percent, with the return of 217 survey instruments. Of the number returned, 206 were usable, for a usable rate of 78.3 percent.

The statistical analysis was conducted through the College of Agricultural Statistical Services Component. Statistical tests such as correlations and probability tests were used to analyze the data. Significance was tested at the .05 level.

### RESULTS

The Extension service appears to have a healthy climate. The administrative style perceived by the faculty was primarily a low to middle System three (consultive). The subjective analysis of the researchers led to the conclusion that the system seems to be healthy overall in regards to Likert's System one to four continuum. The conclusion is objectively substantiated by comparing the mean scores of the organization processes (leadership, communications, decision making, etc.) of Extension to the initial and final mean scores of the processes as perceived by the respondents.

Faculty wanted to improve their climate. The preferred ("like") profile, indicated a desire by all organization members to move their climate toward System four (Participative Group). No difference existed between geographical areas except with regard to the process of control. The significant difference (.05 probability) with regard to the control processes also appears when means are compared with sex. When comparing the perceptions between sex, the analysis revealed that males as a group consistently perceived climate more toward a System four (participative) than did females. Further, the perception between sex was significantly different (.05 probability) on the variables of leadership, motivation, and control.

One can conclude from this study that Likert's methodology and procedures for measuring organizational climate has relevance for research on climate in the Extension service. The study provided valuable information that was consistent with other studies. The operation of the study ran rather smoothly. The smoothness was substantiated by the 82.5% return of survey instruments. The survey was handled with reasonable effort and its replication would be simplified since the survey procedures had been developed and proven.

#### IMPLICATIONS

These are the implications drawn from the study.

1. The applicability to Extension of climate measurement has been substantiated. Further research using climate measurement can be used to monitor the learning environment.
2. Measurement should be extended to the staff and clientele of Extension. The present study included only faculty; thus, the perceptions may contain some distortions without analyzing perceptions of staff and clientele.
3. Measurement of Extension should be done on an annual basis perhaps more frequently if events warrant. Such events might be in-service staff development or significant faculty or staff changes. Such measurements given data on current perceptions of the climate which provides time for positive action to improve the organization before irreconcilable conflict and serious breakdown in communication occurs.
4. A possible problem with control processes is suggested by the significant differences (.05 probability) that occur when analyzing various demographic characteristics. This problem should be researched which may lead to possible improvements in the control processes.

#### References

- Likert, R. The Human Organization. McGraw-Hill, New York, New York, 1977 (revised) pp. 260.

## COMMITMENT AND SYSTEMATIC APPROACH YIELD PROGRESS IN CIVIL RIGHTS COMPLIANCE

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### Abstract

The Virginia Cooperative Extension Service has, since 1980, been working toward implementation of a negotiated plan for compliance with Title IV (race, color, national origin) and Title IX (sex) of the Civil Rights Act. As a public agency receiving major funding from the State and Federal Governments, it is legally and morally right that programs and employment opportunities be made available to all citizens of the Commonwealth. This paper outlines the characteristics of the plan, the process developed and utilized to help insure implementation of the programmatic aspects of the plan, and progress in that implementation effort.

### DEVELOPMENT OF THE PLAN

During 1979, the Office of Equal Opportunity of the United States Department of Agriculture (OEO-USDA) conducted a program audit of the Virginia Cooperative Extension Service (VCES). VCES was found deficient in several areas of program compliance. These areas were related to Title IX of the Civil Rights Act.

Careful negotiation with OEO-USDA led to the first voluntary compliance plan for VCES being finalized in March, 1980. To bring Extension sponsored organizations into full program compliance, Extension Homemaker Clubs (EHC) and 4-H clubs were to be racially balanced comparable to the communities in which they were located. Sexual balance of the 4-H clubs and the recruitment of males in EHC were added goals of that plan. Other areas addressed by that plan were affirmative action steps in all Extension meetings, increased program emphasis with low-income farmers, review of all educational materials and programs for sexual and racial bias, and all aspects of equal opportunity for employees. An important point to note relative to membership in EHC and 4-H in that plan was that there was no latitude built in for failure to achieve an ideal racial mix. The clubs had to achieve the ideal mix within a designated time period or the clubs were to be disbanded.

In April, 1981, the Dean of Extension temporarily halted implementation of the plan due to obvious drastic decreases in membership of sponsored clubs. Another review of the situation by OEO was requested.

During the summer and fall of 1981 and winter of 1982, OEO conducted a review and offered, in March of 1982, an alternative procedure for reaching compliance. VCES accepted this opportunity and set about to develop a second voluntary compliance plan. With involvement of staff from throughout the organization, the second plan was finalized in April, 1982.

A key concept incorporated into the 1982 plan was "all reasonable effort." In essence, this concept states that when a group is putting forth an effort to meet compliance guidelines, documenting that effort, and is achieving less than desired results, sponsorship of the group will be continued by VCES. The ultimate goal is still racial and sexual balance for all sponsored groups, yet it is recognized that groups may legitimately encounter difficulties in meeting the goal. ARE (all reasonable effort) must be on-going, and was defined in the 1982 Addendum in the following specific terms.

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"All reasonable effort is a combination of actions designed to communicate to all persons that EH and 4-H Club memberships are open, that non-members are welcome and encouraged to become members, and that VCES subscribes to a balanced membership philosophy. The following factors will be considered in determining whether VCES personnel and EH and 4-H Clubs have made all reasonable efforts: 1) The number of planning sessions held between VCES personnel and volunteer leaders and prospective leaders representing various racial groups for the purpose of attaining a comprehensive community club program and a racially and sexually balanced membership; 2) The number of membership promotion drives held by VCES and individual 4-H and EH Clubs to attract underrepresented groups by race and sex to join the Extension activities and clubs; 3) The number of additional projects and activities designed to attract racial and sexual groups not adequately represented in the present membership. These may include such efforts as joint activities by clubs; 4) The recruitment activities for volunteer leaders representative of the race(s) not adequately represented in the present leadership; 5) The places where club meetings and other extension activities are held so that they are located at sites available to all interested groups. This may include rotation of meeting locations; 6) The type and frequency of announcements of club meetings including the presence of the nondiscrimination statement that the clubs are open to all individuals regardless of race, color, age, national origin, sex, religion, handicap, or political affiliation; 7) Continuous actions taken by VCES and clubs to ensure that all people, especially minorities, are aware of the club's existence, time of meetings, and meeting places by use of the following methods: a) Placement of announcements and posters in public places frequented by all racial groups; b) Use of all available public service mass media, including radio, newspaper, and television, to inform potential beneficiaries of the program and of their opportunity to participate; c) Personal letters and circulars addressed to defined potential beneficiaries inviting them to participate, including dates and places of meetings or other planned activity; d) Personal contacts by VCES personnel and volunteer leaders to a representative number of defined potential beneficiaries in the defined community in which the club serves to encourage participation; e) Community groups contacted to assist VCES and its clubs in informing potential minority participants of available programs and clubs of VCES.

Documentation of any and all of the above efforts will be retained at the unit level for three years for review by state and USDA review teams." (Taken from Plan to Correct Deficiencies Found in Follow Up Review of the VCES Plan for Compliance Conducted August 1981 by USDA)

### Corrective Actions

Specific corrective actions related to: 1) discipline of existing clubs that were not integrated and who refused to make all reasonable effort, 2) organization of new clubs, 3) training VCES staff to bring about a higher level of sensitivity and understanding regarding Civil Rights and the Compliance Plan, 4) updating the 4-H Leaders' Handbook, 5) Title IX Self-Evaluation to be carried out by each unit, 6) disciplinary action for VCES employees who were unwilling to work toward implementation of the Compliance Plan, 7) assistance to private organizations, groups and clubs, 8) the establishment of three two-member compliance teams and their specific responsibilities, 9) review and forwarding of progress reports, 10) efforts to be made by clubs not integrated, but who were willing to work toward compliance, and 11) VCES' submission of an annual compliance report to USDA.

### ORGANIZING FOR ACTION

The Interim Director for VCES, Virginia Tech, in the fall of 1982 pledged the organization to nondiscriminatory programs in all program areas. He was overtly supported by both the President of Virginia Tech and the Administrator of the 1890 institution, Virginia State University.

Following the specific corrective actions spelled out in the Compliance Plan, the Interim Director named three two-member program review teams. These teams did not review employment issues. To coordinate and supervise the work of these teams and to carry out other corrective actions and requirements of the plan, the Interim Director appointed a seventh person to have major responsibilities in Civil Rights Compliance. All of these professionals were headquartered at Virginia Tech. Designation by race and sex of the total compliance team yielded three black/four white; three females/four males, with the coordinator being a white male. Each two-member team had a black member and a white member.

Each team was directed to assist and review local units within two Extension Districts in the Commonwealth, and to work in a similar way relative to certain designated campus-based staffs at both Virginia Tech and Virginia State. Three districts were considered high priority because of high minority population ratios. Each team was responsible for one of those districts and was required to complete assistance visits and reviews within the period June, 1982-March, 1983. Assistance and reviews in each of the other districts was designated for completion by December, 1984.

A second major effort undertaken by VCES administration was the provision of across-the-organization training relative to Civil Rights and the requirements of the Compliance Plan. The training team, making presentations in each district, consisted of the VCES Director, Virginia Tech, the Administrator of 1890 programs, Virginia State, the appropriate District Director, the appropriate Compliance Team members, and Extension Agents representative of that district. In addition to the face-to-face presentations made by the training team, the President of Virginia Tech appeared on a videotape to pledge his commitment. A significant part of that training was the discussion of compliance team developed documentation forms for use of unit personnel. These forms for documentation included: 1) The Learning Groups Log, 2) The Attendance Log for organized groups, 3) The Mailing List Log, 4) The Plan for Compliance Form for sponsored groups, 5) The All Reasonable Efforts Log to be used by each staff person and by organized groups, and 6) Participation Forms for EFNEP participants. In addition to explanation of the forms for documentation, the review checklist was shared in order that units would be fully apprised as to what specific items would be checked when the unit was reviewed. All documentation requirements and items on the checklist were very directly related to the elements in the Compliance Plan.

#### Taking Action

Following the district training meetings, compliance team members visited units in the three high priority districts to provide assistance in 1) interpretation of the Compliance Plan, 2) answering agents' questions regarding procedure and documentation, and 3) to review the status of the unit's documentation and effort. Reports were subsequently prepared outlining unit status at that time, and offering specific recommendations in order that the unit would be in good standing when the official review was carried out a few months later.

Using a specific checklist for interviewing the total unit staff, the compliance teams undertook the review process itself in the fall of 1982. Usually there was a member of the district staff present during the review. In addition to staff interviews, the review procedure involved document, file, pictorial study, and face-to-face or telephone interviews with clientele. Compliance team members selected individuals to be interviewed from attendance rosters, mailing lists, committee membership lists, local public officials, small and part-time farmer lists and other groups relevant to the locality. In a number of districts, the average number of client interviews was twenty. Understanding that there are 109 local units in Virginia, it is sufficient to say that 2000 plus individuals is an adequate sample size from which to gather data and draw conclusions about the relevant local programs. Finally, an exit interview procedure was used before the team left the unit. Within a reasonable period, generally ten days, the team submitted their final report to the Compliance Coordinator and the District Director, as well as to the Associate Directors for programs and the four program leaders. The local unit received their report either directly or via the District Director depending upon the District Director's preference.

The District staffs were delegated responsibility for following up on the recommendations of the review team. The follow up has taken place in a number of ways in the various districts. One district is presently engaged in developing a structured follow up review process in order to insure that deficiencies, if any, are being corrected.

#### OUTCOMES OF THE PROCESS

##### VCES Assistance

As a result of the assistance process undertaken in June, 1982, individual staff members were better informed as to specific All Reasonable Efforts strategies, planning units were

able to establish documentation and verification systems that were directly related to the Compliance Plan, and staff resistance to working toward compliance was no longer evident.

A detailed record of assistance, along with any specific recommendations, was filed for each local unit. These documents provided a bench mark for assessment when unit reviews were carried out some months later.

### VCES Review

Programming unit reviews yielded a number of important outcomes. They included: 1) Reports that served as documentation of the review, that gave details of progress or lack of progress toward implementation of compliance plan requirements in stated conclusions and justifications, and that delineated specific recommendations and commendations; 2) Opportunity for compliance team interaction with local extension clientele in interviews which served to verify staff documentation and to provide illumination of staff efforts. This process provided the opportunity for (a) VCES to specifically express commitment to Civil Rights and the intent to make programs available to all, (b) for clientele to be heard, (c) for compliance team members to build a profile of current VCES clientele, and (d) for compliance team members to better understand the local programming context.

An unanticipated outcome of these interviews was the expressed pleasure of individuals for the opportunity to share their candid perceptions. Team members assured citizens that remarks would be kept confidential and that their honest opinions and feelings were important for the assessment of VCES progress in Civil Rights Compliance. Comments such as "The Extension Service is doing a very good thing to talk to the people and get their ideas" were frequent; 3) Opportunity for state, district, and local unit personnel to work closely toward a common objective that cut across program area lines. This work has provided a new intangible dimension of cohesiveness throughout VCES. Staff at all levels and in all program areas can claim input into VCES progress in Civil Rights Compliance.

### State Reports

As agreed in the April, 1982 Addendum to the VCES Civil Rights Compliance Plan for Title VI and Title IX, reports were periodically sent to Washington by the compliance team leader. These reports included a summary statement related to progress and each of the individual programming unit assistance records and/or review reports.

### USDA-OIG-ES Review

During August, 1983, approximately fourteen months after the structured assistance and review process were undertaken by the VCES compliance team, a Federal level team carried out a review in Virginia. The VCES compliance team, VCES administration, district staffs, and local staffs were all involved.

In a report received September, 1984, based on that review these statements were included: 1) "VCES has made singularly significant progress in complying with both the spirit and the letter of its 1980 Compliance Plan and the 1982 Addendum. Strong leadership on behalf of civil rights compliance is emanating from both the 1862 and 1890 institutions--and the administrators of each institution appear to have developed a mutually supportive and responsible working relationship"; and 2) "...other states would do well to emulate the system developed in Virginia."



TESTING AN ALTERNATE APPROACH TO EXTENSION FOR LIMITED  
RESOURCE FARM FAMILIES WITH EMPHASIS ON DEVELOPING COUNTRIES

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Abstract

The top-down technocratic approach in extension work in many developing countries has failed to improve the conditions of the majority of the rural population. This study qualitatively examined "in process" a "collaborative strategy," an alternate model, focusing on a paraprofessional's experiences in working with low-income farm families. Putting a collaborative strategy into practice was found problematic. Implications are discussed in the context of developing countries.

More than ever, agricultural extension work is being undertaken in an increasing number of developing countries. However, it has not been generally successful in helping farm families with limited resources (Dejene, 1983, p.iii & p.12; UN FAO, 1984; Whyte, 1975, pp.2-4). Until recently, the primary blame for its lack of success has been directed onto the farmers. Whyte called this "the myth of the passive peasant" who is characterized as being, by his very nature, "passive, fatalistic, tradition bound, and resistant to change" (Whyte, 1975, p.5; see also CENDHRA, 1976, p.19; Rhoades, 1983, p.4).

Some have begun to wonder if the problem could rest, at least in part, with the way extension undertakes to assist this class of farm families (Crouch, 1981, pp.xxii-xxiii). Extension's characterization of its efforts as "transferring technology" has been interpreted and practiced as the process of moving technology from the research station to farmers' fields. This top-down technocratic approach has not worked generally with farmers of limited resources (Bordenave, 1976; Morss, 1976, pp.203-223; Roling, 1976). An alternate to the top-down, technocratic model is being referred to as a "collaborative" approach. In such an approach the extension worker and the farm family collaborate in determining what needs and opportunities exist for the farm family to improve its situation and how the desired improvements can be undertaken. The learning process becomes a shared responsibility. Growing interest in the "collaborative" approach, especially in the developing countries, has been noted (Pearse, 1979; Rhoades, 1983, pp.1-7; Wessler, 1982).

North Carolina State University has undertaken to develop and implement a "collaborative strategy." The first attempt was made in-state, the assumption being that if it could be made to work domestically there would be a chance of its working in developing countries. A research project has been underway for three years employing a paraprofessional to work with 39 limited resource farm families. The paraprofessional was instructed to engage in a collaborative process with these farm families. The study was designed to investigate the "collaboration" between the paraprofessional and the farm families "in process." One of the main questions guiding the inquiry was: How is the intervention process empirically experienced by the main actors?

This paper explores findings related to that question, specifically focusing on the experiences of the paraprofessional. Implications of the findings as they apply to developing countries will also be discussed. Qualitative methodology was used including the following techniques: 1) a client visit record system (i.e., the paraprofessional's records and files of every visit made; 2) periodic interviews with the paraprofessional; 3) participant observation of the paraprofessional-client interactions; and 4) critical incidents occurring in the intervention process (i.e., successful/unsuccessful learning experiences).

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## FINDINGS AND DISCUSSION

From the very beginning the paraprofessional worked on a family-to-family basis. Her modus operandi was making visits with the families in their homes/farms, talking with the farmer and/or the spouse, and in some instances helping out with whatever activity in which the client may happen to be engaged. The paraprofessional saw her job as, "being open to any possibility of extending assistance of any kind to clients which they might need and might bring to her attention. These were not limited to farming, but could be anything."

The preparation or orientation for her engaging in a "collaborative strategy" was negligible. The paraprofessional remarked:

When I was applying for the job, I felt good about it because I felt like I could handle the job. I work well with people .... The farmer relation, you know, after living in the farm all my life ... didn't scare me. But I guess when it came down to ... how to work with or help the low-income farmers, that is where I started to get concerned .... How do you do that? ... I haven't had any training on this, and I was walking into it with no experience ....

One of the main features of a "collaborative strategy" is effective communication. Freire explained this concept saying, "the role of the educator is not to 'fill' the educatee with 'knowledge,' technical or otherwise. It is rather to attempt to move towards a new way of thinking in both educator and educatee, through the dialogic relation between both. The flow is in both directions" (Freire, 1973, p.125). To bring about this learning situation one "begins by listening ... by learning from the people" (CENDHRA, 1976, p.40).

The paraprofessional began to work with mixed feelings of excitement and fear — excitement because of the kind of work she had to do, and fear because of inexperience and not knowing the "hows" of doing the work. On top of that she was anxious: "Will the clients accept me or not?" Her strategy then was "to be open and to take the problems as they came." During the initial phase of the project, her visits were to get to know the farm families and their situation, allowing them to know her and her purpose. The data demonstrate the paraprofessional's self-confidence and ease at handling the farmer-relations aspect of her work. In a matter of time, a working relationship with the majority of the clients developed to the extent the paraprofessional felt comfortable in discussing things with them.

The great majority of the clients hold a favorable impression of the paraprofessional as a person and in her manner of dealing with them. Although in a few cases the working relationship could not go far because the clients were "cold" to her, in general the matter of establishing a friendly relationship was a positive outcome. The farm families described her as "friendly," "a nice person," "She's really interested and really wants to help small farmers in any way she can." Clients reported feeling free to call on her for whatever information, problems, and needs they might have.

Creating a friendly relationship is only the beginning in establishing an effective collaborative strategy. The crux of engaging genuinely in a collaboration, philosophically and practically, is to deepen that dialogic relationship and to make it a dynamic process. This is a continuous activity which is "mobile and critical" (Freire, 1973, p.152). The object of the relationship is for both the agent and the farm families to look into reality, to know it, critically analyze it, and change it for the better. Freire called this "conscientization." The role of agents in this learning process is "not to narrate to the educatees what in their opinion constitutes their knowledge of reality or of the technical dimension involved in it .... Their task is to challenge the peasants ..., to penetrate the significance of the thematic content with which they are confronted" (Freire, 1973, p.161).

The process of "getting into the heart" of the dialogic relationship appears to be the most important aspect of the whole education program. Indeed, if the strategy has any semblance of impact on the farm families the resulting effect may be an increasing awareness of their world and what they can do about improving it. Data in this study reveal that this been the most challenging and problematic area of the collaborative strategy.

The paraprofessional's friendly personality and her pleasant ways with the clients created friendly interactions which prevailed at all times. However, this did not necessarily lead to a deepening and dynamic relationship with many. At the very start, the paraprofessional began to get apprehensive about what she could do to help the farm families. She had the impression that the majority were not open with her. She suspected that they were holding back certain things she needed to know if she was to be of any help. "They did not know what to say when I asked if there was anything I could do." Data support the fact that the "silent farmer" remained so throughout the project. When asked why she wrote in the Client Visit Record Sheets so many times, "I plan to find out what I can help him with," the paraprofessional answered:

I guess it was just more out of frustration because the farmer will have no problems. I didn't want to be pushy and maybe on the next visit I ask some more questions, hint around to other things. If the farmer did not respond you just sort of get the feeling that it's time to hush up, that I've asked enough for the day. Overall, I think the approach was good, it just took a long time to get them to express their needs. So you just keep on going back time and time again asking questions.

Indeed she kept on visiting with the farm families. In many a visit, talks remained "superficial," not leading anywhere. It could be said that the dialogic relationship remained static: "Overall, I wanted to work with the farmer on any problem he could come up with .... In my farm visits we discussed about a variety of things, about his crops. However, the farmer (and/or spouse) did not mention any particular problem. He seemed to have everything okay. Our talks were general talks mainly." In a similar case, a center in a developing country reported an experience with "Self-Actualization Method" with groups of rural women. The facilitators, using non-directive techniques in helping the women identify common goals and ways to achieve them, reported a successful implementation, but not without difficulties. "Accustomed to directive approaches to community organizing, the villagers were at first puzzled and confused by the method ..." (Rural Reconstruction Review, 1981, p.68).

On the positive side, data show some successful cases where the "collaborative strategy" became a real dynamic process of learning that led to tangible benefits for a few farm families. What actually occurred was articulated by a farmer:

We began to plan what we were gonna do, get the soil tested, you know, fertilizers and stuff that we needed. But the biggest thing that we really did was to talk about that .... We decided to soil test. And then we found out that the land needed lime ... fertilizers to use .... We had good results .... It (tobacco) was pretty sight you could lay your eyes on .... Gosh, I should have done this ... but I never thought about that. Then, me and her got to talking about that.

Another farmer said: "We discussed the way of the tobacco, how it's doing this season, and during the winter we discussed in planning for the summer ..., discussing the types of fertilizers, the way the land should be fixed, the stalks and all should be turned over, we discussed for the farm."

Several things are noteworthy in the two cases mentioned above: 1) the word "we" implied an awareness of the collaborative process; 2) the dialogue moved into a dynamic learning process with one activity leading into another culminating into beneficial results; 3) the language used to represent "consciousness-raising" or "awareness" was down-to-earth and applied to specific problem-situations that needed improvement; 4) the time element to put the dialogue into a dynamic relationship was different for the two cases, one farmer responding quickly, the other taking some time (as the farmer explained: "In the beginning I thought she was a nice person, but it took a while to know she was really interested in helping because I haven't had anybody to come in and help"); 5) the innovations were within the farmers' reach financially and intellectually. A dynamic dialogic relationship

never lulls anyone to sleep. Dialogue awakens awareness. Within dialogue and problem-posing educator-educatee and educatee-educator go forward together to develop a critical

attitude. The result of this is the perception of the interplay of knowledge and all its adjuncts. This knowledge reflects the world; reflects human beings in and with the world, explaining the world, even more important it reflects having to justify their transformation of the world (Freire, 1973, p.127).

Data further show a variety of tangible benefits that farmers felt they have gotten. The benefits were both in the agricultural and non-agricultural areas (i.e., soil-testing assistance, quality/quantity of fertilizers used, variety of agricultural information, winter-weatherizing of home, food recipes, canning pointers, etc.). Analysis of these benefits, however, raises important questions in the light of a "collaborative education." For one, there is always a possibility that the benefits were results of what Freire called "a technical aid conception of education which 'anaesthetizes' the educatees and leaves them acritical and naive in the face of the world" (Freire, 1973, p.152). Freire would ask: Could the paraprofessional's actions have encouraged "naivete rather than conscientization" on the part of the farmers? (Freire, 1973, p.157). Are the farmers really "challenged to think about how and why they exist in a certain way, to which their own type of techniques corresponds, and when they are challenged, to reflect on why and how they can use this or that type of technique," thereby increasing their "technical proficiency capacitation" instead of merely "technical instruction?" (Freire, 1973, p.160).

Perhaps the following offers some illumination. In many occasions the paraprofessional felt frustrated about the non-reciprocity of the farm families to dialogue with her substantively. Concerned about the farmers' silence, she initiated soil-testing assistance. "I wanted to soil-test the farmers' fields to know the condition of their soil. Also I wanted to start something with the farmers in farming matters since it was difficult for the farmers to open-up. The soil testing was something that could break the ice." The majority did respond positively to the soil-test idea, but only a few followed recommendations fully.

Finally, the paraprofessional's experiences in trying to implement a "collaborative education" with limited resource farmers may be captured in her own perceptions of the process: "It seems like I'm still trying to be working on simple, small things. But farmers don't take the initiative to do things. I've been going week after week. It makes me wonder whether it's me. I don't seem to be effective. Perhaps I'm the type of person who likes to see things happen fast, but things are not happening that fast." Towards the end of the project, she said: "I thought I did pretty good. I did my own thing. I set my own pace. The biggest thing was I just sort of felt my way through it. I mean I knew I had to ask questions. I knew I had to help the farmers, you know, help them improve financially, but it just took time. I went through it at a pace where I felt I was not being pushy."

#### CONCLUSIONS AND IMPLICATIONS

Efforts to operationalize a collaborative extension education approach with low-income farmers has been noted in developing countries. Unfortunately, the literature does not have much to share by way of empirical studies of the strategy "in process." This study was meant to contribute to building knowledge particularly focusing on the agent's experiences.

Students of development with primary interest in developing countries have to cope with an enormously complex problem to get "agriculture moving" (Mosher, 1966). It will be naive to suggest that an effective "collaborative strategy" alone can do it. But given the complex condition, even that single step of educating the poor farming population (development of a human resource) is not easy. A "collaborative strategy" seems to be a step in the right direction. The big challenge is how to make the "collaborative strategy" work effectively, as this study has shown.

Development projects in developing countries are and will be confronted with demands for training "facilitators" effectively in this approach. Modest as it may seem, this study has the following contributions to offer:

1. The qualifications of change agents to engage in this approach cannot be overlooked. Change agents should fit the target group as well as the specific job to be done (i.e.,

agents with farm background to work with farmers). A pleasant personality with a sense of empathy is helpful. Such traits are useful to begin to enter into meaningful dialogue with the target group.

2. The critical stage is in the education of qualified change agents in the collaborative approach. This study has pointed out the possibility of change agents' inability to move into a dynamic dialogic relationship with clients. The big question is how skills can be taught and learned in practice with a collaborative strategy effectively. On-the-job learning/training may be the best approach, with the use of systematic tools. Experienced facilitators can help develop the agents' analytical and technical skills with the aid of the "Farm Visit Record Sheets" (used in this study only for the research component) or a similar device.
3. Beneficial results can be achieved with low-income farmers, albeit simple and small, requiring only resources within the farmers' capacity provided that there is continuity of the dialogue which can lead to other improvements/changes.
4. One-on-one interactions may be good in that each farm family is unique as this study has indicated. However, one-on-one work may be an economic burden to developing countries. Perhaps learning to apply a collaborative strategy with groups may alleviate the burden of one-on-one collaborative work as change agents gain more experience and skills.

Many problems in developing countries are "social" and "structural" in nature. Sooner or later these problems must be confronted. A collaborative strategy cannot ignore the relevance of the social and structural elements with the individual lives of farm families. This is an enormous educational task.

#### References

- Bordenave, J. D. (1976). Communication of agricultural innovation in Latin America. In E. M. Rogers (Ed.), Communication and development: Critical perspectives (pp.43-62). Beverly Hills, CA: Sage Publications Inc.
- Crouch, B. R., and Chamala, S. (Eds.). (1981). Extension education and rural development (Vol. I). New York: John Wiley and Sons.
- Dejene, A. (1983). Education in basic needs fulfillment: Case studies from Ethiopia, Bangladesh, and Botswana (occasional paper). Pittsburgh, PA: University of Pittsburgh, International and Development Education Program.
- Freire, P. (1983). Education for critical consciousness. New York: Seabury Press.
- Ledesma, A. L., and Yap-Ledesma, A. (1976). Dialogue with Asia's rural man. Report of the 1976 CENDHRA integral rural development workshop, CENDHRA, Manila, Philippines.
- Morss, E. R., et al. (1976). Strategies for small farmer development (Vol. I). Boulder, CO: Westview Press.
- Mosher, A. T. (1966). Getting agriculture moving: Essentials for development and modernization. New York: Praeger Publishers.
- Pearse, A., and Stiefel, M. (1979). Inquiry into participation: A research proposal. UN Research Institute for Social Development, UNRISD/79/C.14, GE. 79-2103. Geneva, pp. 3-4.
- Rhoades, R. E., and Booth, R. H. (1983, Summer). Reaching farmers: Research and extension. Culture and Agriculture (Newsletter of the anthropological study group on agrarian systems), pp.1-7.
- Roling, N. G., et al. (1976). The diffusion of innovations and the issue of equity and rural development. In E. M. Rogers (Ed.), Communication and development: Critical perspectives (pp.63-78). Beverly Hills, CA: Sage Publications Inc.
- UN FAO (1984). World conference on agrarian reform and rural development, FAO conference, Rome, November, 1983. CENDHRA Development Memo, 22, Manila, Philippines, p.4.
- Wessler, M. (1982). Participatory learning. Education (Vol. 25), Tubingen, Universitat Kassel, Steinstrasse 19, D-3430 Witzenhausen.
- Whyte, W. F. (1975). Organizing for agricultural development. New Brunswick, NJ: Transaction Books Inc.

**BENEFITS OF NONCREDIT ADULT EDUCATION IN EXTENSION  
PRIDE AND NON PRIDE GROUPS**

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Charles R. Oaklief

Abstract

The study determined participant characteristics, quality of learning experiences, and perceived benefits of participation across nineteen benefit areas. The sample included 201 subjects randomly selected from two distinct groups: (1) Extension Pride and (2) Extension Non Pride participants. Participants were primarily females, 35-45 years of age, employed, high school or college educated, and completed 2-3 Extension learning experiences. Their primary reason for voluntary participation was to "learn more and expand their minds." Extension participants received both noneconomic and economic benefits from their noncredit experience; however, greatest benefits accrued from noneconomic areas for Pride participants. Non Pride participants reported higher benefits from economic areas.

**INTRODUCTION**

The Cooperative Extension Service, since its earliest beginnings has demonstrated that adults could obtain dramatic benefits in both economic and quality of life areas through adult education programs. Evidence of these benefits has been constantly accruing and have been emphasized over the years in a variety of literature (Jenkins, 1964); (A People and a Spirit, 1968); (Knowles, 1977); (Houle, 1984).

Although instructional methodologies, as provided by the Cooperative Extension Service, have included outstanding examples of learner involvement in the design, conduct, and evaluation of Extension educational programs, the global perspective on Extension methodologies is one of information dissemination, organizationally speaking, from the top down. However, tradition and existing structure need not dictate Extension teaching techniques. The idea that the agent's task is not limited to convincing Extension audiences to adopt new technologies but to help those audiences to convince themselves they should adopt presents a much broader focus on motivation/participation theory and information dissemination in Extension education as reported by Carter (1984). In this respect, the Extension workers job is to help the audience to learn; a task which is inherently more challenging and difficult. In respect to Extension's difficulty in developing effective adult education for specific audiences such as "less progressive farmers" (Mercado & Carter, 1984) understanding the impact on motivational input or participation theory is an area needing further research as emphasized by Cross (1981), Knowles (1980), and Tough (1973). It was considered appropriate in this study to explore the rationale of participation in Extension educational programs from the perspective of economic and noneconomic benefits (Peterson, 1979) which participants perceive in relation to two different learner groups; Extension Pride (Programming Resources with Initiation for Development Effectiveness) and Extension Non Pride (Randomly selected citizens from respective communities). The 201 Pride and Non Pride respondents were randomly selected from service areas designated by the Kansas Cooperative Extension Service.

Cooperative Extension Service Pride Group .

There were 130 respondents in the Cooperative Extension Service Pride group of which 44.5% were married females, 28.9 percent were married males, and 20.3 percent were

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single females. The largest age category was the 35-49 age range constituting 34.6 percent of the Pride respondents. Over 50 percent of those surveyed were employed full time and 36.2 percent had completed a high school education. The data on the number of adult learning experiences completed in the last two years revealed that 39.5 percent completed 2 or 3 experiences. Within seven voluntary reasons for participation, 37.7 percent enrolled to learn more. The length of the learning experience for 40.6 percent of the respondents was from 1-9 hours. No special recognition was received for successful completion of the learning experience by 66 percent of the Extension Pride group.

#### Cooperative Extension Service Non Pride Group

The 71 Cooperative Extension Non Pride survey participants were composed of 43.7 percent married females, 31.0 percent single females, and 18.3 percent married males. Over 50 percent were 25-49 years of age, and 69 percent were employed full time. No special recognition was awarded for successful completion of the learning experience for 61.3 percent; however, a certificate was awarded to 16.1 percent.

Those non pride participants reporting a "very" satisfied rating for the learning experience consisted of 14.1 percent while 45.1 percent were "quite" satisfied. An overall mean satisfaction score of 3.59 was calculated from the 5 point scale.

### Results

The two Cooperative Extension Service groups yielded data which indicated an overall benefit value of 2.83, approaching the definite benefit category. Interestingly, Pride and Non Pride data resulted in both noneconomic (questionnaire items 1-13) and economic benefits (questionnaire items 14-19) as reported in Table I. The first, second and fourth rated benefits across both Pride and Non Pride groups were "becoming better informed about some subject," "gaining from self-improvement," and "improving interest and skill in learning;" all noneconomic benefits. Completing the top five rated benefits were third ranked "learning recent job knowledge," and fifth ranked "gaining new job qualifications." Very limited benefits were perceived relative to "learning to be an effective consumer," "learning to be an effective parent," "increasing appreciation of art and culture," and "learning effective politics and government." Extension survey responses included some benefit for all nineteen areas. Overall, economic benefits and noneconomic benefits were reported to be the same; however, synthesis of the data revealed that Extension audiences perceived stronger benefits from subject oriented learning, opportunities for self-improvement, improving learning skills, and gaining new job qualifications. Participants reported several benefits which differed between noneconomic and economic areas for the two groups.

#### Extension Pride

Extension Pride participants reported four of their top five benefits as noneconomic areas including "becoming better informed about some subject," "improving interest and skill in learning," "developing principles and beliefs," and "gaining from self-improvement." The only economic area within the top five benefits for Pride participants was third ranked: "preparing to handle increased job responsibilities." There was little difference between noneconomic and economic mean scores for Extension Pride participants; however, pride participants placed more emphasis upon "preparing to handle increased job responsibilities," "gaining new job qualifications," and "recent job knowledge" than on "qualifying for entry positions" or a "new job" and "increasing job earnings and qualifications."

#### Extension Non Pride

Extension Non Pride respondents stressed the economic benefit areas of "increasing job earnings and qualifications," "qualifying for a new job," and "learning recent job knowledge." The other two of the top five benefits included noneconomic areas of "developing self-reliance and independence" and "gaining from self-improvement."

According to the data reported in Table 1, "preparing to handle increased job responsibilities," "learning to be an effective consumer and parent," "learning effective politics and government," "improving interest and skill in learning," and "qualifying for an entry position" were among the lowest benefit areas for the Non Pride groups.

The economic benefit areas were reported only slightly higher than noneconomic areas for the Extension Pride respondents; however, the Non Pride respondents perceived economic areas relating to "increasing job earnings and qualifications."

Analysis over the nineteen variables revealed an overall benefit mean of 2.83 which identifies on the four point scale between "some benefit" and a "definite benefit." Review of the noneconomic benefits (questionnaire items 1-13) revealed a mean of 2.82 which related to intellectual, personality, avocational/cultural, and consumer benefits.

**Table 1**  
**Degree of Personal Benefit: Economic and Noneconomic Areas**

<u>Possible Benefits</u>	<u>Cooperative Extension Service</u>		
	<u>Pride Mean(Rank)</u>	<u>Non Pride Mean(Rank)</u>	<u>Total Mean(Rank)</u>
<b>Noneconomic Benefits</b>			
1. Improving skill in reading, writing, or speaking	2.89(7)	2.81(12-13)	2.85(11)
2. Learning how to be a more effective consumer	2.65(19)	2.63(10)	2.64(19)
3. Learning how to be a more effective parent	2.68(15)	2.74(16)	2.71(18)
4. Learning how to be a more effective participant in politics or government	2.84(11)	2.71(17)	2.77(15)
5. Becoming better informed about some subject or area of knowledge	3.02(1)	2.91(6)	2.96(1)
6. Improving my interest and/or skill in learning more	2.95(2)	2.79(14)	2.87(4)
7. Developing a sense of self-reliance or independence	2.76(12)	2.97(3)	2.86(8)
8. Developing positive feelings about myself and my worth as a person	2.85(10)	2.85(8-9)	2.85(9)
9. Becoming more tolerant and respectful of others, even if they differ from me in their opinions or conduct	2.86(9)	2.84(10)	2.85(10)
10. Developing a personal set of principles and beliefs that determine what is right and wrong for me	2.92(4-5)	2.81(12-13)	2.86(7)
11. Developing skills and/or interests in hobbies or other free-time activities	2.68(15)	2.83(11)	2.84(13)
12. Increasing appreciation of artistic or cultural expressions	2.68(15)	2.87(7)	2.77(16)
13. Gaining satisfaction from being involved in self-improvement	2.92(4-5)	2.92(5)	2.92(2)
<b>Economic Benefits</b>			
14. Becoming qualified for an entry-level position	2.74(13)	2.76(15)	2.75(17)
15. Preparing to handle increased responsibilities which will make my job more important	2.94(3)	2.61(19)	2.77(14)
16. Increasing my job earnings by improving my qualifications	2.68(15)	3.00(1-2)	2.84(12)
17. Learning about recent knowledge affecting my work	2.88(8)	2.93(4)	2.90(3)
18. Becoming qualified for a new and different job	2.72(14)	3.00(1-2)	2.86(6)
19. Gaining qualifications which enable me to assume a wider variety of responsibilities	2.90(6)	2.85(8-9)	2.87(5)
<b>Noneconomic Benefits</b>	<b>2.82</b>	<b>2.81</b>	<b>2.815</b>
<b>Economic Benefits</b>	<b>2.81</b>	<b>2.86</b>	<b>2.83</b>
<b>Overall Benefits</b>	<b>2.82</b>	<b>2.83</b>	<b>2.825</b>

Economic benefit areas (questionnaire items 14-19) revealed a mean of 2.83 and reflected on areas including (1) job entry training, (2) job advancement, (3) vocational and job retraining, and (4) recareering.

Individual growth and development benefits (questionnaire items number 6,7,8,12, and 13) accrued from a variety of areas including (1) intellectual, (2) personality, and (3) avocational/cultural areas. The mean score for the personal growth and development area was 2.85 approaching a "definite benefit" for this noneconomic area.



The societal benefits (questionnaire items 2, 3, 9, and 10) accrued from "learning effective consumer skills," "developing parenting skills," "becoming effective in politics and government," and "developing principles and beliefs." Societal benefits were represented by a mean of 2.76, approaching a "definite benefit." The benefits related to personal development areas help to form the foundation for societal development. According to Peterson (1979), direct benefits to societal development include:

1. A more literate and informed population.
2. More knowledgeable citizenry.
3. Advanced cultural and social enhancement based upon trust and independency.

Indirect benefits to societal development include:

1. More equitable distribution of life's amenities.
2. Reduced levels of welfare and crime.
3. Improved health and environment.

Also, according to Peterson (1979) individual economic benefits promote advancements in the general economy as follows:

1. Availability of manpower.
2. Increased job satisfaction.
3. Increased living standards.
4. Lower unemployment and higher productivity.

Approximately 50 percent of the participants were "quite" satisfied with their learning experience. Extension Pride participant's mean score for the satisfaction level of their learning experience was 3.85 on a 5 point scale. The two highest strength features of the learning experience were "the expertise of leaders and teachers" and "the leader's ability to explain and demonstrate." Extension Pride respondent's opportunity to participate was highest for "sharing their own experiences so that others learn from these."

The most relevant of the 19 benefits was "becoming better informed about some subject or area of knowledge." This benefit was also the highest ranked actual benefit with a mean of 3.02 from the 4 point scale. The Extension Pride group's overall benefit mean was 2.85.

#### Recommendations for Providers of Cooperative Extension Service Pride Programs.

1. Continue to provide noncredit adult learning experiences for participants since they did benefit from these experiences and they were satisfied with the experiences.
2. Continue to employ teachers with high expertise who have the ability to explain and demonstrate.
3. Encourage participation of single males.
4. Encourage involvement of adults under 25 years of age.
5. Encourage involvement of those adults with less than a high school education.
6. Give recognition for successful completion of the experience by offering a certificate or another form of appropriate recognition.
7. Continue participant sharing of experiences so others can learn from these and encourage participation in setting the goals for the learning experiences and contributing to the evaluation process.

#### Recommendations for Cooperative Extension Service Non Pride Programs

1. Continue to offer noncredit adult learning experiences.
2. Encourage participation of single and married males.
3. Encourage participation of those persons under 25 years of age and over 49 years of age.
4. Offer recognition for successful completion of the learning experience by awarding a certificate.

Results from this study have already provided valuable insight from both the theoretical and the practical side of motivation/participation in Cooperative Extension adult education programs. Knowing that participants in Extension education do, in fact, receive both economic and noneconomic benefits from specific learning events and that different learning groups perceive benefits of participation at different degrees can give added emphasis to most areas of the program planning and development process. Finally, the survey has provided the researchers with an empirically tested format for understanding individual and group rationale for participation in Extension learning activities.

## References

- Carter, G. L. (1984). Staff and organizational development for INIAP: A working paper. Unpublished manuscript, North Carolina State University, Department of Adult and Community College Education, Raleigh.
- Cross, K. P. (1981). Adults as learners. San Francisco: Jossey-Bass.
- Houle, Cyril O. (1984). Patterns of Learning. San Francisco: Jossey-Bass.
- Hoyt, D. P. (1975). Appraisal of interest in continuing education opportunities among Kansas adults. Manhattan: Kansas State University.
- Jenkins, D. D. (1964). The Ohio Cooperative Extension Service as perceived by resource development committee representatives. Unpublished doctoral dissertation, The Ohio State University, Columbus.
- Knowles, M. S. (1977). The adult education movement in the U.S. Huntington: Krieger.
- Knowles, M. S. (1980). The modern practice of adult education: From pedagogy to andragogy. Chicago: Associated Press.
- Mercado, A. B. & Carter, G. L. (1984). Examining a development intervention in process with operators of small farms. Proceedings to the 1984 Midwest Research-to-Practice Conference in Adult and Continuing Education. 105.
- Peterson, R. E. and Associates. (1979). Lifelong learning in America. San Francisco: Jossey-Bass.
- Tough, A. (1973). The adult's learning projects. Toronto: The Ontario Institute for Studies.

**FACTORS FOR AGRICULTURAL EXTENSION SUCCESS:  
ORGANIZATIONAL, INTERACTIVE AND CONTEXTUAL**

William M. Rivera<sup>1</sup>

Abstract

What are the factors for agricultural extension success? This paper organizes its examination of the question under four major headings to distinguish and clarify different sets of factors and the scope of issues to which they pertain. These headings recognize that extension is 1) a varied system; 2) a varied system with common organizational problems; 3) a system linked to other systems involved in the process of agricultural development; and 4) a system dependent on both the national and international contexts in which it operates. In the larger context of national and international development, extension is dependent on the national will and social accommodation by farmers as well as on international supports and development strategies. The authors conclude that full discussion of factors for extension success must consider extension organization as involving varied systems albeit with common problems, as a system which operates within a larger agricultural development rural social process, and finally as a system which depends on national and international policies and their determinations of what extension's role is and what constitutes success.

**Introduction**

What are the factors for agricultural extension success? This paper began by examining the literature specific to the organization of extension in an effort to respond to the above question, and then analyzed a number of differing systems and models of extension to compare organizational factors that appeared to be significant, if not crucial in determining agricultural extension success.

We encountered a wide variety of perceptions, indicators, conditions, components and essentials--factors that referred however not only to the organization of extension but to other operations and contextual situations relating to, and seriously affecting, extension. We soon realized that different systems and models of extension tended to underline distinct factors as being the most important to that particular system or model.--These discrepancies and the tendency toward inclusiveness regarding factors for success in the literature led us to organize discussion under four main chapters. These chapter headings are as follows:

- I. Extension: A Varied System
- II. Extension: A Varied System with Common Problems
- III. Extension: A System Linked to Other Systems
- IV. Extension: A Contextually Dependent System

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## I. Extension: A Varied System

The success of agricultural extension is determined by multiple and disparate factors. The first of these are organizational and include structure, management, personnel, performance, finances, materials, etc., but while there may be, as there are, certain commonalities among extension organizations, an important fact deserves attention. Extension is a varied organization; that is, it refers to various systems, models, programs and projects throughout the world. And while systems of extension tend to be more broadly based than models and programs are more long-term than projects, more important distinctions remain. These distinctions have to do with perspectives of extension's role and definitions of its purpose, as well as approaches to its organizational structure and methods. Thus, comparison among systems (including models, programs and projects) indicates a wide range of differences in approach, purposes, and methods of extension.

## II. Extension: A Varied System With Common Problems

While it is important in any discussion of factors affecting extension's success to pay attention to the differences among its varied systems, it is also important to recognize that extension systems share certain commonalities and that certain problems and concerns are common among these systems. In analyzing extension systems, Kears (1980?) claims that five requirements, or essentials, "have showed up in every successful extension program in rural areas anywhere in the world;" they are: 1) the availability of genuinely better technology; 2) the readiness and the capacity to understand the special needs of particular localities and, perhaps even more important, the differing situation of individual families even in the same locality; 3) primary loyalty to the welfare of the rural family in preference to rigid commitment to governmental goals and targets; 4) ready access to authoritative and reliable information; and 5) extension workers need to have ways to influence the nation's agricultural research agenda.

Other researchers (Sigman & Swanson, 1984) in reviewing the problems that face national agricultural extension in developing countries note that in the literature on agricultural extension nine are frequently addressed; technology, linkage, technical training, extension training mobility, equipment, teaching aids, organizations, and other specific problems identified by, for instance, third world extension directors. Their study indicates however that extension directors in different parts of the third world rank differently the seriousness of these problems. In general, their respondents view the lack of mobility, extension training, communications and teaching equipment, along with organizational problems, as the most serious facing their organizations. Technology and linkage problems are infrequently viewed as serious problems, although they are often perceived as "somewhat of a problem." And, as the authors point out, extension directors in low-income countries do view technology problems as more serious than their counterparts in other-income level countries.

## III. Extension: A System Linked to Other Systems

Without further review of common problems and essential requirements envisaged by the wealth of authors who address the question of factors affecting extension success, it is apparent that certain problems go beyond the immediate confines of the extension organization itself. Indeed, even cursory review of the literature reveals that extension systems operate within larger systems, and that one of their problems is linkage. While linkage is not cited as a "serious" problem in the Sigman and Swanson study, as they point out there maybe three possible reasons for this. First, the concept may have meaning that the study was unable to isolate and measure. Secondly extension directors may think that sufficient technology exists and that the critical factor is disseminating it. Thirdly, they may view technology and linkage problems as the immediate concern on research institutions and of peripheral concern to extension organizations. Another author however, (Cummings, 1982?) argues that strengthening the linkages between research systems and farmers is a problem second only to government commitment to rural and agricultural development. According to Cummings the three principal action agents in technology development are a) the research service, b) the farmers advisory (extension) services, and c) the farmers. However, he notes the significant importance of other institutions, what he calls d) service institutions--such as seed, fertilizer, and pesticide distributors, veterinary services, credit agencies, and traders, as well as e)

government policies for prices, roads, etc. Other authors (Axinn & Thorat, 1972) have referred to these service institutions as part of the agricultural development system, a macro system within which extension operates and to which it is linked. This macro, agricultural development, system according to Axinn and Thorat includes the following major components which interact in the production process: supplies, markets, governance, research, education and extension.

#### IV. Extension: A Contextually Dependent System

Finally, extension is a dependent system, i.e. dependent on factors outside its history, structure, organization and management, linkages, etc. Aside from operating within an agricultural system of markets, supplies, governance, education and research to which it is-- or should be--tightly linked, it depends on a much larger context of thought and action. Most obviously perhaps it depends on national commitment, and accordingly reflects political thinking about whether extension education and the transfer of knowledge are priority concerns in the complex array of what's thought to be needed for the purposes of agricultural development and modernization. Secondly, extension depends on cultural accomodation broadly speaking but specifically in terms of farmer receptivity to technical innovations and social change pressures. Mobilization of farmers to participate in activities aiming to alter their traditional ways and to modify their motivations is a key to success; conversely the lack of popular participation in extension programs and the practice of new, or improved, ways of farming and livestock raising is the road to failure--no matter how appropriate or new the technology. Social behavior in other words, and the motivations that invest that behavior, make all the difference at the so-called bottom level.

External to the national context in international supports--particularly consequential to less developed countries. International supports may come in various packages: financial (development) assistance, technical (human and material) assistance, and programmatic (systemic) assistance--implants such as the T&V and FSR/D approaches are examples of systems, or models, transferred as adjuncts to, and sometimes in lieu of, national extension systems.

Finally, extension and the systems, or models, employed to put it into operation depends not only on the way these systems and models are perceived and implemented, but on the way in which development in general and agricultural development in particular are perceived and the actions taken to enhance them. In other words, extension as with other aspects of a country's agricultural development system, depends on development strategies.

#### Conclusions

Thus, we argue that factors for agricultural extension go beyond organizational problems and even those of linkage, including policy commitments and financing as well as the cultural setting and the farmer's individual motives (in all their diversity). In short, extension is not only a varied system with many and different structures and targeted purposes, not only a system that operates within and in connection with other systems, but it is a dependent system--one dependent on international support, national commitment, the cultural setting and farmer motivations. These realities must color, and do, the way in which extension is perceived how it operates, and finally the results which it achieves.

The problem with extension models is that their perspectives necessarily affect their organizational programs and practice. While both an on-going visit and training system (like T&V) and a participatory farm research orientation (like that of FSR/D) provide useful approaches to the agricultural development problem in developing countries, both may fall short of what is ultimately needed.

Indeed, the United States extension model (the CES) has yet to be a recognized for its value as a with a long-range comprehensive and special (and diversified) techniques that continually keep agriculture at the forefront on the nation's development. It is because the system has insisted upon (1) a long-term vision of its purposes; (2) a collaborative effort among federal, state and local authorities; (3) close linkages with research and education/institutions as well as with supply, marketing and governance services; (4) the value and use of volunteers, (5) a broad-based program that serves the farmer, the farming family

and the rural community; and (6) a comprehensive (but not diluted) view of the agent's role with respect to farm clientele--that is to say, a view has been maintained which antedates the concept of "integrated rural development."

In short, technology transfer while at the core of extension's purpose in developing countries cannot be seen as the final purpose, or the only purpose, of extension. Extension models must be seen for what they are: implants at best. Models usually have special answers about how to go about something and they often differ in purpose, as noted with respect to T&V and FSR/D as well as the U.S. CES. Special answers and specific purposes require close examination. Thus, we conclude with others (Claar, Dahl, & Watts, 1987; Hage & Finsterbusch, 1984) that the notion of a universal model is misleading. Theoretically, a "contingency model" approximates what would appear most needed; that is, site-specific development in which all models are considered but more importantly the particular circumstances, situation and problems of a country are responded to according to its particular strengths, weaknesses, values and directions.

As yet there is no consensus among experts as to the best way to go about insuring for linkage between agricultural research and the farmer and between the farmer and researchers. For one thing linkage means different things to different people. If clients are served well and the linkage system works well it does not matter what methods are used. Both T&V and FSR/D have different linkage systems, yet they both reach their clients effectively. On the other hand some universities and experimental stations in developing countries conduct important research but because they do not have efficient linkage systems their research does not become useful to farmers. We note that while the research/extension/farmer linkage is crucial, this micro system of interaction (or its lack) represents only one set of links in a much larger chain of activities, what Axinn and Thorat refer to as "the rural agricultural system."

To recognize the relationship between agriculture, development, and extension requires that we recognize the distinct and hugely different approaches to development. Briefly, it may be enough to remember that only some 20 years ago, Rene Dumont was fighting a losing battle in Africa to advance agriculture when newly independent nations there were expecting to leap with the help of "manpower development" theorists into the industrial age. The need for agricultural development has had to be learned by most developing countries; it is not a perspective that they cherished at the start; indeed, as Dumont pointed out, Africa was off to a false start--and with the help of various thinkers who thought industrialization could be gained without much ado about agriculture (Example: Kenya).

While agriculture development has become recognized as crucial to overall development of the less developed nations, still there are differing views about which strategies are the best to make agriculture and development go together. Some have sought to gain contact with the most advanced and educated farmers, to thus accelerate production and demonstrate rapid success; and extension has been interpreted as a system for distributing research and other new technology to those farmers more likely to adopt new practices and produce more food.

But not all have agreed with the formula of extending new practices and high technology to the few better-off farmers. In fact, some promulgated the idea that, on the contrary, "small is beautiful" (Shumacher, 1973), calling on strategies to employ "economics as if people mattered."

Whatever the development strategy, a highly visible and important actor on the agricultural scene today is the international organization. Often several international organizations will be advising and working within a single country, and with differing perspectives of what needs to be done and how to do it. Although development cannot be a goal achieved by international support in underdeveloped countries such support cannot be ignored or underestimated.

In most developing countries national government is the predominant authority, and national will is the major determinant in development. Development itself is a complex process in the analysis of which technology, economics, sociology and political science, among other subjects, come into play. Furthermore, development is a globally interactive process involving international trade, cartels, supply and demand, assistance, etc. It is a process which is understood along with those of growth and progress, all of which have meaning only when used

in comparison (Malassis, 1975). Thus, we speak of "more" or "less" developed countries.

In less developing countries national commitment is best expressed by way of national planning strategies, strong legislation and financial support--although this expression may also be "implicit," through a general understanding of certain goals and expectations. While agriculture is the most important economic sector in the less-developed countries and is usually called upon to play a fundamental role in the overall socioeconomic development process, it is not a separate sector but rather a branch of the economy. Thus, planning strategies involving policies and financial support for agriculture are but one part of the development process. But even if national commitment is assured through policy planning and financial supports--there remains the farmer and the family unit and their reality within the rural situation, all of which exists and acts in a cultural framework of ideological preferences, social values and behaviors and environmental resources. Accordingly, we inevitably confront questions concerning "peasant rationality" and farmer receptivity to innovation in our discussion of factors for agricultural extension success.

In sum, to discuss fully the question of what are the factors for extension success requires that we examine organizationally, as an interactive link in a series of larger agricultural and rural development systems, and as a contextually dependent system--relying on national and (in the case of less developed countries) on international supports. By organizing examination of extension in this way, we recognize and can account for the multiple factors that impinge on extension and influence its success.

#### References

- Axinn, G. H. & Thorat, S. S. (1972). Modernizing World Agriculture: A Comparative Study of Agricultural Extension Education Systems. N.Y.: Praeger.
- Benor, D. & Baxter, M. (1984) Training and Visit Extension. Washington, D.C.: World Bank.
- Claar, J. B.; Dahl, D. T. & Watts, L. H. (1983) The Cooperative Extension Service; An Adaptable Model for Developing Countries. Urbana, IL: University of Illinois at Urbana-Champaign. College of Agriculture, College of Education and Graduate School of Library Sciences (INTERPAKS Series No. 1), 26 p.
- Hage, J. & Finsterbusch, K. (1984). A Proposal to Develop a Contingency Theory of the Management of Change. College Park, MD: University of Maryland (a proposal to the US/AID) p. 19.
- Kearl, Bryant. (1980?) An Analysis of Extension Models for Developing Countries. (A paper: no place of publication or date).
- Shaner, W. W.; Philipp, P. F.; & Schmehl, W. R. (1982). Farming Systems Research and Development: Guideline for Developing Countries, Boulder, Co: Westview.
- Sigman, V. A. & Swanson, B. E. (1984). Problems Facing National Agricultural Extension in Developing Countries. Urbana, IL: INTERPAKS--International Programs for Agricultural Knowledge Systems (Series no. 3).

**Class Attitudes, Adult Industrial Education, and  
the "New South" in Richmond, Virginia,  
1884 to 1904.**

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Abstract

The Virginia Mechanics' Institute was significant in educating industrial workers of Richmond, Virginia, during the "New South" era of the late 19th and early 20th centuries. Its work was shaped by class attitudes and socio-economic conditions of the day, and its story helps raise important questions for contemporary adult educators in the development of human resources for economic purposes.

An area continuing to be neglected in the history of education in the South is adult education. This paper is an exploration of the formal provisions for adult industrial education in Richmond, Virginia, from 1884 to 1904, a period which witnessed the development of the "New South" ideology as an effort to pull the region into the economic mainstream of American life. Richmond was a central city of Virginia and the South, with deep aristocratic traditions, and the move toward greater industrialization called for new social alignments and a redistribution of power. In Richmond, adult industrial education was centered in the Virginia Mechanics' Institute and limited to the white population. Class attitudes shaped Institute objectives and programs that were designed to help bring about New South social and economic change.

The Virginia Mechanics' Institute was founded in 1854, but it ceased operation during the Civil War, and its property was burned to the ground during the Confederate evacuation of Richmond in 1865 (Catalogue, 1934, pp. 12-13). It was not re-established until 1884, when an economic revival was occurring and the New South ideology of industrial progress was making an impact. There was also a reassertion of native white political power, now focused more on urban industrial centers than on the former rural strongholds (Moger, 1968, p. 399). For a time, socio-economic conditions were fluid and alliances changed frequently. Community leaders, industrialists, and urban workers occasionally worked together for mutual benefit, and the Virginia Mechanics' Institute was an example of such effort. Socio-economic divisions remained, however, as illustrated by the fact that blacks were excluded from the Institute even though they comprised a significant portion of Richmond's population and labor force.

In the early 1880s, Richmond experienced a burst of economic growth. Industries such as tobacco, iron foundries, and engine works flourished. Banking, wholesaling, real estate development, and construction all grew. The city launched a major street and sewer improvement program, and new telephone and electric street car systems were built (Chesson, 1981, pp. 171-177). There was a demand for workers and a need for "mechanics," or skilled industrial artisans. A concurrent development was the New South ideology of industrial progress. It was not solely a southern invention, for northern social commentators ("The Young South", 1882) also helped spread the gospel of progress in the South. Perhaps the foremost southern exponent was Henry Grady, the Georgian journalist, who projected a New South "thrilling with the consciousness of growing power and prosperity" (1969 [1904], p. 37). New South enthusiasm also gripped Richmond, and in 1888, it hosted a grand exposition, boasting of its industrial progress and publishing a commemorative volume entitled Richmond and the New South (Morrison, 1889?). It was in this type of environment that the Virginia Mechanics' Institute was refounded.

One of the leaders in the refounding was Lyon Gardiner Tyler. In the fall of 1884, Tyler and others organized a "Night School of Technology" for interested young men "who could not

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afford to pay for an education." The school opened on October 3, with courses in mathematics, bookkeeping, architectural drawing, and mechanical drawing. By December, there were 117 students and five faculty, with Tyler teaching mathematics. In the meantime, ways were explored to reestablish the defunct Institute. On December 5, Tyler, the other faculty, and numerous professional men, merchants, and mechanics formed an association (Dispatch, December 6, 1884), and by January, 1885, they had adopted a constitution and by-laws and elected officers and a board of managers for a new Virginia Mechanics' Institute. In March, they secured financing from the City of Richmond for the Night School, which served as the nucleus for the new institute. The objectives of the Institute were stated as "the promotion and encouragement of manufactures, the Mechanic and Useful Arts, and the mental and social improvement of the industrial classes" (Record, I, p. 1).

At the Institute, the advantages of New South progress and industrial education were connected with regional pride. Night School principal A.M.F. Billingslea portrayed the advantage as "never so great in the South as it is today," for while the South had lagged economically behind the North, this was now changing, for "the better education of the working class [is] working a mighty change" (Whig, June 8, 1887). Vice-president Ashton Starke called upon students to take charge of the new industries: "Will it be men from across the seas or from the North or West? God forbid. We are glad to welcome all, but let Virginia boys bring to themselves fortunes and the names that will live as monuments to their memory" (Dispatch, May 10, 1889). One guest speaker argued that the South must not only compete with other American regions, but with Europe as well, and the solution was educated labor (Dispatch, May 16, 1891). The depression of 1893 chilled some of the more flamboyant New South rhetoric, but the drive to industrialize remained strong.

Socio-economic class was an important consideration. Thomas Nelson Page, one of the founders and a member of the board, reported that class feeling in Virginia was "stronger than existed anywhere else on this side of the water, unless it was South Carolina," but driven by post-war poverty, young men "supposed to be the proudest in the land" poured into the towns and cities, "engaging in the work of laborers and losing no caste by it" (T. Page, 1908, pp. 309, 322). Such men were likely clientele for the Institute.

A central question is how much class affected the work of the Institute. Both Tyler and Page came from upper class families. Tyler was the son of John Tyler, 10th President of the United States. Page was the grandson of Thomas Nelson, a signer of the Declaration of Independence. Tyler went on to become president of the College of William and Mary and a prominent historian on the South ("Lyon G. Tyler," 1906, p. 359), while Page became a leading novelist in the Lost Cause genre of American literature (R. Page, 1923, p. 79ff). Page was one of the founders and served on the board for two years, but Tyler was one of the chief originators, a board member, a faculty member, and a leading advocate in helping the Institute secure funding. Tyler was later made an honorary life member of the Institute, and was still proudly boosting it in 1934, shortly before his death (Catalogue, 1934, p. 11). Their activities reflected the old aristocratic tradition of public service, and it seems that neither stood to gain economically from the Institute, although Tyler's later educational career was certainly not hampered by his connection.

A different perspective is seen in the middle class leadership. George Ainslie, carriage maker and first president, wanted to bring down the "latest results of scientific research and apply them to practical use," and "to lift up our mechanics above the level of unthinking muscle work." W.E. Simons, treasurer, wanted to develop "the general mechanical interests of the whole city," but he also wanted to provide a means of education for those "who are compelled to work in the daytime and have no means of obtaining an education except from a night school" (Dispatch, August 7, 1887). A.M.F. Billingslea maintained that "No philosophy of labor is true that does not recognize the fact that every human being has the right to be unfolded, enriched, and enveloped as a man" (Whig, June 8, 1887). Thus, there was a tension between economic advantage and humanitarian concern for the worker.

Still another class perspective is gained from the students. The Institute finished its first term in 1885 with 134 students, and by the 1892-93 term, it had 374.\* In the depression years from 1893 to 1899, enrollments fell to a low of 239 in the 1896-97 term, and only climbed up to 376 in the 1902-03 term. Students ranged in age from the mid-teens to the mid-thirties, with an average age of 20, and exhibited ambitions for occupational advancement and upward mobility, ambitions encouraged by the board: Guest speaker Edward N. Calish, at

\*Unless otherwise indicated, all statistics and curriculum data come from the Record, the official minutes of the institute.

the end-of-term exercises in 1899, told students that the work of the Institute was of inestimable value. It reached for "the middle or industrial class," the one that "bears the burdens of society" and "is the Atlas upon whose shoulders rests the world of organized society" (Calish, 1899, pp. 6-7).

The fact that students had to work long hours and attend classes at night meant that there were attendance problems. The average rate of attendance was only about 73% of actual enrollment, a factor that no doubt affected achievement. Many students earned very low wages, one estimate in 1890 being as little as \$10 per month for some of the apprentices (State, October 29, 1890). In 1901, it was estimated that 95% of the students were breadwinners, either supporting or assisting to support families (Times, March 17, 1901). In spite of student hardships, the Institute was often unable to handle student demand. In 1892, for example, 77 applicants were turned away because of lack of funds and space. This was true for the most popular courses even during the depression years from 1893 to 1899. When economic recovery came, the necessity of turning away applicants increased, but after the Institute finally built new quarters in 1901, this became less of a problem.

Most students viewed the Institute as a means of advancement, and the curriculum indicates some of the directions their ambitions took. By the early 1890s, the curriculum included arithmetic, algebra, plane geometry, solid geometry, descriptive geometry, bookkeeping, architectural drawing, mechanical drawing, applied mechanics, freehand drawing, modeling, electricity, chemistry, and physics. By 1904, calculus, natural philosophy, and English had been added. Many students came with poor background preparation, and remedial courses were needed, particularly in the area of mathematics.

By the late 1880s, the dominant power in Virginia politics was the Virginia Democratic Party, but it favored upper and middle class interests and ignored the lower classes, both black and white (Pulley, 1968, p. 155). While there was no direct connection between Institute policies and partisan politics, there was a strong connection between political interests and those of urban business, and Institute leadership certainly reflected the latter. Shortly after the Institute was reestablished in 1885, restive Virginia farmers met in a "Farmers' Convention" in Richmond to air their grievances about taxes, railroads, and similar issues. This appeared as a threat to urban interests, and the Institute board organized a committee "to protect the interests of the Virginia Mechanics' Institute" in case there was any movement by the farmers that seemed "to conflict with the intentions and ultimate objective of this organization" (Record, I, p. 26), a move which sheds light on board attitudes. A second illustration concerns the Virginia Constitutional Convention of 1901-02, which resulted in restrictions on the rights of poor blacks and whites (Pulley, 1968, pp. 83-84). One member of the board was also chairman of the House Committee on the Constitutional Convention, and the board rented Institute facilities to the Convention (Record, III, p. 214). This shows no direct connection with Institute educational policies, of course, but it does show the kinds of influences on the board.

Still, students were drawn from among the laboring classes, and they found the Institute amenable to their needs. Even organized labor supported it, for in the mid-1880s, when for a short time labor dominated city government, city funding to the Institute increased almost three and a half times. In the early 1890s, the Labor News editorially advocated stated funding of the Institute comparable to that of the state colleges (November 28, 1891). The labor movement in Richmond broke apart over the racial issues, however, and was never able to exercise much influence at the state level (Chesson, 1981, pp. 186-189).

If the Institute leadership had any significant influence at the state level, it was singularly ineffective in gaining state funding. Many requests were made, but all were denied. The leadership was even unsuccessful in getting a state charter until 1902. A major reason for the need for state funding was inadequate facilities, but when the Institute finally secured a new building, it did so solely through private contributions (Record, III, pp. 199-200, 227).

By 1904, the Virginia Mechanics' Institute had become a well established part of the community, and it continued to grow over the years. In 1925, it moved again into larger new quarters, and in 1942, its board was dissolved and it merged with the Richmond public schools. In 1966, its name was changed to the Richmond Technical Center, and it moved once again to new facilities where it is located today. Thus, from rather penurious but optimistic beginnings, an institution was built which today serves area high school students in the day, and working adults at night, regardless of class, race, or sex.

The story of the Virginia Mechanics' Institute is instructive for adult educators today. New and more persistent calls are made for cooperation between educators and business and industry. As adult educators enter new arrangements with the business world, they must be sensitive to the philosophical and ideological justifications, and whether promises made can be delivered.

Much talk is heard today about economic growth in the so-called "sun belt" region of the country, and the term "New South" may even occasionally be heard again. As the story of the Virginia Mechanics' Institute shows, however, rhetoric frequently hides deeper and even unconscious motives that linger in the culture. As subsequent history has revealed, there was much about the New South that was not really new. Certainly Richmond and the South experienced new growth, but educational provisions could not control larger social, political, and economic forces. The level of financial support, for example, was never commensurate with rhetorical flair and expectation. The term New South was itself problematical, for much of the new was simply superimposed on the old. The Institute strove to serve industrial workers, but it was socially selective in who was served and in the attitudes fostered. If it sought to serve industrial workers, it did not question existing social divisions as much as it served leading economic interests in its drive for New South industrialization. Thus, educators must be sensitive to who is served by new programs, and who is excluded. The question "Who benefits?" is an important one.

The Virginia Mechanics' Institute story also shows that much positive good can come from new educational departures. In spite of all the difficulties, the institution survived and became an important part of the social and economic life of the community. One of the distinguishing features of that success relates, however, to an early feature: While the objectives were certainly oriented to economic objectives of business and industry, there was also a definite humanitarian concern for the welfare of learners, although the concern showed some significant omissions. As adult educators reach into economic institutions in new ways today with slogans of "human resource development," it is well to keep clearly in mind the nature of slogans and to consider that humans are always more than mere resources to be developed.

#### References

- Calish, E.N. (1899) "Address," Virginia Mechanics' Institute, May 16, 1899. Richmond: J. L. Hill Printing Company.
- Catalogue of the Virginia Mechanics' Institute, 1934-35. (1934) Fiftieth Anniversary Edition. Richmond: Housed in Richmond Public Library, Richmond Virginia.
- Chesson, M.B. (1981) Richmond After the War, 1865-1890. Richmond: Virginia State Library.
- Grady, H.W. (1969 [1904]) The New South and Other Addresses. Edited by Edna Lee Turpin. New York: Haskell House Publishers.
- The Labor News [Richmond], November 28, 1891; January 2, 1892.
- "Lyon G. Tyler," (1907) Men of Mark in Virginia, Volume I. Washington, D.C.: Mean of Mark Publishing Company.
- Moger, A.W. (1968) Virginia: Bourbonism to Byrd, 1870-1925. Charlottesville: University of Virginia Press.
- Morrison, A., compiler. (1889?) Richmond, Virginia, and the New South. Richmond: George W. Englehardt.
- Page, R. (1923) Thomas Nelson Page: A Memoir of a Virginia Gentleman. New York: Charles Scribner's and Sons.
- Page, T.N. (1908) The Old Dominion: Her Making and Her Manners. New York: Charles Scribner's and Sons.
- Pulley, R.E. (1968) Old Virginia Restored: An Interpretation of the Progressive Impulse, 1870-1930. Charlottesville: University of Virginia Press.
- Richmond Dispatch. December 6, 1884; June 8, 1887; August 7, May 19, 1888; May 10, 1891; May 2, 14, 21, June 12, 1892; May 17, 1895.
- The State [Richmond], October 29, 1890.
- The Times [Richmond], March 17, 1901.
- Record, Virginia Mechanics' Institute. Volume I, 1884-1891; Volume II, 1891-1898; Volume III, 1898-1904. Housed in Richmond Public Library, Richmond, Virginia.
- "The Young South," Century Magazine, 24 [Old Series], (October, 1882), in The South Since Reconstruction, edited by Thomas D. Clark. New York: The Bobbs-Merrill Company, 1973.
- The Whig [Richmond], June 8, 1887.

## NIKOLAI GRUNDTVIG: EDUARD LINDEMAN'S DENMARK CONNECTION

David W. Stewart<sup>1</sup>

### Abstract

Some eight significant threads of influence on Eduard Lindeman can be identified as coming from Nikolai Grundtvig. These are: (1) education as "life", (2) adult education as for everyone, (3) education as experience-centered rather than subject-centered, (4) importance of teacher-learner interaction, (5) social and community dimensions of adult education, (6) adult education as non-vocational, (7) freedom as a prerequisite of adult education, and (8) importance of national culture as a primary curricular base.

Nikolai Frederik Severin Grundtvig (1783-1872), Denmark's "Prophet of the North", had long been dead when a young Eduard Lindeman first visited Denmark in 1920, but the bustling Denmark of that year was largely a creature of the nation's 19th Century intellectual leader.

While Lindeman was aware of Grundtvig's massive influence on Denmark, he could not have read any of Grundtvig's major writings on education since none of them was published in English until 1976. (Knudsen, 1976) Almost certainly his early acquaintance with Grundtvig's ideas was obtained from conversations with Danes, readings in Grundtvig-influenced secondary sources, and astute observation of Danish society.

The most overt manifestation of Grundtvig's influence was the Danish folk high schools (folkehøjskoler) or people's colleges. It was the folk high school, Lindeman believed, that was "the chief source of Denmark's economic and social renaissance, and hence it was that I came back from Denmark a convinced and ardent advocate of adult education". (Lindeman, 1949, p. 1) Lindeman also concluded that there was no way to make the new - and to him impressive - Danish culture clear and meaningful "except when viewed through the lens of adult education." (Lindeman, 1945, p. 4)

The connection between adult education and societal progress in Denmark was crystalized for Lindeman when he saw hanging over the doorway in a Danish farmhouse this slogan referring to the nation's struggle for recovery after a disastrous 1864 war with Prussia: "Hvad udad tabes, det må indad vindes." [What outwardly is lost must inwardly be gained.] This quotation from the Danish poet H. P. Holst, Lindeman translated as: "What the enemy has taken from us by force from without, we must regain by education from within." (Lindeman, 1961, p. xxix) (Bugge, October 22, 1984)

From the Danish folk high schools and related education enterprises derived from Grundtvig's thought, Lindeman acquired a broad range of influence upon his philosophy that eventually found expression in The Meaning of Adult Education, including the concepts of: (1) education as "life", (2) adult education as for everyone, (3) education as experience-centered rather than subject-centered, (4) the importance of interaction between teacher and learner, (5) the social and community dimensions of adult education,

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(6) adult education as non-vocational, (7) freedom as a prerequisite of adult education, and (8) the importance of national culture as a primary curricular base.

Many of these influences overlap with those of Lindeman's intellectual roots that came from Ralph Waldo Emerson and John Dewey.

### Education as Life

Nikolai Grundtvig believed that the great need of every human being was that of coping creatively with the problems and opportunities of one's life. Around himself he found schools where reading, writing, arithmetic, the classics, and the professions could be learned but nowhere was there a "school for life". (Davies, 1931, p. 71) In designing the folk school, Grundtvig's intention was that of developing an institution that could strengthen young adults in their capacity to get a good start on life's road - not a predetermined path but the road of life that each person would individually choose. Lindeman adapted this idea to an American setting and affirmed that "education is life - not a mere preparation for an unknown kind of future living." (Lindeman, 1961, p. 4)

### Adult Education As for Everyone

The second great influence of Grundtvig upon Eduard Lindeman was the idea that adult education is for everyone, not just for those considered "educable" in any classic sense. A democratic nation was strong if its individual citizens were strong, competent, and morally upright in their approach to citizenship. The "common life of the people" was an appropriate source of experience for learning; the "unique personality" of the individual student would also be valued and developed. (Hart, 1927, p. 271) In common with Grundtvig, Lindeman was egalitarian to the core. His belief in the inherent right of each individual to learn and to develop as a unique individual was in part derived from his exposure to the Danish educational and social experience.

### Adult Education as Experience-Centered

Lindeman subsumed most dimensions of Grundtvig's thinking in his assumption that adult education should come "via the route of situations, not subjects". (Lindeman, 1961, p. 6) With Grundtvig, Lindeman believed that adult education should begin - must begin - in the real world inhabited by adults.

### Importance of Teacher-Learner Interaction

Grundtvig was nearly alone in his time as an advocate of a free and easy interaction between teacher and learner and, for that matter, within student instructional groups. He had serious reservations about the lecture as a teaching tool in that "no living interaction is reached between your thoughts and mine". (Bugge, 1983, p. 218) Reciprocal teaching was the essence of Grundtvig's version of the teaching-learning transaction. This was an idea that greatly appealed to Eduard Lindeman and that found its way into The Meaning of Adult Education and into American adult education philosophy and practice.

### Social and Community Dimensions of Adult Education

Grundtvig's adult might view the world from the perspective of his or her own aspirations, but these were not to be self-centered persons. Each individual was to have a sense of oneness with the folk school community and a sense of community responsibility. By extension, this would ultimately

incorporate the surrounding social environment and society. A "spiritual sense of a unity in multiplicity" was to be imparted by the Danish folk high school. (Davies, 1931, p. 72) Herein is to be found an important wellspring of Scandinavian democratic socialism and a source, too, of Eduard Lindeman's social and political philosophy. Lindeman's chapter on adult education "As Dynamic for Collective Enterprise" in The Meaning of Adult Education reveals Grundtvig's influence at this source.

### Adult Education as Non-Vocational

That adult education is to revolve around "non-vocational ideals", to use Lindeman's words, is an additional plank of Grundtvig's philosophical platform adapted for Americans. (Lindeman, 1961, p. 5) While neither Grundtvig nor Lindeman intended to denigrate vocational education, their belief was that development of a vocation was secondary to the development of a creatively functioning human being.

### Freedom as a Prerequisite

The adult's freedom to learn is a theme running through all of Grundtvig's educational philosophy. Consequently, adult education should be voluntary. Living in freedom, as well as learning in freedom, was a topic developed by Lindeman in a full chapter of The Meaning of Adult Education. Grundtvig's philosophy, as well as that of Ralph Waldo Emerson, jumps from every page. The contemporary adult educator who promotes self-directed learning by adults is squarely within this tradition.

### National Culture as Primary Curricular Base

Finally, a more subtle influence of Nikolai Grundtvig upon the thinking of Eduard Lindeman - that of national culture as the primary curricular base for adult learning. Neither Grundtvig nor Lindeman was being narrowly nationalistic in asserting that the culture of the motherland was to come first as a citizen pursued the educational road through life. Grundtvig believed that Danish culture, for Danes, was the starting point in acquiring an individual worldview. (Knudsen, 1955) Lindeman appears to have borrowed this idea - perhaps unconsciously - when he enshrined Ralph Waldo Emerson and John Dewey as examples of what is great and good in American culture.

## IMPLICATIONS

What, in summary, are the implications of Grundtvig - as interpreted by Lindeman - for the adult educator in the world of today?

At the outset comes the all important assumption that education is life. Adult education starts where the adult learner wants to start - and the adult learner will want to start with learning that will help him or her live life more fully and productively. Adult education is for everyone - human beings at all economic and social levels. Adult learning will happen faster and with greater ease when it evolves from experience rather than subjects. Teaching and learning is a democratic transaction between equals. Adult education has community and societal implications; it is not something that happens in a vacuum surrounding an individual. Adult learners are persons, not functions, and wish to be treated as mature adults. Learners possess a high degree of personal freedom within a good learning situation. Life-based learning can best evolve from the national culture within which it will be used.

If true, all of this is profoundly good news not only for individuals but for societies and nations. Adult learning becomes not only acceptable but essential and desirable in a world that has often devalued it in the past. Middle-aged, even elderly, people who want to learn in or out of institutional settings should be encouraged. Adult learners can rightly demand that they be full participants in the learning transaction. Adult education is not something they receive but something they themselves acquire and own.

For young people and their anxious parents, there are also glad tidings. It is possible to relax a bit about the time frame in which education can be obtained. Why try to inculcate bits of knowledge into the heads of unwilling teenagers who might be better able to learn later in life? Perhaps a teenager has as much right to work - or even to pause for breath before undertaking some of life's developmental tasks - as an adult has a right to learn.

Almost all of what is now called "nontraditional education", e.g., assessment of prior experiential learning, external degrees, competency-based curricula, learning contracts, etc., has a philosophical base that can be traced back to Grundtvig via Lindeman. Even the "reconceptualized" education called for or implied by futurists such as Alvin Toffler (Future Shock, The Third Wave) and John Naisbitt (Megatrends) is a logical extension of ideas pioneered by Nikolai Grundtvig in 19th Century Denmark.

#### References

- Axford, Roger. (May 14, 1983). An American educator comments on the World Impact of N.S.F. Grundtvig's Educational Ideas. Des Moines, Iowa, Grandview College, Grundtvig Bicentennial.
- Bugge, K. E. (1983). Grundtvig's educational ideas. In Thodberg, Christian & Thyssen, Anders P., N.S.F. Grundtvig, Tradition and Renewal. Copenhagen: DET Danske Selskab; Philadelphia: Nordic Books Distributor.
- Bugge, K. E. (October 22, 1984). Unpublished letter to author. [I am indebted to Prof. Bugge of The Royal Danish School of Educational Studies, Copenhagen, for tracing the "outwardly lost/inwardly gained" quotation to H. P. Holst who formulated it as the motto for an industrial exhibition in 1872. It has erroneously been attributed to Grundtvig in the United States or to Enrico Dalgas, a military officer, in Denmark.]
- Davies, Noelle. (1931). Education for Life: A Danish Pioneer. London: Williams & Norgate.
- Hart, Joseph K. (1927). Adult Education. New York: Thomas Y. Crowell Co.
- Knudsen, Johannes. (1955). Danish Rebel: A Study of N.S.F. Grundtvig. Philadelphia: Muhlenberg Press.
- Knudsen, Johannes (Ed.). (c 1976). Selected Writings/ N.S.F. Grundtvig. Philadelphia: Fortress Press.
- Kulich, Jindra. (1984). N.F.S. Grundtvig's folk high school idea and the challenge of our times. Lifelong Learning, 7:10-13.
- Lindeman, Eduard C. (1945). The sociology of adult education. Educational Sociology, 19:4-13.

Lindeman, Eduard C. (May 31, 1949). The meaning of adult education for the new age. Unpublished manuscript located in Box 12, A-I, E.C. Lindeman Manuscripts, Rare Book and Manuscript Library, Columbia University, New York).

Lindeman, Eduard C. (1961). The Meaning of Adult Education. Montreal: Harvest House Ltd. (Originally published in 1926 by New Republic, Inc., New York).

Stewart, David W. (February 17-18, 1983). Eduard C. Lindeman and the idea of lifelong learning in America. Lifelong Learning Research Conference Proceedings. College, Park, Maryland: University of Maryland, Department of Agricultural and Extension Education, 97-101.



**Emerging Paradigms and Forms of Adult Education  
A Classification Scheme**

Harold W. Stubblefield<sup>1</sup>

**Abstract**

The post World War II period of adult education has been characterized by the emergence of new paradigms and forms. This paper classifies these into a five part classification scheme: (a) the adult education synthesis, (b) reconceptualizations of the educational system, (c) institutional reorientations, (d) new forms for adult roles, and (e) the lifelong learning synthesis.

The post World War II period of adult education has been characterized by the emergence of new paradigms and forms of adult education. For each of these paradigms and forms a new term has been used to describe its distinctiveness. Consequently, the field of adult education has been inundated with a profusion of new terms, resulting in considerable confusion about how these new paradigms and forms are related to each other. Attempts to define these terms have not resulted in conceptual clarity. As Thomas (1983) put it: "Much of this debate is sterile, many of the arguments are circular, and, on the whole little is contributed to the development of theory in respect of adult education" (p. 1).

This paper presents a classification scheme to depict these emerging paradigms and forms. The scheme was derived from logical and historical analysis because new paradigms and forms of practice evolve from concrete experience. Debates about these terms are meaningless unless the arguments are grounded in knowledge of the term's evolution and meaning to its originators. Paradigms and forms have to be interpreted in light of the historical and experiential occasions in which they were framed.

**THE ADULT EDUCATION SYNTHESIS**

The first attempt in the United States to make sense out of adult education came in the 1920s in the Carnegie Corporation's creation of the American Association for Adult Education (Rose, 1979). The Carnegie Corporation's (CC) work in adult education grew out of its mandate to advance and diffuse knowledge. The diffusion of knowledge would (a) promote good citizenship, (b) be a creative outlet for bored factory workers, and (c) permit the intellectually gifted to advance. The CC used adult education as its conception of how knowledge should be organized and diffused. The CC wanted to start a new educational approach to complement the public school system and universities. Adult education would take learning outside the classroom, include all aspects of daily life, and restore learning to the learner outside bureaucratic structures. Adult education would further be a repository for the liberal arts and develop each person's intellectual capacity and appreciation for learning. Adult education would do this by capacity and appreciation for learning. Adult education would do this by organizing the information to be disseminated into manageable sections that the average person could understand; only that information judged essential for the public would be organized. The CC's definition of adult education excluded education for professional or occupational training or full-time degrees. The CC focused on the organization and dissemination of knowledge and not on how institutions should organize themselves to deliver programs for adults.

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The professional interests of providers thwarted this experiment. Nevertheless, the dominant idea of adult education that had emerged by the 1940s held that participation in learning by adults derived from their personal interest. The role of government in adult education was only dimly perceived.

## RECONCEPTUALIZATION OF THE EDUCATIONAL SYSTEM

In the 1960s international and European organizations began to center attention on education as a lifelong process. Unesco adopted the term Lifelong Education, the Council of Europe the term Permanent Education, and the Organization for Economic and Cooperative Development the term Recurrent Education. As Alanen (1982) and others have shown, these approaches were concerned with establishing a basis for educational planning, each held in common similar beliefs that education was a lifelong process, and each held different ideas about the goals of education as a lifelong process and how educational planning should proceed.

### Lifelong Education

The guiding principle of Unesco's Lifelong Education concept is the vertical and horizontal integration of education. Horizontal integration calls for breaking the monopoly of public schools and the recognition of the various educative institutions in the learning experiences of both youth and adults. Vertical integration calls for a more systematic connection between persons and educative institutions and for self-directed learning through the lifespan. A critical ingredient in this process is to develop learners who have the motivation and competencies to direct their own learning. Unesco has based this work on lifelong education on both a humanistic and technocratic view of man: a concern for developing persons and for helping persons adapt to the changing requirements of work.

### Permanent Education

In January 1962 the Council of Europe established the Council for Cultural Co-Operation to develop and promote a cultural program for the Council. Its initial educational focus was on young Europeans of all backgrounds and academic attainment to help them adjust to the changing political and social conditions. The term L'Education Permanente was adopted by the Council in 1966. This project in permanent education shared many of the Unesco ideas, but the primary focus was on didactics. The central experiments have sought to help adults engage in the "self-management" of their own learning and to free them from dependence on institutions and the teacher as the resource. A second emphasis has centered on developing the "community" as the organizing unit for educational planning.

### Recurrent Education

Recurrent education, the educational strategy of the OECD, has focused on how to distribute education in alternating periods of work and education after postcompulsory education has been completed. Recurrent education sought to correct defects in the current educational scheme, namely, the growing length of compulsory schooling, the separation of school from work, and the lack of correspondence between the demands of the world of work and educational preparation. The central features of recurrent education were shortening postcompulsory education and providing opportunities for persons to return to post secondary education for periods of study after they had been in the work force. Recurrent education as an educational strategy has been concerned mainly about the relation of education and work.

Each of these paradigms has generated position papers, conceptual studies, and research. Sweden, reportedly, has adopted the recurrent education model as the basis of educational reform, and Finland has adopted the lifelong education model as the guiding principle for restructuring its educational system.

## INSTITUTIONAL REORIENTATIONS

In the United States, publicly supported educational institutions have begun to rethink their role in the education of adults. Current developments should not obscure the pioneering efforts of public schools and colleges and universities for almost a century.

### Public School-Community Education

The reorientation of public schools toward its role in the education of adults has occurred under the rubric of community education. Early forms of community education began to emerge before the turn of the century as part of the progressive reform movement. But the modern community education movement began in 1935 with the Flint, Michigan, Community School Program. Until the 1950s the emphasis was placed on school-community relations. The Community School concept held that the school should engage in community problem solving and in expanding educational opportunities to citizens of all ages. In the 1960s, the concept of community education emerged to clarify the function of community-school programs from the work of adult education and recreation. Leaders in the national movement began to expand the concept to include a "community development" function. Theorists of community education describe it as a program, process, and movement.

### Higher Education-Nontraditional Study

In the 1960s higher education began to re-examine its role in the education of adults and how university delivery systems should be modified to accommodate the life situation of adults who needed to study part-time and at locations near where they lived and worked. The term "nontraditional study" emerged as the covering term for higher education's attempt to redefine and restructure its mission and delivery modes. The term itself was vague and conceptually weak. But it served as a term around which the new thinking about higher education and the adult learner could be organized.

## NEW FORMS FOR ADULT LIFE ROLES

New forms of education for adult life roles have emerged frequently since 1960, and each of these forms required a term that described their uniqueness. The term career education is a creation of the Office of Education to describe a conception of education related to vocation based on life span developmental psychology. Primarily directed toward public school curriculum, the concept of career education or development has been adopted in the work place. Its relation to adult education is the subject of some discussion. Other terms include civic literacy which treats the role of the adult as citizen and andragogy which articulates a theory of the adult as a learner.

The term "Human Resource Development" (HRD) was coined by Leonard Nadler and popularized in 1970 in his book on Developing Human Resources. The term HRD focuses on individual-institutional relationships to denote a group of activities in which the job, the individual, and the organization interact. Unlike other terms, HRD has not proven to be faddish. The term is widely used and a small but important knowledge base has emerged. The term has also been used to describe a field of practice organized around three major functions: administration, learning specialist, and consulting.

## LIFELONG LEARNING: THE UNITED STATES SYNTHESIS

In the 1960s the term lifelong learning began to be used in the United States to describe an emerging synthesis about new directions for adult education. The term was most widely popularized by the 1976 amendments to the higher education act, known as the "Lifelong Learning and Public Policy". Other projects also widely popularized the term especially the Exxon Educational Foundation supported project of the College Board, Future Directions for a Learning Society, and a book, Lifelong Learning in America. Also, a special issue of School Review in 1978 examined the financing of the learning society.

As used in the literature, the term lifelong learning has been imprecisely defined. The term is often used as a synonym for adult education; the focus is on the adult years. The substitution of lifelong learning for adult education has not been capricious, however. The term represents a shift in philosophy about the provision of adult learning opportunities. The philosophical position in adult education held that adult education was a private interest to be pursued at the adult's expense. The new term contains a policy dimension absent from the conception of adult education. In the lifelong learning conception, education in adulthood is a matter of public interest that demands government policies at both the state and federal levels. At the minimum, those advocates hold, a lifelong learning policy should provide a minimum level of basic education for adults who did not acquire basic literacy skills as children and youth and educational opportunities to equip all adults with job related skills.

The term lifelong learning may be inadequate as a gathering place for the various interests in adult learning. The term Human Resource Development appears to be gaining some acceptance. It conveys a clearer sense of the task to be accomplished, it belongs to the economic vocabulary, and it relates adult learning to the economic sphere, which is the dominant concern in American life now. The term lifelong learning appears to have been an interim term, useful for a decade or so, but giving way now to a term more suited to the present economic and political agendas.

#### References

- Alanen, Aulis. (1982). Lifelong education-permanent education-recurrent education. Special issue. Adult Education in Finland. 19.
- Doyle, Mike. (1983). Thoughts on developing America's human resources for the future. In W. L. Smith (Ed.). Collaboration in lifelong learning (pp. 25-41). Washington, D.C.: American Association for Adult Continuing Education.
- Kurland, N. D. (1977). Lifelong learning in the public interest. In Yearbook of adult and continuing education, 1977-78 (pp. 275-83). Chicago: Marquis Academic Media.
- Rose, A. D. (1979). Towards the organization of knowledge: Professional adult education in the 1920s. Doctoral dissertation, Teachers College, Columbia University.
- Thomas, J. E. (1982). Radical adult education: Theory and practice. Nottingham: Department of Adult Education, University of Nottingham.

REFUGEE ADULT EDUCATION:  
A CASE STUDY OF AN APPROPRIATE  
EDUCATIONAL APPROACH IN A TECHNICAL SOCIETY

1

David Milton Mattocks

Abstract

This paper examines many of the hurdles of refugee acculturation in a technical society. The researcher builds a case for "appropriate education" while drawing from typical blunders in international development. The author contends that there are important principles which educators working among diverse cultures should follow. A case study is utilized to examine these unique educational principles which one agency used, resulting in several remarkable businesses, programs and educational opportunities for refugees.

INTRODUCTION

Mea was past the point of crying. As she sat staring at the yellowed walls of an empty apartment, all she could think about was how life was in the lush tropical mountains of Laos. Life was so free and simple. The small village, meals on a low earthen fire, a garden for rice and vegetables . . . Then there was the war. Mea never understood the whys of the war, only that she had lost her husband and brother to it. Mea had heard rumors of village annihilations by government soldiers. Fearful of the same, some families in the village had already left in the dark of night for northeast Thailand.

One evening two of the village men brought news that a North Vietnamese troop was only a morning walk from their camp. That evening the leaders decided that the villagers could no longer stay in the mountains of Laos. By the light of the moon, Mea, her family, and the village started their trip to the Mekong River, the last obstacle in the difficult trek to freedom.

Mea was exhausted. Carrying her youngest of three, while providing for the needs of her other children, was almost more than she could bear. Chieu, her eldest son of 13 years, also had difficulty keeping pace. His young body trembled under the combined weight of himself and his grandmother, who had been ill for the past few years.

Mea and her family soon became part of the, "tag along group", the weak and the sick of the village who could not keep pace. One night there was gun fire ahead, a lot of it! It seemed as if it was never ending! A few moments later some of the group came running back. They were not holding any of the possessions they had previously toted with them. Only their lives. Most of the villagers were killed under the shower of government bullets that night. The small band of survivors hid in the under brush while two of the young men scouted out a safer route. The following night, the group crossed the Mekong River into Northeast Thailand.

For the next seven years, Mea and her family spent every day in crowded refugee camps waiting for their papers to be processed. One day Mea and her family were on a plane to America.

The story of Mea and her family is a composite account based on the experience of many Laotian refugees.

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## HURDLES OF ACCULTURATION: UNDERSTANDING CULTURAL DISADVANTAGES

Our age is a century of refugees. The horrors of diabolic dictatorships, floods and famine have resulted in the displacement of millions of human beings, who have been conveniently labeled as "refugees". Virtually every nation in our world has been affected. The newly arriving refugees soon learn that their cultural values are often viewed as little more than ideological backwardness in a fast-moving society. Previous ways of livelihood are quickly negated by governmental, state and supportive agencies as, "nontransferable employment skills." The impact of prejudice, culture shock, and loss of home, country, and loved ones all couple together in a wrenching socialization process which is difficult to imagine. As the refugees attempt to adapt to a technical society, there are four barriers which the individual generally must overcome.

### Linguistic Isolation

The most important factor to achieving economic self-sufficiency in a technical society is the ability to speak the native tongue. In 1977 the California Department of Health conducted a study which indicated a high positive correlation between the refugees who had the ability to speak English and those who were employed. (Ellis, 1982, p.96)

Many of the Laotian and Cambodian refugees have had little or no education or exposure to a written language. This makes the transition to written English and basic math difficult when there is not a foundation to build from.

### Mental Trauma

It is an accepted fact that refugees experience some degree of trauma. "Amazingly, the refugees . . . are adjusting well. But underneath these apparently successful and incredibly resilient people have a great emotional pain and suffering. The emotional toll is unimagineable. Some will need psychiatric help. Many more will never come to our attention. The problems will affect the entire first and second generations of Indochinese-Americans. They are survivors. They will survive". (Ellis, 1982, p. 103)

The trauma which is experienced in the resettlement process may range from mild depression to survivor's guilt or other mental health problems. In a nation wide study sponsored by the Department of Health, Education and Welfare, Indochinese Refugee Assistance Programs (DHEW IRAP) staff in Washington D. C., assessed the current status of the Indochinese. Their findings indicated that most refugees culturally resist help. Of the ones that did seek help, most are taken care of by voluntary agencies, while others are seen by the IRAP mental health projects.

Many of the mental health problems begin to surface approximately four years after their resettlement. The highest risk group was between the ages of 19 and 35. It was found that married couples generally acculturated too quickly substituting the value systems of young Americans for that of their own homeland. The single refugees seemed to have a sense of rootlessness underscored with depression, alcoholism, violence, bad dreams and/or thought disorders. (Ellis, 1982, pp. 101-102)

### Cultural "Backwardness"

Most human beings grow up with cultural characteristics, values, customs and beliefs which are ingrained into their very being. Many refugees find that most of their values do not "fit" into their new promised land. Customs, values and beliefs which they previously held are often discredited.

In replacement of the thatched hut or tent comes a steel building. Even eating becomes complex. Rather than going out to the garden or open market to obtain food, one must find a store, which can be frightening experience for some refugees.

## "Nontransferable Employment Skills"

New ways of livelihood must also be learned. A life time of experience will often be labeled as "nontransferable employment skills." Previous expertise in farming, herding or fishing is viewed with little employment potential in a technical society. Even doctors, lawyers, and educators are not easily transplanted from one country to another.

These hurdles present a challenge for government, state, supportive agencies and volunteers to incorporate some degree of wisdom and sensitivity into the resettlement process of refugees. It is this researcher's opinion that the needed cross-cultural wisdom which could be utilized among diverse cultures, can be extrapolated and defined from many of the lessons we have learned in the field of international development.

### APPROPRIATE EDUCATION: LEARNING FROM OUR MISTAKES

In recent decades many agencies have been asking some difficult questions regarding international development issues. It was thought that the "green revolution" would answer all of the world's food problems. Technology, it was thought, could cure almost any hurt . . . . WRONG. "We have given them mobile power units called tractors without teaching them how to repair them or warning them how dependent they would be on gasoline. We have looked at their shallow wooden ploughs and said primitive. We have given them deep ploughshares, efficient in temperate zone soils, but not in theirs. We have wrecked their soils which are shallow in organic terms and have turned up the sub-soils to be chemically and uselessly transformed by the sun. We have done the same sort of thing to their social habits which, even in poverty, were a stability. We have impaired their cultures and we have made them dependent on artificial standards which might suit us but are alien to them. We have created the ghost towns of our good intentions." (Retchie-Calder, 1974)

Many Western minded "internationalists" have understandably been frustrated with their lack of success while working within international communities. Mystified, they have found that their top-down, goal-orientated, problem-solving approaches have not worked. Like ships passing in the dark of night, the needs and the assistance pass each other with little understanding as to why.

After almost three decades of tripping over our shoelaces, we found that answers were not as easy as we once purported. What we thought to be a "heads or tails" problem, turned out to be more of a Rubic's cube. We soon learned that different cultures recognize, conceive and grasp the realities of life through divergent codification processes. (A codification process, quite simply put, is how a society or individual classifies experiences.) We realized, in turn, that it was important for the individual working among diverse cultures to be sensitive to individuals and how they view life within their societal frameworks. Every human codifies experiences through language and behavior, both of which are molded by one's culture. Learners will grasp reality only as it is perceived through their individual code.

It is for this reason that I am making a plea for what I will call, "appropriate education." It is my belief that international farming systems research and development is built on the unlabeled foundation of "appropriate education and extension." The realization that one should learn, before one attempts to teach, or change, is at the very crux of this developmental approach. The sensitivity and awareness of the extension agent and other research members is the fundamental principle in the incorporation and application of farming systems research and development. If the important agronomic, anthropological, economic and sociological questions are not asked by the team, we simply go back to tripping over the shoelace of inappropriate cross cultural education and extension.

It is this author's opinion that many of the lessons we have learned in the field of international development needs to be extrapolated and defined by those working among international communities within technical societies.

In recent years, the third world has arrived on our door step. Recent arrivals have tended to be from rural areas with little contact from the western world. The hurdles of cultural disadvantages translate into difficulties in terms of economic self-sufficiency. The Mien and Hmong are two examples of cultures caught in this difficult transition process. The majority of Mien and Hmong families were previously self-sufficient subsistence farmers living in the lush tropical mountains.

#### A CASE STUDY: PRACTICING APPROPRIATE EDUCATION

In 1982, the researcher together with a small group of individuals became concerned about the growing numbers of Hmong and Mien families in the Seattle area. The refugees' lack of English, technical skills, job-finding methods, and a depressed economy all contributed to high unemployment among these peoples. The few agencies which were left working with refugees had such enormous caseloads as to render them ineffective. Out of this group of concerned individuals, lead by Cal Utomoto and Tom Lane, an agency grew which has played a significant role in the resettlement of many displaced refugee families.

The unique educational and developmental principles (values) which this culturally sensitive group embraced has resulted in several remarkable businesses, programs and educational opportunities for refugees.

These principles are:

- 1) Change vs. time: It was realized that change must take place to facilitate self-sufficiency into a technical society. Yet this change is a process which should be done with the refugees, not for them. It should be realized that change often results in instability, characterized psychologically as emotional tension. (Shaner, et al, 1982, p. 397) Much of the trauma can be overcome if the refugee has one friend who s/he can turn to for help. Sponsor families, who sponsor one refugee family, can be especially helpful.

Any change takes time. This is especially true when one attempts to learn a new language. Translators and job-related English classes are appropriate methods of overcoming the hurdle of linguistic isolation in a technical society.

- 2) Cultural differences: All cultural differences should be treated with respect and usefulness rather than evidence of ignorance, stubbornness or a general inability to learn. (Shaner, et al, 1982, p. 397) Without this respect for another's heritage, cultural ethnocide is the only alternative for the refugee. The "salad bowl" concept respects the heritage and diversity of all ethnic groups.
- 3) "Nontransferable employment skills": All "Nontransferable employment skills" whether individual, social, or cultural, are all educational opportunities rather than educational liabilities.

Most of the jobs and opportunities were created from the existent framework of "nontransferable employment skills" which the refugees already possessed. A successful example includes a farm cooperative which continues to remain a curiosity to the news media. On a shoe string budget in the spring of 1982, the Indochinese Farm Project (IFP) was born. The project utilized a farming system or process approach to agricultural development. The refugees served as decision makers and researchers while learning and deriving an income from the project. The "farming package" was not conjured up in meeting rooms, but by sitting on the grass with the farmers and deciding, what happens next?

The goal of the IFP is to create vocational agricultural opportunities by providing necessary inputs, via grants and donations, thus helping refugee families to establish themselves as viable truck farmers. In 1982 12 families worked an average of 60-hour weeks, realizing a total return of over \$14,000 on their efforts. The produce was marketed in a variety of wholesale and retail community markets. In 1983, eight families cultivated 14 acres of land. By the end of the year the farmers realized a gross income of \$42,500. Growers in 1984 had a bad year with a cold, wet spring and an early frost in September, yet



the nine families realized over \$40,000 in earnings. In addition, the project has generated a food supply for the farmers while providing unsaleable produce donations to local food banks on a regular basis.

Green houses, covered with polyurethane, are prepared in September for the winter crops. The annual IFP harvest celebration is held in October. The general community and the media are all invited to celebrate the indochinese culture and their harvest. January and February are a time to do maintenance around the farm and to take time off. With the advent of March the farmers will be out working the new crops.

To accomplish its long-range objectives, the IFP relies on a small dedicated staff and numerous volunteers who are working toward the eventual self-sufficiency of the project. The project has obtained additional land for cultivation in 1986 and hopes to expand into animal husbandry.

Another successful business is a small store called South East Asian Design (SEAD) which sells Mein and Hmong embroidery, applique and batik. The SEAD cooperative has a retail outlet in the Pike Place Market and assists hundreds of Indochinese refugees in the Seattle area. The store provides opportunities for craftswomen to learn business, retail, and cultural skills while selling their handwork to the public, galleries and museums. The cooperative is now owned and operated by Mien and Hmong craftswomen who have achieved self-sufficiency while retaining some of their cultural heritage.

#### IMPLICATIONS

The educational principles which helped to guide and which result in programs such as these are by no means a comprehensive educational guide. Rather they embrace one fundamental rule of education; one should learn, before one attempts to teach. This rule is one critical component which many adult educators working cross culturally within international communities, both locally and abroad, frequently overlook.

#### References

- Ellis, Arthur A. The Assimilation and Acculturation of Indochinese Children Into American Culture. Sacramento: Department of Social Services, Sacramento California, 95814.
- Ritchie-Calder, Lord. Exploring the future. Christian Science Monitor. May 20, 1974.
- Lee, Dorothy. Freedom and Culture. Englewood Cliffs, NJ: Prentice Hall, 1959.
- Shaner, W.W., Philip, P.F., and Schmehl W.R. Farming Systems Research and Development. Bolder: Westview Press, 1982.
- Smith, Kathleen A. Acculturation of Late-Arriving Refugees: A New Job for Adult Educators. St. Louis: National Adult Education Conference, 1980.
- Wallace, Mike. CBS Reports on Plight of Laotian Refugees in Thai Camps. March 4, 1978.

## THE HRD PROFESSIONAL: A MACROMOTION STUDY

Travis Shipp<sup>1</sup>

### Abstract

This is a report of a macromotion study of the practice of the Human Resource Development (HRD) profession. The researcher randomly observed the work activities of a sample of HRD professionals and then analyzed the content of that work to ascertain the range of activities performed and the relative importance of each. Each activity was further subdivided into its components which were subjected to factor analyses to determine common factors. The resulting factors are the sets of skills necessary for performing the HRD function.

### Purpose of Study

The American Society for Training & Development (ASTD) defines Human Resource Development as a series of organized activities conducted within a specified time and designed to produce behavioral change, (ASTD p. 8). "Adult Education is a process by which men and women (alone, in groups, or in institutional settings) seek to improve themselves or their society by increasing their skill, knowledge or sensitivity; or it is any process by which individuals, groups or institutions try to help men and women improve in these ways." (Houle, p. 32) While the definitions of HRD and that of the broader field of Adult Education are remarkably similar, it is important to note that the context of the two is quite different. HRD is conducted primarily in the workplace with the intent of improving productivity. Adult Education takes place in almost all aspects of life, the workplace being only one of the arenas for learning, and may have as its goal any of a host of motivations. It is fitting, therefore, that research of the practice of the HRD functions be conducted in the workplace and should include inquiry into the range of activities (and the relative importance of each of those activities) in the HRD matrix.

### Significance of Study

The word "profession" to describe the HRD field of practice is used with the understanding that HRD is not a profession as defined by occupational sociologists, but the word does denote the aspirations of those who currently practice in the field and is used here to describe the practice and the aspiration. For the practice to evolve into a true profession, there must be, among other requirements, a specialized body of knowledge to be imparted to the aspiring professional in a lengthy, formal training period. At present, this specialized body of knowledge does not exist; what does exist is a set of practices, or "bags of tricks" which are used and discarded as new fads appear (Mech, p. 163). Until the field of HRD is defined more specifically, the practice analyzed, and a theory base formulated and tested, the body of specialized knowledge and the formal training programs to support that knowledge are still in the future.

The purpose of this study was to determine the activities which comprise the practice of HRD and to ascertain the percentage of time spent on each of those activities. Additionally, an attempt was made to analyze the content of each for the skills or knowledge required to perform the activities. This study should make a particularly valuable contribution in that it is one of the first factor analyses employing numerous observations of a large sample of HRD professionals in different occupational situs taken over an extended period of time.

### Methodology

The research methodology used for this study was one borrowed from the field of industrial engineering. The design, macromotion time study, uses numerous observations made over a long

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period of time to ascertain what one does, how often one does it and how long it takes. The macro-motion study, coupled with task analysis and factor analysis, can accurately describe an occupation.

For this study 125 HRD managers were recruited. The reason for observing only HRD managers rather than all HRD practitioners was that managers were employed full time in HRD and performed a variety of HRD tasks; whereas, many instructors and consultants were "stand up" instructors with few other HRD duties or were only assigned to the HRD function on a part-time basis. The managers represented the legal, finance, manufacturing, transportation, commerce and health situs. The extraction, building, entertainment and education situs were not represented. Preliminary interviews helped determine that an observation period from September, 1983 through January, 1984 could reasonably be expected to encompass a full range of HRD activities.

Each manager was instructed on how to record and report the observations, and promised that the data would be held in confidence. A secretary was recruited at each work site and given the duties of notifying managers at each site about observation times, collecting observation cards and making check observations. Managers did not know the day or time of an observation in advance. At the randomly selected time, managers were notified to record the observation and return the card to the secretary, who then marked it with the manager's identification number and sent it to the researcher.

To reduce the large number of observations to a more parsimonious set of factors based on the common elements of the observed activities, an orthogonal rotation factor analysis was used. The factors were then examined by a panel of HRD managers working with the researcher. The panel named each factor, determined skills required to accomplish each and determined which factors were HRD related and which were not. ("Personal activities" and "avoidable delays" were two factors determined to be non-HRD, non-work related factors. "Organizational committees" was a non-HRD, work-related factor.)

### Findings

The following activities appear to be a part of the HRD manager's job. The factors are presented in the descending order of importance. The skills or knowledges most frequently mentioned as necessary for performance of the activity are listed under each. The percent of time spent in each activity is a percentage of the total time in the HRD function only; typically, the HRD manager was involved in HRD activities 4.28 hours/day and in non-HRD activities the rest of the time.

<u>Activity</u>	<u>% Time</u>
Program Management	
o understand goals, policies and practices of the organization	16.1
o understand the relationship of training to profits and costs of the organization	
o advise management on appropriate training solutions to problems	
o coordinate training function with other staff functions in planning and forecasting	
o plan training programs (includes training system development, scheduling, resource acquisition and allocation)	
o administer training program (includes overseeing the process of the program, resolving problems as they arise and writing final report)	
Needs Assessment/Research	13.9
o understand research design, survey research and interviewing	
o understand accounting and budgeting	
o understand relationship of training to changes in job performance, costs and profits	
o form and lead effective advisory groups	
o reconcile employee needs, organizational needs and own personal needs	
o anticipate future HRD needs by interpreting organization and department long range plans	

<u>Activity</u>	<u>% Time</u>
Budget/Finance/Accounting	8.8
<ul style="list-style-type: none"> <li>o prepare department budget</li> <li>o understand profit/cost center concept</li> <li>o understand standard cost concept</li> <li>o understand relevant cost concept</li> <li>o understand relationship of training to profit/cost center performance</li> <li>o prepare amortization schedule for training costs</li> <li>o determine life cycle of training information or skills</li> </ul>	
Writing/Communicating	8.1
<ul style="list-style-type: none"> <li>o write clear, concise reports, letters, and memos</li> <li>o use proper grammar, punctuation, spelling and syntax in all oral and written communication</li> <li>o write and deliver oral presentations to internal audiences</li> <li>o write and deliver speeches to outside audiences</li> </ul>	
Evaluation	8.0
<ul style="list-style-type: none"> <li>o determine what is to be evaluated and the desired direction and magnitude of change</li> <li>o demonstrate the relevance of the change to higher management</li> <li>o show relationship of training costs to profit/cost change</li> <li>o conduct evaluations of changes in learning, teaching, behavior, attitude, profit or loss associated with training</li> <li>o modify programs as indicated</li> <li>o report problems or solutions not appropriate for training</li> </ul>	
Records Management/Information Processing	6.9
<ul style="list-style-type: none"> <li>o design and administer information system to facilitate program management</li> <li>o design and administer information input system to insure organizational problems are brought to attention of HRD</li> <li>o insure that evaluation results are compared to plans in time to make changes</li> <li>o review employee performance problems and make recommendations</li> <li>o insure HRD is represented in HR planning and forecasting</li> <li>o administer training materials inventory and instructors' records</li> <li>o administer employee training records</li> </ul>	
Planning Organizational Change	6.9
<ul style="list-style-type: none"> <li>o understand a variety of planning models</li> <li>o recommend HRD contributions to future alternatives</li> <li>o differentiate between single-use project plans and standing plans</li> <li>o coordinate HRD short, intermediate and long range plans with those of the organization</li> <li>o articulate, in writing, the HRD objectives to reach the organization's long range goals</li> </ul>	
Human Resource	6.0
<ul style="list-style-type: none"> <li>o differentiate between short-run and long-run manpower planning</li> <li>o short-run forecasting include provision to (a) change the job, (b) change the employee, and (c) remove the employee</li> <li>o long-range forecasting include provisions to (a) project organization structure to match organization goals, and estimate human resources to fit that structure, (b) match the projected human resources with the existing workforce and (c) plan for employee development and entry training</li> </ul>	

## Activity

## % Time

### Directing/Supervising

- o manage the HRD employee in the department
- o train HRD employees
- o review employee performance
- o devise work improvements
- o handle technical matters

None of the other activities occupies more than 5% of the HRD managers' time. In the aggregate they make up nearly 20% of the time spent on HRD activities, and so should be mentioned although space does not allow a fuller treatment. They are: Instructional Design (3.8%), Meeting/Planning/Facilitating (3.6%), Personnel Management (3.2%), Audio-Visual Planning and Use (1.0%), and Miscellaneous (1.9%).

### Conclusions and Recommendations

Even a cursory examination of the foregoing list reveals that the definitions of HRD and Adult Education are more similar than the activities which make the practitioners' roles. The traditional management skills of planning, budgeting and business information processing assume far more importance for the HRD manager than the Adult Educators' instructional planning, instructing and meeting planning, and facilitating. (Ingham, p. 17-38) Even some of the important areas common to both fields such as needs assessment and evaluation require a different orientation since HRD managers concern themselves with profit and costs, while Adult Educators concentrate on the growth and development of the individual.

Programmatic recommendations are tentative at this time, but would certainly include an interdisciplinary approach utilizing more the cost accounting, budgeting, management, and personnel administration courses from the School of Business. Some reorientation of course objectives in the Adult Education courses dealing with needs assessment and evaluation would also be appropriate. Internships for those planning careers in HRD should definitely take place in a business setting and should include maximum exposure to the production process and to budgets and cost accounting. This borrowing from other academic disciplines is only a stop-gap measure as the HRD field evolves as a true field of study and ultimately, one hopes, into a true profession. This paper reports only the activities that currently occupy the HRD manager and the skills required to perform each. No attempt has been made to judge the appropriateness of these activities or to ascertain the relative value of other activities to the organization or the advantage to the development of the field. It does seem reasonable to say that the lack of entry requirements into the field, the paucity of research and theory formulation and a definition lacking specificity and exclusivity require that the existence of HRD as a field of study or an academic discipline be taken somewhat on faith.

Those involved in the activities known as HRD have a professional responsibility to continue to conduct research and to formulate theory. This study suggests that further research is needed in the following:

- a. research into the activities of all aspects of HRD practice
- b. research into the knowledge to perform the activities - particularly to ascertain if the knowledge to perform an HRD activity is unique to HRD or part of some other field of study
- c. research into more specific and exclusive definition(s)
- d. research into the structure of HRD to ascertain if it is one field or several similar fields related to or overlapping one another
- e. research into the value of specific preparation for entry into the field and alternate forms of preparation
- f. theory formulation and testing

## References

ASTD (1984), Models for Excellence: The Conclusion and Recommendations of the ASTD Training and Development Study. Washington, D.C.: ASTD.

Houle, Cyril O. (1972), The Design of Education. San Francisco: Jossey-Bass, Inc., Publ.

Ingham, Roy J. in Preparing Educators of Adults (1981), Stanley M. Grabowski (Ed.). San Francisco: Jossey-Bass, Inc., Publ.

Mech, Vicki Ann (1984), Human Resource Development in the United States from 1630-1980. Doctoral Dissertation, Indiana University, Bloomington, IN.

# COLLEAGUE COACHING TO SUPPORT LIFELONG LEARNING ON THE JOB: CRITICAL ISSUES AND IMPLICATIONS FOR EXPANDED PRACTICE

William J. Yakowicz<sup>1</sup>

## Abstract

Recent research suggests colleague coaching both facilitates the transfer of learning from training to application situations and, more importantly, expands opportunities for lifelong learning on the job. While such findings have far reaching implications for the field, little information regarding development and maintenance of the practice is available. This paper reports findings of an indepth field study which examined teacher efforts to implement and sustain the practice of colleague coaching in the workplace.

## INTRODUCTION

### Overview

Much has been written about the need to expand opportunities for lifelong learning on the job. O'Toole (1977) noted that learning must be integrated with work since, in part, "most workers have an innate desire to learn and grow." Beyond desire, however, such other forces as rapid social change, technological developments, and the dynamic nature of the workplace compel nearly all to continue professional development (LeBreton, 1978). As Knowles (1975) contends, capacity for lifelong learning is increasingly critical as the world becomes one "in which rapid change will be the only stable characteristic."

Expanded opportunities for lifelong learning on the job are no less critical for educators (Edlefelt, 1974). To support such opportunities, Schaefer (1967) suggested restructuring the workplace to facilitate teacher to teacher communication and experimentation. Lortie (1975), noting both the lack of a shared technical culture and the isolation teachers often experience on the job, recommended working arrangements to foster mutual visitation and consultation. Lawrence and his associates (1974) found such arrangements powerfully support efforts to improve instruction.

Subsequent studies produced similar findings. Joyce and Showers (1980) reported that, when used in conjunction with study of new instructional models, demonstration, and guided practice, coaching by colleagues aids in the transfer of learning from training to application. Coaching, Joyce and Showers (1980) contend, is one integral component of effective training which enables teachers to provide each other with companionship, technical feedback, and on the job assistance in analyzing the application of new methods, adapting them to students, and gaining executive control over them.

From a different perspective, Lawrence and Branch (1978) discuss a similar practice more broadly. Peer panels, they say, serve as "vehicles to support the continuing professional development of their members." Much like coaching teams, peer panels enable teachers to help one another plan for self-improvement, analyze teaching - often through mutual observation and the provision of low-inference feedback - and verify, if necessary, the attainment of personal improvement plan objectives. Similarly, Johnson and Johnson (1980) find collaborative teacher support groups foster higher levels of participant motivation, more productive professional relationships, and increase implementation of new teaching practices. Sharon and Hertz-Lazerowitz (1982) also found teacher self-help groups to enhance learning transfer. More

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recently, Sparks (1983) found additional evidence regarding the value of coaching. Summarizing this research, she notes that peer observation had a greater impact on teacher implementation of new instructional practices than trainer delivered coaching. She says, "This is good news. Followup visits by experts are expensive, and may be unnecessary for teachers to make real changes in their teaching."

It appears that coaching and related approaches to learning on the job can be of considerable value to human resource developers, researchers, and teachers alike. After all, as Little (1981) contends, "Working and learning together with colleagues is both more powerful and more satisfying than working and learning alone."

While benefits derived from coaching can be significant, teachers attempting to integrate the practice with ongoing school programs face a number of difficulties. School organization, scheduling, and time constraints pose formidable obstacles. Compounding traditional impediments, however, is the relative rarity of colleague coaching in the field of education. Indeed, Bird (1983) contends coaching with peers is so rare that "typically, one must produce it in order to study it." Consequently, colleague coaching activities constitute new and untried practices for most teachers, few working models of successful efforts exist, and resources or guidelines to facilitate development of such practices are difficult to find.

With little available research regarding facilitative conditions, procedures, and behaviors, attempts to build coaching networks may be frustrating. As one participant in this study notes:

It's hard to get it off the ground....coaching is clearly important and we want to get it going here on a larger scale....Perhaps it is the general attitude that classrooms belong to individual teachers. After all, we are not used to having visitors in the class. But there are other things as well. I'm not sure what they are, but they get in the way.

This study was concerned with such "things:" the impediments to and the facilitators of colleague coaching in the workplace.

### METHODOLOGY

#### Purpose of the Study

Concerned with facilitating teacher efforts to implement and sustain the practice of coaching on the job, this study sought to answer the following questions: 1) What is colleague coaching and how is it implemented on the job? 2) What critical factors facilitate or impede the practice? 3) What implications do these critical factors have for practitioners interested in implementing and sustaining colleague coaching in the workplace.

#### Method

To gain a multidimensional view of colleague coaching, this field study employed semistructured interviews and conversations with coaching teachers, observations of coaching activities, arranged group discussions, and the critical incident technique. Interviews, conversations, and observations were recorded in field notes and video tape between December 1982 and June 1983.

As information was collected, it was reviewed for accuracy and examined to extract critical incidents as well as other salient elements. These were coded and sorted into relevant categories which were inductively generated. These analytic categories emerged gradually through continuing review and comparison. Tentative findings were tested against teacher perspectives at arranged group discussions.

Critical incident procedures were employed in April and again in June of 1983. Participants were provided with background information concerning this study, provided directions and sample incidents, and asked to write their own first-hand reports of incidents which critically affected



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efforts to build and maintain the practice of coaching in their schools. Twenty-three of the twenty-five participating teachers returned forty-five usable incidents and eighty-three recommendations for improving coaching in their schools.

### Subjects

Twenty-five teachers from two New Jersey high schools (one urban school and one rural school) were recruited on the basis of their active involvement with and knowledge of colleague coaching. Teachers ranged in age from twenty-seven to forty-three, with a median of thirty-six. Twenty participants held bachelor's degrees in arts or sciences, while five had master's. All were certified in their speciality and had been teaching for an average of eleven years. Fourteen were female. Although most were content specialists, three were special educators, one was a child study team director, and one was a department chair. Of the remaining, seven taught math, four taught history or social studies, three taught English, and one each taught physical education, art, shop, and business.

## FINDINGS

### Implementing the Practice of Coaching

Initially, colleague coaching served two distinct functions in participating sites. Coaching was introduced to the urban school as a mechanism which would ensure the implementation of new methods of instruction. At the rural site, coaching was introduced as a support mechanism for teachers who were attempting to more effectively integrate handicapped students. As such, special educators were to provide inclass assistance and coaching to their content teaching peers. Regardless of initial differences, however, the emerging practice looked something like this at both sites:

1. In some way, frequently as a result of informal discussions in the faculty room, classroom difficulties or good ideas would be explored. Initiated by someone who was familiar with the practice, the notion of a classroom visit was raised. Often a colleague would be invited to see how a new approach affected student learning and to "give me some ideas about how to make it work better." In this way, the visit usually had a some focus or purpose beyond companionship.

2. With the visit scheduled, guidelines regarding its length, purpose, and method of recording were determined. Teachers suggested that this step was critical for successful visits.

3. The visit was conducted, to the extent possible, as planned. Observations were often recorded in the form of coding map or a running narrative. However, in many instances no records were made. This last approach, termed the "warm body method" by teachers, served as an introduction to the practice.

4. Observations would be discussed some time after the class. Occasionally, teachers had corresponding lunch or preparation periods which allowed for extended discussion. More often, however, teachers found it necessary to steal a few minutes in the hallway between classes. Detailed discussions generally had to wait until the next opening - perhaps a week later.

The actual discussion approach varied considerably. However, the general intent was to elicit from the observed teacher a) a description of positive lesson aspects, b) reasons why these aspects or practices were effective, and c) how the positive practices might be further strengthened. Then, if the coach was sensitive to teacher concerns, the discussion turned to those concerns for assessment. If both coach and teacher were comfortable with the process, one improvement objective might be identified.

5. If an improvement objective had been identified, strategies for implementing it were devised and another visit was scheduled to assess the impact of any changes as well as to assist in making necessary changes.

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6. The coach would invite the observed teacher to exchange roles and the reciprocal visit would be scheduled.

7. Finally, records of the visit or followup sessions would be given to the teacher and the process would begin anew.

### Difficulties Faced in Building Coaching Practices

While teachers reported a range of benefits which became available through the practice of coaching, they also noted serious impediments to their efforts to build and maintain the practice. Principal difficulties fell into three broad categories: organizational forces, their own actions and attitudes, and specific coaching procedures.

Organizational forces, in the start up stage, posed the greatest problems. Time, for example, was always tight and tough to schedule for coaching with trusted colleagues. Teachers taught five periods during the day, had one period of scheduled supervision in the hall or cafeteria, one lunch period, and one preparation period. Typically, it was necessary to coach during lunch or preparation periods. Feedback sessions had to be conducted on the run.

As important, however, administrators provided few rewards for coaching in the early stages. In fact, one other difficulty related to this was the negative reward structure. Teachers quickly learned that as they improved their practice through coaching, they would find increasing numbers of "difficult students" in their classes. Administrators, noticing how well some teachers handled handicapped students, "rewarded" these teachers by taking special students out of the hostile classrooms and moving them to the more effective ones. As coaching became recognized by administrators and they released coaches from noninstructional duty, this negative reward was perceived to be an acceptable trade off.

Teacher actions could easily impede efforts to coach as well. Lack of confidence reduced the likelihood of getting involved in coaching. Just as powerfully, however, lack of competence in observation and feedback resulted in closed doors. In this regard, the pervasive use of evaluative rather than nonjudgemental feedback, even though teachers were used to receiving it from administrators, both reduced levels of trust and levels of interest in coaching, "I get enough of negatives from my supervisors, I don't need more." Interestingly enough, however, teachers almost demanded a qualitative rating from observers. Nearly every initial visit concluded with teachers asking, "How'd I do?"

### Factors Which Facilitate Coaching

Facilitators of coaching in the workplace fell into the same broad categories cited above. Teachers reported that, with an adequate number of trusted colleagues involved in the coaching network, scheduling of visits and feedback sessions was easier. In addition, as teachers were able to appropriate time from noninstructional duties, scheduling flexibility was increased. Further, teachers perceived this additional time to coach as a reward from the administration. By demonstrating their commitment to the practice, administrators enabled teachers to engage in coaching without fear that the required time would be wasted, that is, not counted for evaluation purposes. Thus, the administration played a crucial role in legitimizing the practice and in fostering a climate within which coaching might flourish.

Teacher actions and procedures which facilitated expanded use of coaching included a maintenance of focus on coaching as a tool for collaborative problem solving. This involved the recognition that a) coaches were also learners, b) that effective support and technical assistance could be provided by both coaching and observed teachers, and c) that improvement through coaching was a collaborative rather than prescriptive venture.

Findings also indicated that rewards in the form of improved practice in the classroom proved to be critical. While companionship was one important benefit to accrue from coaching,

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teachers indicated that, "If I don't get any improvement out of coaching, if I can't find out what I'm doing wrong and what I'm doing right, what good is it?" However, the approach used to help a colleague find out about areas for improvement was critical as well. By providing many recommendations for improvement, a coach could easily frighten colleagues and reduce the sense of self-efficacy. The most effective approach, it appeared, concentrated on assisting the teacher in defining her/his own improvement objectives. Typically, when only one area for improvement was identified, progress was readily evident.

### IMPLICATIONS FOR EXPANDED PRACTICE

As it emerged in participating schools, coaching was a complex process affected and given meaning by the unique institutional and social forces at work. Even so, coaching appears to be a viable tool for educators as well as human resources developers at the present time. Those interested in building coaching practices may wish to consider the following:

1. Coaching should be introduced to the entire school so all are aware of purposes, procedures, expected benefits, and potential risks attendant to the practice. This is not to say that all teachers must be involved in coaching - indeed, participation should be voluntary - but all teachers in the school should be aware of what their colleagues are doing and should understand the practice is not a threat to them.
2. Administrators have a critical role in the development and maintenance of coaching in the school. As such, they should explicitly support the practice from the start. Such support can come in the form of release time from noninstructional duties, curiosity about the impact of coaching in the school, and the basic "pat on the back" to let teachers know that what they are doing has value.
3. Teachers and administrators should work to increase opportunities for communication and collaboration. By building such opportunities into the school year, all involved can more effectively develop tactics for introducing, expanding, and sustaining the practice of coaching. In addition, increased communication in participating schools appeared to foster increased trust, one major facilitator of coaching.
4. Teachers and administrators should recognize that coaching is not a simple process that is easily implemented in any setting. Efforts to introduce coaching will be greatly enhanced by collaborative planning to identify potential difficulties, useful problem solving mechanisms, and specific plans of action. Plans should consider incremental implementation issues as well as individual differences.
5. Coaching should be introduced and expanded incrementally, perhaps beginning with the "warm body approach" and gradually moving to more complex and differentiated strategies. The latter should include the recording of instruction and the provision of nonjudgemental or technical feedback to provide a data base for discussion.
6. The practice of coaching should emerge from the concerns of teachers and the problems they face in the day to day business of teaching. Coaching should be defined by teachers and directed at building capacity for problem solving through colleague support. Thus, data that becomes available through coaching should not be used for evaluative purposes.

### REFERENCES

- Arends, Richard, Richard Hersh and Jack Turner. Conditions for Promoting Effective Staff Staff Development. Washington, D.C.: ERIC Clearinghouse on Teacher Education, 1980.
- Bird, Tom. Teacher Coaching in School Improvement Experiments. Unpublished research proposal to the National Institute of Education. Boulder: Center for Action Research, 1983 (1125 Spruce, Boulder, Colorado 80302).

# THE IMPLEMENTATION-REPLICATION EXTENSION SYSTEM: A NEW, LOW-COST FUELWOOD ENERGY EXTENSION STRATEGY FOR DEVELOPING COUNTRIES

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## Abstract

For most people in developing countries, fuelwood, used for cooking and heating, remains the primary energy source. In recent years, rising demands for fuelwood have contributed to the widespread destruction of tropical forests, causing fuelwood prices to escalate sharply. The author has developed a low-cost fuelwood-production program, the "Implementation-Replication Extension System", which stresses minimization of risks, utilization of local resources, and a simple management structure. The rapid success of a pilot project using this system in the Dominican Republic in summer, 1984, suggested the system's potential value in a wide range of situations where fuelwood supply is a major problem.

## THE FUELWOOD PROBLEM

Although discussion about the energy crisis has centered on the high costs of imported fuels, for most people in developing countries, fuelwood remains the most immediate energy need. It is estimated that the use of firewood and charcoal, primarily for cooking, represents 90% of all energy consumption for 1.5 billion people in these countries. For another billion people, the use of firewood and charcoal represents at least 50% of all energy use (Eckholm, 1975; NAS, 1980). In recent years, rising human populations have increased the demand for fuelwood, often far beyond the ability of the native forests to provide new supplies. Fuelwood supplies have steadily decreased, causing sharply escalating fuelwood prices. These higher prices have been particularly damaging to the middle and low income sectors which depend on fuelwood for their cooking and heating needs. A growing percentage of their limited resources has gone to pay for wood for cooking (NAS, 1980). Often, people in these groups are forced to reduce the number of meals in which they cook food. And the loss of forests has meant more than a simple shortage of wood. Throughout the developing world, the destruction of forests has caused severe erosion, heavy flooding after rains, and perhaps most ominously, the drying up of many rivers. Large areas of once-fertile land are becoming deserts.

The disappearance of native forests has hurt some of the very lowest income sectors in rural areas in another way as well. In many very low-income areas, the land is too arid or otherwise unsuitable for conventional agricultural utilization. Lacking other alternatives, the people in these areas often turn to the production of firewood and charcoal, which they sell to be transported to the cities or to more prosperous rural areas, as their major source of income. For these people, the growing loss of forest resources means the loss of their primary means of subsistence.

In recent years, there have been a number of attempts, both by the major international organizations, as well as by developing countries themselves, to develop fuelwood production programs. These programs have succeeded in identifying a number of fuelwood-producing trees capable of rapid development. However, attempts to involve small farmers in these programs have frequently been less than successful, often due more to social and cultural reasons than to technical ones (Hyman, 1983).

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## THE IRES FUELWOOD ENERGY EXTENSION SYSTEM

Under a fellowship from the Organization of American States (with additional support from the Pan-American Development Foundation) the author developed a low-cost, rapid-implementation system for rural fuelwood projects, called the "Implementation-Replication Extension System (IRES)", designed to encourage low-income farmers to grow fuelwood-producing trees on their abandoned and marginal lands. The IRES system emphasizes the minimization of risks, a simple management structure with clear well-defined objectives, the utilization of locally available resources, and an emphasis on flexible use of funds. Using this system, the author directed a pilot project in summer, 1984, in Monte Cristi province of the Dominican Republic. Within 3 months, and despite a total budget of under \$5,000, farmers in 7 towns had planted fuelwood plots on their abandoned lands, and the Dominican government had officially requested that the program be expanded to a national scale. The rapid success of this initial pilot project suggested that the IRES system may hold considerable promise for other areas where fuelwood supplies are a serious problem. This paper will discuss the different components of the IRES system, and the ways in which they make possible the development of rapid, wide-reaching fuelwood projects in situations where project resources are a major limiting factor.

### Minimization of Risks

The goal of the IRES system is to encourage a small number of farmers in each town within a designated project area to grow fast-developing, fuelwood-producing trees on their abandoned and marginal lands. As the idea of growing fuelwood trees as a crop is a relatively new concept for most Third World farmers, it is unlikely that they will be willing to risk their very limited resources on a fuelwood project until they have seen that it produces clear benefits. Therefore, in order to obtain satisfactory farmer participation at the onset of a project (and to insure that participating farmers are not negatively affected in any way) it is essential that economic risks to the farmer be removed from the project design. The plantings are carried out only on a farmer's abandoned lands, which are not producing any income. Furthermore, if there is any livestock in the area which might damage the planting, such as goats and cattle, it is essential that the project be carried out on land which has already been fenced (since in all other cases, it would be necessary for the farmer to make an investment in constructing the fence). And the tree species being used should be adapted to relatively difficult circumstances, in which they will probably not receive either chemical fertilization or pesticide applications.

The stress on abandoned lands and the minimization of cash investment are key elements in attracting the participation of low-income farmers and in protecting against unexpected results. For the farmer, the only investment involved is the labor involved in planting (about one day at most) plus occasional care for the plants as needed. The knowledge on the part of the farmers that even if the energy plot is unsuccessful, they still do not lose any money, makes it much easier to find farmers willing to take part in the program.

There is another reason why the IRES model is particularly well adapted to very low income rural areas. It is in the low-income areas where the production of firewood and charcoal often represents the major income source for most of the population, so a program which offers the opportunity to increase fuelwood production is likely to appear particularly relevant to the villagers' needs. In many cases, villagers turn to fuelwood production as the only alternative for sustenance because the surrounding land is unsuitable for conventional agriculture, be it for aridity, salinity, or some other problem. Consequently, there are large areas of abandoned lands on which a fuelwood program can be carried out without in any way interfering with other agricultural activities.

The stress on minimizing economic risks to the farmer also reduces the need to conduct lengthy and costly species trials prior to taking the project out to the countryside. Because there are few risks involved to participating farmers, they generally do not object to the use of several species in their plantings (in fact, the presence of diverse species, including some which they may never have seen before, is more likely to increase their

interest in the program). Thus, a considerable amount of on-site species testing can be conducted, which, though not purely scientific, will give a reasonably good idea of which species perform best under real-life conditions.

### Clear, Well-Defined Goals and Easy Project Replicability

Many projects in developing countries are unsuccessful because they require a high level of management skills which frequently is not available. For this reason, the IRES system stresses a simple management structure with clear, well-defined goals. The IRES system does not require separate project infrastructure, but rather, is designed to be built into already existing Agriculture or Forestry Ministries. The government designates certain zones - preferably zones where fuelwood plays an important role in the local economy - as "project areas". In each project area, one IRES extensionist is assigned to develop local energy farm programs. The IRES extensionist has a specific and very clear function: to have a small number of farmers in a specified number of towns (usually about 5-10 towns per season, depending upon local conditions) within his project region planting small energy plots on their abandoned lands with the onset of each rainy season (the plantings are done by private individuals on their own abandoned lands, so that the benefits will go directly to the participating farmers). The extensionists should assist the farmers with the planting and, no less important, should continue to assist and encourage the farmers in the care of their plots in the months which follow. With each new growing season, the extensionist has the responsibility of incorporating a specified number of new towns within the program, as well as continuing to assist towns in which there are already participating farmers. Although this means that eventually the extensionist will be responsible for a large number of towns, the amount of time required should not increase excessively. Unlike annual crops, most fuelwood-producing trees require relatively little attention beyond the immediate time of planting. Between the time that the trees have become successfully established, and the time that they are ready for harvest, the main purpose for most extensionist visits will be simply to keep participating farmers involved and to reassure them that they have not been forgotten.

The ultimate goal of the extensionist is that eventually, each town within his project area (the size of a project area may vary; in the Dominican Republic, the total project area proposed for each extensionist is the size of one province, about the size of one county in the U.S. or other large countries) where fuelwood plays an important economic role should have at least one farmer growing fuelwood-producing trees on his abandoned lands. This strategy will expose the widest possible number of people, within a short time, to the possibility of producing fuelwood as a low-risk cash crop. Once a small number of people in each town have made money from fuelwood trees on what was formerly non-productive land, it will take little effort to convince their neighbors that planting fuelwood plots offers them an opportunity for a new source of income. The project is very easy to evaluate: if an extensionist is unable to obtain the specified number of participating towns, then it indicates certain problems. And the role of the supervisor is also very clear: to determine the project areas and to insure that the extensionists in each of these project areas are able to obtain the participation of farmers in a specified number of towns.

Another advantage of the simple management structure is that it provides the IRES system with a built-in capacity for easy replicability since implementation of the project does not require the creation of a large new infrastructure. After the program has been initiated in a few project areas, the same project can easily be expanded to new areas, by simply training a new extensionist for each of the designated new sites. In this way, the IRES system permits, first, the rapid implementation of energy farm projects and later, their diffusion through wide areas.

### Utilization of Locally Available Resources

The IRES extensionist is trained to identify locally available resources, both personnel and material, which can be of use to him in his project. For instance, it is common in developing countries to find government nurseries in which large numbers of tree seedlings are lost because no one claims them. Whenever possible, an IRES project should be designed

around one of these underutilized nurseries.

The IRES extensionist is also trained to coordinate his project with locally active organizations (especially private-sector organizations) which assist farmers. There is tremendous value in carrying out a project in coordination with locally based organizations. People based in the area can inform the extensionist about the areas within his zone where fuelwood production plays the largest role, and can introduce him to key farmers or groups within the area. They can also provide day-to-day support for the project as they visit the area in the course of their regular activities. The cooperation with local personnel to assist in site selection and farmer introduction not only dramatically reduces the time required for an extensionist to familiarize himself with the area and begin developing his program, it also makes him aware of local idiosyncracies of which most outsiders would not be aware, and allows him to select the villages and towns where his program has the greatest chance of succeeding. In the Monte Cristi pilot program, the coordination of the project with a local private sector non-profit organization led to the selection of seven target towns where fuelwood represented the major source of income (and avoided the selection of areas where fuelwood played a less significant role) with the result that, within three months, all seven towns had participating farmers planting energy plots.

As long as the IRES extensionist is following the general goal of having some farmers in each fuelwood-producing town producing energy trees, it is not important in which order he goes about selecting the towns within his project area as targets for his program in a particular growing season. Often, especially at the beginning of a program, the choice of which towns to select at a given time is better left to the agents of the cooperating local agency. These agents may have a particular reason for preferring one town over another with apparently similar conditions. By allowing them to choose the specific participating towns, within the general guidelines set by the IRES extensionist (i.e., significant fuelwood-producing zones), it allows the local agents to have a tangible impact on the development of the project. Allowing the local agents to make such decisions will greatly increase their morale and willingness to cooperate in the project.

The same general principle holds true when dealing with groups such as farmer associations and cooperatives. From the beginning of the program, the farmers are actively involved in the planning process. If an association wishes to participate in the project, then the IRES extensionist should encourage the farmers themselves to determine which of them will be the participants, when the planting should be, etc. If the IRES extensionist allows the farmers themselves to make all the decisions which do not affect his basic project goals, he will find that farmers become much more enthusiastic about his project. When dealing in this way with associations in the Dominican Republic pilot project, it happened repeatedly that on the day that farmers had selected for planting, 10 or 15 other association members would appear voluntarily to assist those members who had decided to plant energy plots - despite the fact that the plantings were taking place at the beginning of the growing season and that many of them were taking time away from preparing their own crops.

Throughout his training, the IRES extensionist is taught that people who are allowed to make important decisions and to have a tangible impact are much more likely to cooperate than those who are merely expected to follow instructions. He is also taught to respect and seek the knowledge of others, both from field agents of local organizations and from the farmers themselves. Seeking the advice of local agents can often avoid unnecessary mistakes, such as selecting target towns where the people are unlikely to be interested in a fuelwood project. Likewise, the farmers themselves can often supply valuable information about their own soils, the optimal time for planting, etc. By building a project around locally existing material and personnel resources, the IRES system not only dramatically reduces project cost and start-up time; it also maximizes opportunity for informal inter-agency cooperation at the village level in a way that does not occur among agency heads at the national level.

#### Mobility and Flexibility of Personnel

Because it stresses the identification and utilization of already existing resources, the IRES system requires very few new resources in order to successfully impact upon wide

areas. However, due to the limited communications facilities in most rural areas, it is necessary that all personnel be highly mobile and flexible in order to be able to reach these resources whenever necessary. Each extensionist should be provided with some means of transportation, such as a motorcycle, and a reasonable amount of money on a monthly (or other fixed period) basis to cover all transportation expenses, primarily gasoline, to use as he sees fit. He should also be assigned on a similar fixed period basis another small sum of money to cover other project expenses that may come up. An example of such an expense might be a small amount of money to pay for gasoline for a pick-up truck which has been borrowed to carry seedlings out to the planting sites. The project supervisor, who will usually be based in a regional or national capital, should have the necessary transportation resources which will allow him to regularly visit his extensionists and evaluate the progress of the program.

Although the total monthly sums for transportation and other project expenses need not be large (a monthly total per extensionist of \$100-200 is about average), it is necessary that the extensionist have this resource at his disposal at all times to use in response to any situation which may arise. This flexibility allows the extensionist to develop his project in response to the particular conditions in his project area. For instance, the farmers in one area may favor planting in one period while farmers in a different area may favor a different time. Or one area may have soils which are so low in phosphorus that a small amount of phosphorus (the cost of which may, at the extensionist's discretion be subsidized by his monthly project expense) may make the difference between project failure and success. Also, because the IRES system places so high a role on informal cooperation, the extensionist must have the mobility to contact cooperating groups or individuals whenever necessary. The IRES extensionist must have the flexibility to develop his project to respond to the particular needs of his project area.

#### CONCLUSION

The rising demand for fuelwood, the growing loss of forest reserves, and the resulting hardships for the very lowest income sectors in developing countries, have made it essential to develop alternative sources of fuelwood. Often, there are few resources available to support such an effort. The IRES system, by maximizing the use of what resources are available, offers developing countries the opportunity to develop rapid, low-cost fuelwood projects which will reach wide areas. By providing an alternative source of fuelwood, the IRES system can alleviate some of the pressure against the remaining native forests. And by providing a low-cost, low-risk cash crop, the IRES system offers a potential new source of income for the poorest rural areas. To be sure, an IRES project alone cannot reverse the entire deforestation process, which is the result of many complex factors. But by providing a simple, low-cost approach to the growing problem of fuelwood shortages, the IRES system holds promise as a development strategy for those large areas of the developing world where fuelwood remains a primary energy source.

#### References

- Eckholm E. (1975). The Other Energy Crisis: Firewood. Washington, D.C.: Worldwatch Institute, Paper 1.
- Hyman, E. L. (1983). Smallholder Tree Farming in the Philippines, UNASYLVA 35 (139): 25-31.
- National Academy of Sciences. (1980). Firewood Crops, Washington, D.C.: NAS.
- White, L. P. and L. G. Plaskett. (1981). Biomass as Fuel. London: Academic Press.



## THE COOPERATIVE MOVEMENT AND GREECE'S DEVELOPMENT

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### Abstract

The history and current status of the agricultural cooperative movement in Greece was examined via the use of Greek, French, and English language documents as well as in-person interviews. By design, cooperatives aim at development in micro and macro arenas. Protected by the State, but self-governing, they are units responsible for their own educational development. This freedom from intervention has led to their growth and impact as the primary social and economic institution in rural Greece. The pyramidal structure of operation (from village cooperatives to the PanHellenic Union) may be of interest to others as might the historical "Brotherhood of Ampelakia," which laid down principles of cooperation long before the famed Rochdale pioneers.

This paper represents a piece of a much larger research effort of the author--ongoing since 1980--to examine the education of adults in Greece in the context of the socio-economic, political, cultural, as well as historical and geographic phenomena of the country. Coordination and operational efforts of the Ministry of Education have been explored elsewhere (Boucouvalas, 1982a, 1982b). The delivery system, however, includes a myriad of formal, non-formal, and informal agents and processes--including learners themselves. An overview of these systems and infrastructures, as well as methodological difficulties and "lessons learned" will form the focus of a forthcoming paper (Boucouvalas & Drower, 1985). Moreover, a comprehensive treatment from antiquity to modern times, of adult education in Greece from a dynamic process perspective as well as an institutional and program area emphasis will be completed by late 1985 as part of the series on Comparative and Area Studies in Adult Education edited by Jindra Kulich.

The substance of the present paper--the cooperative movement--represents a serendipitous discovery of the author in the process of the research noted above. Follow up inquiry was conducted in the summer and fall of 1984 to further examine this area. Investigations into Greek, French, and English language documents, coupled with in-person interviews, provided the main data bases.

Although a system for agricultural education and extension activities operates via Centers for Professional and Agricultural Education (KEGE, after the Greek acronym) in each district throughout the country, as well as through other bodies, it is only the cooperative movement which, by design, focuses efforts on development in a more comprehensive sense.

The formation of cooperatives in Greece was designed to assist individual development as well as national development. Interestingly, the development of cooperatives becomes inextricably intertwined with the development of individual farmers (on the micro side) and the development of the country of Greece (on the macro side). As used in the present paper, the concept of development will draw from the work of Bowman (1984) who explains that "national development entails the involvement of rising proportions of the population in changing ways of producing and living" and laments that "few investigations have focused on this broad theme" (p. 1301).

Although the greater cooperative movement in Greece has spawned urban and rural, consumer and "producer" cooperatives, the main focus of the present inquiry is restricted to the rural agricultural cooperatives of farmers. It is in this sphere where cooperatives can best be called a movement in the sense of an organized attempt to effect development--both individual and national--and as the major economic and social institution (in the sociological sense) operating in rural Greece.

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Cooperatives, of course, by definition are enterprises that are collectively owned and operated for mutual benefit, which in agricultural Greece, covers production, processing and marketing of goods (and other economic benefits), and service (such as credit, use of machinery, etc.). Educational efforts form an integral part.

In Greece "cooperatives are self-governing bodies...[yet] are protected and supervised by the State, which is under the obligation to foster their development" (PASEGES, 1978, p. 13). In fact, both the Ministry of Agriculture and the Agricultural Bank of Greece provide partial funds for educational activities, in addition to finances received from member contributions. A critically important accomplishment in Greece, however, is that now cooperatives themselves are recognized as the only body competent to supervise and design cooperative education. In other words, neither the Ministry of Agriculture nor the Agricultural Bank of Greece--nor any other unsolicited body for that matter--intervenes. For Mavrogiannis (1982) this point is critical. Responsibility for educational pursuits is separated from responsibility for regulatory functions such as inspecting and registering cooperatives and represents the converse of the situation during the military dictatorship of the country (1967-1974) when State officials used the "cooperative message as a tool for disseminating military propaganda" (p. 606). Before examining the modern day cooperative movement in more detail a brief historical sketch seems in order.

### Historical Sketch

According to both written and oral accounts, "tselingata" (a cooperative form of sheep and goat breeding and selling by nomads), which date to the fourteenth century, are credited with marking the first appearance in Greece of the cooperative movement. This form of cooperation lasted for about six centuries--until the mid-twentieth century, after which time changing conditions caused them to diminish, although a very few are still in existence today.

From an historical standpoint, however, perhaps the most noteworthy form of cooperation in Greece (and perhaps worldwide) was the emergence--about 1780--of Ampelakia. It was the first cooperative association to actually lay down and go by principles of cooperation. Scholars cannot pinpoint the exact date of the founding of the "Association and Brotherhood of Ampelakia," although it is estimated somewhere between 1774 and 1779. The year 1780, therefore, is generally given as a conservative estimate.

This date certainly preceded the famed Rochdale pioneers in England, who are generally recognized as the first organized cooperative worldwide and are credited with laying down the Rochdale Principles of Cooperation which are said to have provided basic guidelines over the years for both agricultural and consumer cooperatives around the world. Ampelakia seems to set historical precedence from Rochdale and other efforts in its multinational character (i.e., extension of trading post networks throughout Europe, as well as Turkey) as well as other distinguishing features (Louis & Mavrogiannis, 1975; Mavrogiannis, 1975). The spirit of cooperation, which developed initially to process and market their product (i.e., cotton dyed red by a closely guarded secret), led them to realize how much they were being exploited by merchants and consequently caused them to unite even further. The remarkable unity, which was the hallmark of Ampelakia, extended to the entire community. Since education of the citizens to solve community problems became high priority, present day community educators and developers, as well as others, may want to further study the model.

Unfortunately, it went bankrupt in 1811, probably because it did not found its own bank (Louis & Mavrogiannis, 1975). By the late nineteenth century, however, every part of Greece witnessed brotherhoods of cotton spinners, fisheries, etc.--referred to as "Pre-Cooperatives." The spirit of cooperation was much in evidence (Kokides, 1948; Mavrogiannis, 1982).

The next noteworthy event in the development of the cooperative movement in Greece dates to the early 1900's with the formation of the first modern farmer's cooperative in Almyros which supplied credit to members and enabled the use of large machinery. The development and rapid growth of cooperatives at the turn of the century led to the enactment in 1915 of comprehensive legislation (known as law 602, re: Cooperatives), laying down principles and guidelines for cooperative ventures.

Since then, a thorough study of legislation worldwide as well as the needs of Greece, led to a number of revisions. In 1979 Law 921 superceded the 1915 legislation and increased the autonomy of the movement by, among other things, permitting farmers to market their own products. Moreover, it lent unification to the movement in that all cooperatives (e.g., forestry, fisheries, etc.) became a part of the agricultural cooperative movement and answerable to the Ministry of Agriculture. During 1984-85 new legislation seems forthcoming.

### Current Organization and Structure

Critical to understand is that the cooperative movement represents one of the most important economic as well as social and educational institutions (in the sociological sense of the word) in rural Greece. Effort is placed on developing an attitude and spirit of development--individual and national--as well as an understanding of cooperation and its benefits and its "how to's." In fact, such education and training efforts have also been designed with an eye to enlivening the whole movement--recognizing that education benefits not only the individual but also the development of the country--and is consistent with Bowman's (1984, p. 1301) concept of development cited earlier "the involvement of rising proportions of the population in changing ways of producing and living." As noted by Mavrogiannis (1982, pp. 611-612) "to modify the peasant farmer's very way of thinking...cooperative education and training programmes [have been] worked out and widely applied with a view to rejuvenating the entire movement." These efforts refer mainly to the work carried out at what is called the first degree level of village cooperatives.

A thorough understanding of the structure undergirding present day efforts, however, is important since it may represent an interesting model which other countries might wish to examine. The farmers cooperative organizations have a "pyramidal structure" (Le mouvement, 1978, PASEGES, 1977, 1978, 1984). The economic and service activities as well as the aim of education and training differ at each level.

Briefly, the village cooperatives, known as first degree organizations form the base. Their economic and service functions consist mainly of processing and/or marketing a product, supplying credit and sometimes other functions such as operating small processing plants, etc. Educational and training activities at this level focus primarily on the value of being a member of a cooperative. As stressed by Gambroulis (1984), improvement of the peasant way of life, as well as the development of the country, is emphasized to nonmembers as well as members.

For wider economic capacity and geographical coverage Agricultural Cooperative Unions, or second degree organizations were formed. Educational activities at this level involve a deeper analysis of the problems of cooperation. In economic and service spheres they provide support to the operation of the village cooperatives and provide a base for the third degree organizations--the Central Unions. In effect, the second degree organizations--Central Unions--coordinate cooperative activity over the whole country. Continuing education of personnel involved at this level covers administrative concerns, as well as an understanding of national dynamics.

At the "apex" of the pyramid is the PanHellenic Confederation of Unions of Agricultural Cooperatives (PASEGES, after the Greek acronym). Founded in 1935 as a nonprofit organization, it functions as the professional representative of the entire cooperative movement in Greece and is fully recognized by the State and all parties in the country. It officially acts as an advocate, internally handling relations with other governmental bodies, and abroad functioning as a national representative and liaison party. In fact, PASEGES, a member of a number of international groups (e.g., International Cooperative Alliance, International Centre of Research of Information on Public and Cooperative Economy, and a number of others), maintains relationships with cooperatives all over the world, sends Greeks to annual meetings and also for intensive visits to various, selected countries. In addition, PASEGES lobbies to the European Common Community for needs and money (Greece became a full member in 1981).

Moreover, PASEGES has a good size Education Division, which coordinates and supervises all educational and training activities related to cooperative movement. In fact, PASEGES's very existence is an educative venture--and is deeply involved in educating others internally as well as abroad as to the depth, breadth, scope, value, and accomplishments of the cooperative

movement in Greece. Moreover, an organized system for educating members and personnel at all levels of the cooperative system exists.

As far back as 1965 the Cooperative College of Thessalonika was established to train supervisory and management level staff. Educational opportunities for others, however, is a more recent venture particularly since 1981--the time when the new socialist government came into power. In fact, since then the whole nature of the Cooperative College was changed to reflect a better blend of theory and practice. In addition, four regional centers were set up: Iraklion (Crete), Patras, Athens, and Salonika.

Briefly, the 1984 program (Gambroulis, 1984; PASEGES, 1984) covered a wide gamut of activities too extensive to cover completely in these few pages. Two activities, however, seem particularly noteworthy to the life of the movement: a) development of representatives in each region who could educate others and act as an inspirer/motivator, b) work with schools in developing school cooperatives for younger children and at the same time educating school personnel.

The cooperative movement in Greece seems to have made an impact, although more research will be needed to determine the nature and extent of the impact. According to Kamenidis (1981), although productivity has increased it is still low by European Community standards, a situation which he attributes largely to a poorly organized and inefficient marketing system. It is clear from the author's research into the cooperative movement that activities have greatly expanded in quantity as well as quality since 1981 (the year of the article), however more research is needed to determine the impact on Greece's overall development. In-process legislation on cooperatives may be of assistance since marketing is a key focus.

### Conclusions and Implications

The rural agricultural movement in Greece, by design, aims at development in both its micro and macro sense. Moreover, the systematic way in which the structure and function of the cooperative system is organized may present a model which other countries might like to study. Perhaps a key feature in the growth of the movement lies in the fact that educational activities are solely the responsibility of the cooperatives themselves--free from State intervention--yet by statute the cooperatives are protected by the State which is obliged to foster their development.

In addition to implications of the modern-day system for others, the noteworthy structure, function, and operation of Ampelakia may be of interest to both scholars (particularly since it preceded the world renown Rochdale pioneers) as well as to practitioners involved in community education or development efforts.

### References

- Boucouvalas, M. (1982a, February). Adult education in Greece: An exploratory study. In G.C. Whaples & W.M. Rivera (Eds.). Proceedings of the fourth annual Lifelong Research Conference. (pp. 22-25). College Park, MD: University of Maryland.
- Boucouvalas, M. (1982b, November). Adult education in modern Greece. Convergence, 15(3), 28-36. (Also correction in 16(1), 94).
- Boucouvalas, M. & Drower, I. (1985, March). An exploratory examination of the educational delivery system for adults in Greece. Paper to be presented at the Adult Education Research Conference, Tempe, Arizona.
- Bowman, M.J. (1984). National development and education. Encyclopedia of Educational Research, (5th ed.), Vol. 3.
- Gambroulis, H. (1984, August). Head of Education, PASEGES, Personal interview, at PASEGES, Athens, Greece.

- Kamenidis, C. (1981). The effects in agriculture of Greece's entry into the EEC. In R. Von Alvensleben, et al. (Eds.). Agrarwirtschaft und Agrarpolitik in einer Erweiterten Gemeinschaft, 18, 209-230.
- Koukides, K. (1948). L'esprit associationniste chez les grecs modernes. Doctoral dissertation, University of Paris.
- Le mouvement coopératif agricole en grèce. (1978). Revue des études coopératives, 194, 113-119.
- Louis, R. & Mavrogiannis, D. (1975). The advantageous and beneficial system of Ampelakia (1780-1812). Cooperative Information, No. 2 (Geneva: ILO), 21-50.
- Mavrogiannis, D. (1975). L'association coopérative d'Ampelakia: Contribution à l'histoire sociale du mouvement coopérative grec (1780-1812). Doctoral dissertation, University of Paris II.
- Mavrogiannis, D. (1982). Regeneration of the Greek Cooperative movement through education and training. International Labor Review, 121(5), 605-620.
- PanHellenic Confederation of Unions of Agricultural Cooperatives (PASEGES) (1977). The Greek farmers cooperative movement. Athens, PASEGES.
- PanHellenic Confederation of Unions of Agricultural Cooperatives (PASEGES) (1978). Greek agriculture. Athens: PASEGES.
- PanHellenic Confederation of Unions of Agricultural Cooperatives (PASEGES) (1984). Πρόγραμμα συνεταιριστικής εκπαίδευσης για το 1984. (Program of cooperative education for 1984). Athens: PASAGES.

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# THE ROLE OF ADULT EDUCATION IN DEVELOPMENT

Peter S. Cookson\*

## ABSTRACT

This paper introduces the theme of a panel of internationally experienced adult educators concerning the role of adult education and adult educators in development. The terms adult education and development are defined. Various approaches to development are reviewed, making brief mention of the implications for adult education. The paper concludes with several points to be presented by the panelists.

## INTRODUCTION

The acute conditions of mass starvation accompanying the famine in sub-Saharan Africa, the recent abandonment of the U.S. government of UNESCO, recurring riots and outbreaks of guerilla warfare, and the prospect of a major financial calamity arising from failure of one or more Third World countries to repay colossal international debts are all elements which underscore the seriousness of the questions to be addressed by the panel on "The role of Adult Education in Development": (1) Does adult education contribute to development? If so, how? (2) If adult education does contribute to development, what can be the role of adult educators [in North America] with respect to that development?

Obviously there is no ~~one~~ right answer to any of these questions. Divergent responses reflect differences in terms of reference, experience, and differences of ideological persuasion. What may appear to be beneficial at the microlevel of individuals, groups, or communities may appear less so at the macrolevel of an entire society. Rather than respond directly to the questions guiding the panel, the purpose of this paper is to "place on the table," as it were, a few critical issues which pertain to a multifaceted and extremely complex subject. Perhaps quite different concerns will be presented by the panelists.

## DEFINITIONS

### Adult Education

Prerequisite to any meaningful exploration of the development role of adult education is a shared understanding of the terms, adult education and development. First, with respect to the term adult education, a virtual chorus of writers advocates unquestioning acceptance of adult education as a pedagogy of the oppressed. In its "pure" form, adult education must involve conscientization of the oppressed as a preparatory step to bring off the revolution. Society must be rid of the oppressors whose survival is contingent upon "sinful" socio-economic structures centered in the capitalist economic system. While it may be worthwhile to point to examples of adult education programs which have as their aim attainment of a sense of social and economic justice, to limit the scope of adult education to such consciousness-raising programs, often indistinguishable from recruitment campaigns for socialist political movements, would be unnecessarily restrictive.

Another approach to the task of definition calls for cataloging all possible instances of adult education. A drawback to this approach is that it is bound to yield a forever incomplete list of organizations, agencies and programs concerned with the provision of education opportunities for adults. Another major drawback is that such definitions form no basis for shared understanding and commitment to a unified field of practice.

A broader and more practically and ideologically inclusive definition (Houle, 1972)

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refers to adult education as the process whereby men and women (alone, in groups, or in institutional settings) seek to improve themselves by increasing their knowledge, skill, or sensitiveness; or it is the process whereby others seek to assist men and women to improve in these ways. Taking this definition literally allows us to include all efforts to engage in or effect purposive learning by and for adults --- irrespective of either the ideology involved or the extent to which those engaged in the process are aware of the commonalities between their own and quite dissimilar adult education forms.

## Development

The earliest notions of development in the Third World owe their origin to the theories of social evolution and assumptions of maturation or perfectibility of societies. In the four decades since the Second World War, four approaches to development in the Third World have been evidenced (Mabogunje, 1981): (1) economic growth, (2) modernization, (3) distributive justice, and (4) socio-economic transformation.

Development as Economic Growth. The first approach, most manifest in the 50s and 60s, emphasized the need for "a rapid and sustained rise in real output per head and attendant shifts in the technological, economic, and demographic characteristics of the society" (Mabogunje, 1981, p. 36). One of the outcomes of this approach was reinforcement of the "dual economy": (1) an improved export sector, dependent upon imports and benefitting an urban-based minority, and (2) a traditional rural-based majority dependent upon traditional technologies and relatively independent of markets outside the country. The major shortcoming of this approach was that it overlooked the historical process implicit in the term development as had been manifested in the experience of the industrialized countries.

The economic design appropriate to the later stages of development cannot, without waste and damage, be transferred to the early stages. Nor as regards the new countries can the design and emphasis appropriate to a country in one stage of the political, cultural, and economic sequence be applied in a later or earlier stage....In all these [older industrial countries] the early emphasis was not on capital investment but on political and then cultural development. In the United States, Western Europe, and more recently in Japan, a secure political context was stressed in both thought and action on economic development; it was considered the first requisite for economic progress. Were the political system stable and predictable, were it honest and effective, and were there both the sense and the reality of citizen participation, then economic progress was thought to follow. To ensure that it did follow, it was agreed thereafter that education should be compulsory and free and should have as its goal a high standard of basic literacy along with a working sufficiency in the other main branches of learning. No one who recurs to the treatises on economic progress in the last century can doubt the importance then given to a dependable and responsive political structure. Nor can there be any question that a high standard of morality in public affairs was deemed essential for such progress and that popular education was seen as the principal instrument of its achievement (Galbraith, 1983, pp. 8, 11-12).

Hence, in the approach to development as economic growth, neither political nor social development were stressed. Neither youth nor adult education was stressed.

Development as Modernization. A second approach emphasized the need for changes in values, attitudes, beliefs, and knowledge of the people in accordance with the technological demands of a growing "modern" sector of society. In shifting the orientation from commodities to people, education and training to enable primarily young people to learn the "rules of the game" (Mabogunje, 1981, pp. 38-39) received emphasis. This approach, too, overlooked the importance of a stable, supportive, and mature socio-political context. An African adult educator described the absence of such context in these terms:

Here in \_\_\_\_\_ we are merely existing and wallowing in the quagmire of misery (hyperinflation, scarcity of basic commodities and increasing poverty of the poor), all of our own making.

Some loud-mouthed and self-proclaimed socialists maintain that our troubles stem from the machinations of western imperialism, although one finds it difficult to appreciate how these external enemies prevent us from growing sufficient cassava and

seize to feed ourselves...

There is poverty everywhere, while a few unscrupulous people, including some educated persons and some of those who claim to be political leaders, exploit the situation to their advantage. My consolation and to some extent pleasure in this kind of environment is that the people are learning, painfully though, that nation-building is everybody's responsibility (cited in Griffith 1981, pp. 10-11).

Development as Distributive Justice. Coinciding with emergence of an international concern for environmental pollution and depletion of resources, it became increasingly clear during the 70s that in many countries the gap between the wealthy and the poor was widening. Formal schooling for youth actually expanded class inequities by serving the children of the middle and upper classes while ignoring or underserving the children of the people most in need. School credentials served to encourage the upward mobility of an advantaged minority and provided a rationale for exclusion of the disadvantaged majority. Compensatory programs were implemented to aid the poor by "as it was picturesquely put, satisfying their 'basic needs'" (Mabogunje, 1981, p. 39). Progressive taxation and government subsidies, new welfare, employment, and housing services were among the efforts of national governments to promote equality for such target groups as small peasant farmers, landless labourers and submarginal farmers, urban under-employed and urban unemployed" (Mabogunje, 1981, pp. 40-42). Commendable as these efforts have been, we again draw on Galbraith to understand why the outcomes of these policies have not matched intentions. Although the following citation refers to "socialism," it may also apply to welfare state policies which many Third World countries have struggled to implement.

....Socialism requires a large and competent administrative apparatus of high integrity, and in all early stages of political and cultural development such administrative capacity is a scarce resource. It is not even abundantly available in the advanced industrial countries, socialist and capitalist, which now struggle with the unsolved problems of large state and corporate bureaucracies. The essence of all public policy is to economize the scarcest of resources, and this any comprehensive socialist effort in the new countries does not do (Galbraith, 1983, pp. 9-10).

Accompanying these efforts were functional literacy programs which focussed on (1) communication skills and general knowledge, (2) living skills and knowledge, and (3) production skills (Noor, 1984, p. 8).

Development as Socio-Economic Transformation. Impatience with the apparent ineffectiveness of earlier approaches to development led many policy makers to seek more drastic measures. Inspired by the socialist vision of development --- the socialist theory paradigm --- "If I'm poor, it is due to malevolent and powerful others" (Novak, 1982), it was decided that what was needed was a more efficient, albeit authoritarian, and unitary form of government capable of drastic social, political, and economic change. An economy based on materialistic and inegalitarian capitalist modes of production would be replaced by an egalitarian socialist order which would (1) permit society to optimize the full potential of the people, (2) permit a full mobilization of political will for programs aimed at such optimization, and (3) lead to a redefinition of international relations from "dependency" at the periphery of the capitalist system to a "New International Economic Order."

Within the context of such an approach to development, education which does not lead to conscientization is considered suspect as part of the "hegemony" of the worldwide capitalist system to progressively impose "modern" values on third World societies, to "replace their entire cultural tradition through transference of certain technologies for more rational exploitation of basic commodities...[and to induce] an enlargement of markets and a stronger cultural homogenisation between exploiting and exploited countries" (Gelpi, 1979, p. 2). More consonant with this approach to development, adult education a la Freire serves (1) to incite the masses to adopt and eventually act on the ideology of revolution and, once the revolution has been won, (2) to consolidate the gains by socializing the masses into conformity to the requirements of the new socialist state. The proponents of this approach are apparently unaware that no socialist experiment has yet achieved such liberation anywhere in the world and indeed where socialist order has been implemented, the results in terms of dependency on other countries and overall standard of living have been disastrous. The examples of Tanzania, Cuba, Ethiopia, Angola, and Nicaragua are cases in point. It is no



incidence that conversion of almost all collective farms to individual family enterprises in the Peoples' Republic of China during the past four years has been accompanied by an unprecedented rise in agricultural sector productivity and income. Too, there is the example of one of Ethiopia's neighbors which has been exposed to the same drought but which has remained a food exporter without famine --- mainly because national agricultural policies favored a free market approach to the agricultural sector.

## THE ADULT EDUCATION-DEVELOPMENT LINK

### The ICAE Report

Probably the most thorough examination thus far of the relationship between adult education and development is that which was conducted five years ago under the auspices of the International Council for Adult Education (ICAE) Commission of Inquiry. After reviewing a large number of case studies from many Third World countries, the coordinator of the Commission, Dr. Chris Duke concluded:

The work so far falls short of the implicit objective of proving to the hard-nosed economist the contribution of adult education to the reduction of poverty. There is no reason to believe that further studies or more refinement of those already written will alter this. It is logically and methodologically almost impossible to prove this direct relationship and, perhaps, a scientific fallacy to expect or hope for it (Duke, p. 1).

### Views of the Panelists

Each of the adult educators who were invited to participate on the panel will draw from insights gained through years of service with donor, national government, and/or international agencies. Dr. Ahmad Fattahipour is former director of the UNESCO Institute for Adult Literacy Methods and has headed a number of United Nations organizations in several Asian countries. Dr. Sarah Goodwin has served for the past seven years with the National Literacy Plan of Honduras and before that worked in several adult education positions in 22 countries in Latin America and Africa. Mr. Jim Hoxeng is a program officer in Science, Technology and Education for the U.S. Agency for International Development. Dr. Victoria Marsick is currently Assistant Professor of Adult Education at Columbia University, was director of staff training for UNICEF, and has conducted research in three Asian countries. Mr. Jan Van Orman is a program officer of the Interamerican Foundation. Having gained first hand familiarity with numerous projects involving adult education, the panelists view adult education as an integral part of development in Third World countries.

Unfortunately, not everyone agrees with the panel. In contrast to schooling of children and youth which is equated in the public mind with education per se and has become a symbol of status and upward mobility, adult education is often associated with local level, voluntary organization-sponsored, and marginal activities concerned with literacy and basic education for adults. Some development educators contend that adult education programs have been ineffectual. The first priority should be expansion of existing primary education to be followed by an expansion of secondary and tertiary education. As Dr. Goodwin will point out, there are several reasons for rejecting the exclusiveness of that viewpoint and for considering intensive and extensive adult education programs as part of development policy:

- (1) The crises confronting the Third World are too acute to wait for even one generation to grow up to become the educated population essential to development.
- (2) The education of adults who are parents of primary age children will greatly enhance primary education and reduce some of the wastage that results from the 50-80% dropout between the first and sixth grades in many poor countries.
- (3) The education of adults in minimal essential learning needs is necessary to remove present and clear obstacles to development efforts. Agricultural improvement, cooperative and small business development, creation of small or large-scale industries require youth and adults with at least minimum literacy and numeracy skills who can absorb new ideas and training.

As Dr. Fattahipour will explain, the extent to which adult education can effect significant change for the people with the most serious needs depends largely upon the degree

commitment to social change of those in power. Where governments are progressive and favor more equitable restructuring of society, adult education can be considered a potent tool for change. Such governments favor implementation of Paulo Freire's ideas and support efforts to raise the level of critical social and political consciousness of those who have been and are oppressed in the society. On the other hand, where governments are conservative, the sum allotted to adult education will be small and ineffectual in the face of such problems as mass poverty, widespread illiteracy and ignorance, superstition, and retarding traditions. That such governments favor adult education programs which equip men and women with income-generating skills over more threatening forms of conscientization-evoking programs should hardly seem surprising.

Even in a society ruled by conservative elites, it may be possible to implement adult education programs that liberate rather than domesticate. For example, with respect to primary health care, at the heart of which is the process of adult education, Dr. Marsick points out that it can enable people to assume more power and control in their lives. Adult educators are equipped with the perspective and tools necessary to enable those who receive and dispense primary health care to pursue, as suggested by the ICIE, the goals of (1) equity and justice, (2) social as well as economic goals, and (3) local self-reliance and social control of health infrastructures and technology.

To further exemplify the relationships between adult education and development at the local community level, Mr. Van Orman will share the experience and insight he has gained in the development and financing community-based development projects in Latin America. The Interamerican Foundation, operating with funds awarded by the U.S. Congress, provides funding to grassroots level organizations. Development, as defined by people at the local level, is the primary objective. Education is frequently an outcome of such popular involvement.

In contrast to a development first approach, the U.S. Agency for International Development has been experimenting with new institutional and administrative arrangements designed to provide explicit adult education/human resource development services. As Mr. Jim Hoxeng will report, the first of what will eventually be many Education Service Centers have been established in Ecuador and Lesotho. As public sector but fiscally autonomous agencies, often under the auspices of other sectoral ministries outside of the traditional purview of education, these centers (1) inventory the universe of education and training programs in the public, private, and volunteer sectors for adults in a region or nation-wide; (2) provide technical assistance in the form of "train-the-trainers" instructional methodologies and technologies and encourage networking; and (3) provide revolving funds and training for initiation of small business enterprises. Results of the pilot program have been encouraging. Extension of the Education Service Center concept to Gambia, Zimbabwe, and Guatemala is projected.

#### REFERENCES

- Duke, C. (n.d.). "ICIE Commission of Inquiry into Adult Education and the Alleviation of Poverty: Summary of dominant themes and issues." Leaflet distributed by International Council for Adult Education.
- Galbraith, J.K. (1983). The voice of the poor: Essays in economic and political persuasion. Cambridge, Massachusetts: Harvard University Press.
- Gelpi, E. (1979). A future for lifelong education. Vol. 1: Lifelong education: Principles, policies and practices. Manchester: Manchester Monographs, 13.
- Griffith, W.S. (1981). "International adult education: Divergent views." An address presented at a session of the International Adult Education Section, Adult Education Association of the U.S.A. Conference, Anaheim, California, October 29, 1981.
- Houle, C.O. (1972). The design of education. San Francisco: Jossey-Bass.
- Mabogunje, A.L. (1981). The development process. New York: Homes & Meier Publishers.
- Noor, A. (1984). "Proposing another dimension in international adult education: Availability of basic education." Graduate Studies Journal (UDC), 2, 1-16.
- Novak, Michael. (1982). The spirit of democratic capitalism. New York: Touchstone.

# THE INVOLVEMENT OF CONTINENTAL EUROPEAN UNIVERSITIES IN CONTINUING EDUCATION

Jindra Kulich<sup>1</sup>

## Abstract

The continental European universities, as institutions, remained relatively aloof until recently from non-credit general continuing education. Lately the universities are getting involved in continuing professional education. Part-time degree credit programs are still rather rare in Western Europe, but are widespread in the East. University training programs for adult educators are well developed in most East European countries, while in the West such programs are well established only in West Germany and the Netherlands. Research in adult education in continental Europe is carried out just as often in major independent research institutes as in the universities.

## Rationale

Community service and the involvements of universities in adult education is more or less taken for granted in North America, whereas in continental Europe, in spite of some promising early beginnings of university extension early in this century, the universities as institutions have on the whole, until very recently, remained aloof from their communities and from adult education.

What were the institutional, educational, social, political and economic factors that influenced such a diverse path for the European universities? Are there institutions in Europe, other than the universities, which provide the type of continuing education provided in North America by the universities? What are the recent forces impinging on the apparent change in direction in Europe? Do the universities in Eastern and Western Europe differ in their response to the challenge of recurrent education and lifelong learning? What is the involvement of European universities in the training of adult educators and in adult education research? These were among the questions asked in this study.

An analysis of the development and current trends in university continuing education in Europe can by comparison assist North American university administrators, planners of adult education, and researchers in assessing the response of our own universities, in conceptualizing patterns of university continuing education, in teaching adult education courses, and in comparative study of adult education.

## Methodology

The historical background and development was ascertained from analysis of published and unpublished materials and from interviews with university personnel in Europe. Current developments were established from analysis of official documents, official and unofficial reports, published and unpublished materials, travel to 14 countries involving visits to 57 institutions and associations and meetings and interviews with 140 researchers and practitioners.

Were the researcher to ask "What is the direct involvement of the European universities in adult education?", the answer would have to be "Until very recently, only minimal". However,

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this might not be the right question. Were the researcher to ask instead "What types of the provision of continuing education and university involvement in adult education commonly provided in North America by the universities, are available in European countries through the universities or other institutions and associations?", the answer would be significantly different. It was the second question which was applied in this study and the answers to which form the body of this paper.

In order to be able to answer the second question, in relation to the typical North American model (which itself is demonstrably different from the original English prototype), the North American provision was analysed and classified into six major components: (1) general non-credit continuing education, (2) professional continuing education, (3) part-time credit study, (4) training of adult educators, (5) research in adult education and (6) community development, community service. On closer examination, the sixth category was found to be too ambiguous, ill-defined and ill-documented, and was not applied to the study and analysis of the continental European situation.

### Historical Background

Throughout the nineteenth century, in most of the European countries, the intelligentsia saw it as one of their responsibilities to contribute to the enlightenment of their fellow citizens, (particularly the growing working class in Central and Western Europe and the peasantry in Eastern Europe), through popularizing lectures. Early in the nineteenth century, such lectures were organized by a great number of lecturing societies and clubs which sprang up in the cities, and to an extent also in the countryside.

In Scandinavia, university students especially were active both as initiators of this activity and as lecturers. In Central and Eastern Europe, the village school teachers and university professors contributed very much to the general enlightenment of the population, and to some extent this was also true in Southern Europe.

With the advent of the university extension idea and practice in the United Kingdom in the 1860s, the stage was set for the spread of university extension to the English-speaking world, where it soon took root. The idea also found its way to continental Europe in the 1880s. In Northern Europe this led to the establishment of summer courses in Sweden in the early 1890s, and in 1898 the University of Lund set up a regional Central Bureau for Popular Science Lectures. Attempts in Denmark in the late 1890s to get the University of Copenhagen involved remained unsuccessful. Similarly, the Norwegian universities did not get engaged in any direct provision of adult education. This situation remained in Northern Europe until the period after the Second World War. There were some early promising beginnings of university extension in the German-speaking countries around the turn of the century, especially in the Hapsburg Empire, in Germany, and in several East European countries. Southern Europe remained barren. This development was halted by the First World War, and the European universities as institutions have, until fairly recently, remained very aloof from the provision of the general and professional continuing education. This does not mean, however, that general adult education programs of the type commonly provided by the North American universities were not available to the adult population.

One of the reasons why general university extension did not take root in continental Europe is the existence of alternate provision. A number of institutions and voluntary associations, most of which are completely separate and independent from the universities proper and whose primary, if not sole purpose is the provision of adult education, were established in most European countries in the nineteenth and early twentieth century. Some of these, like the people's universities of Scandinavia and Eastern Europe operate to a great extent as de-facto university extension departments for general non-credit education. Another important factor is the traditional, and in many European countries still widespread, intellectual elitism of the universities and faculty.

### General Non-credit Continuing Education

In Northern Europe, extensive provision of the university level lectures and courses by the many voluntary study associations, much of this staffed by university students and faculty,

created a situation in which until fairly recently direct university involvement was not required and to an extent not wanted by the voluntary associations. In all East European countries, in addition to the people's universities, there are also societies for the dissemination of scientific knowledge, whose main goal is the popularization of science by researchers and faculty. In the German-speaking countries, the 'Volkshochschulen' offer non-credit general education programs, often taught by university faculty, of the type and level offered in North America by university extension departments. The universities themselves did not get involved again directly in the provision of continuing education in West Germany until 1956. Southern Europe, on the whole, still has very little activity in this field.

### Professional Continuing Education

Professional continuing education is a fairly recent phenomenon, and in Europe it is even more recent than in North America. In most European countries it is still in the model or experimental stages.

West Germany is the most advanced in this field in Western Europe, with legislation mandating and directing the universities to provide access to continuing education to professionals. A unique aspect is the directive to the universities to provide also professional development to their own faculty and other employees. In Northern Europe, Norway, Sweden and the Netherlands are the most advanced. This is the result of the university reforms in these countries in the 1970s. In the Netherlands, professional continuing education is now well organized at the national level through professional continuing education associations which cooperate very closely with the universities and professional associations. In Norway the regional colleges and many of the university institutes provide extensive programs of courses and seminars for professionals. In Sweden, this provision is best developed in the area of in-service training for teachers, which is provided in each one of the six university regions. The People's University of Stockholm introduced a new branch in 1982 to provide professional development seminars for business and industry. Professional continuing education in Western Europe is least developed in Southern Europe. France is the one notable exception due to legislation passed in 1971.

The Eastern European countries with their planned economy systems and post-war efforts at rapid industrialization, are providing substantial university programs in this area. This provision is best developed in the Soviet Union and in Romania. Much of this is accomplished through part-time degree study used as professional development. In Romania, each ministry was made responsible for the planning and provision of vocational and professional upgrading in its sector. In Yugoslavia, this provision has been organized through the workers' universities rather than through the universities proper. Czechoslovakia and Hungary have a good system of professional continuing education, while in Bulgaria this is only in the beginning stages.

### Part-time Credit Study

Part-time degree programs are best developed in Eastern Europe, not only with ready access but in some countries, notably the Soviet Union and Yugoslavia, with active promotion of part-time study through evening classes and correspondence study which enroll a substantial proportion of the student body. Czechoslovakia, Hungary and Poland also have extensive provision in this area. This situation was brought about by the desire of the ruling Communist parties for significant changes in the social composition of the intelligentsia, and by the economic needs of rapid post-war industrialization in most of the less developed Eastern European countries. As a rule, the East European part-time degree programs take only one year longer to complete than the 'normal' full-time program. Part-time degree students receive major financial support and benefits.

In Western Europe, part-time degree programs are almost unknown, although there are long standing provisions for access to degrees without attending a university, such as the 'externist examination' and 'private students'. Such provisions are made especially in Northern Europe and Germany. Sweden is the leader in Western Europe in opening the universities to mature students, after the experimentation of the 1970s and the far-reaching university reform of 1977. Part-time study in Sweden is possible through evening classes, single-semester courses, off-campus courses, university study circles, summer university and decentralized provision of distance

education. The Norwegian universities have been made responsible since 1976 for alternative degree credit courses. Major university changes are under way in the Netherlands, which on the one hand may make it easier for part-time study, but on the other hand will shift senior year study into an area which will not be financed by the government. There is still very limited provision for part-time degree study in West Germany, although some attempts are being made in this direction. In Southern Europe there is almost no provision for access by mature students to the universities and for part-time degree credit study. It seems that the legislation following the student revolt in France in 1968 did nothing to assist mature adults, and recent developments, especially in professional faculties, do not bode well in this area of concern. The highly acclaimed '150 Hours' provision in Italy also did not seem to assist with better access to universities.

### Training of Adult Educators

The training provision at the university level for adult educators in continental Europe is not as well developed as in North America. In this respect, the difference between Western and Eastern Europe is most marked. This is especially true about Czechoslovakia, Hungary, Poland and Yugoslavia. However, it is worth noting that, except for teachers of academic subjects, the Soviet Union does not have any university training provision for adult educators. Czechoslovakia has an integrated comprehensive system of training of adult educators which provides pre-service training at the secondary technical and university level, as well as in-service training and upgrading. In Hungary, Poland and Yugoslavia, training of adult educators is well developed. As in Czechoslovakia, such training in Hungary is available on a full-time and part-time basis in secondary technical schools and in universities. In Poland, a number of universities offer general or specialized training for adult educators. Yugoslavia has an extensive provision of training at the university level, not only in the faculties of education but also in the faculties of arts, medical schools, military academies and other higher education institutions. In Romania such training is a recent phenomenon and is developed fully only at the University of Bucarest.

In Western Europe, the best developed university provision for training of adult educators can be found in West Germany, where some 30 universities offer a variety of programs from diploma to doctoral level. Such programs are now available also in universities in Austria, although the University for Educational Science in Klagenfurt curiously does not have any program for adult educators. Switzerland has no provision at the university level. Southern Europe does not show any evidence of training programs at this level, except for some provision available in France and very recent attempts to establish such training at one or two Italian universities.

In Northern Europe, the Netherlands had six university programs in adult education, but as of 1985 there will be only three. However, the university programs in the Netherlands are not aimed at training of practitioners (which is the role of the Social Academies) but rather are designed to train researchers and policy makers. The first professorship of adult education in Scandinavia was established in 1970 at the Danish Royal School of Education; however, very remarkably this did not lead to any organized training program. A second Danish attempt to establish a university training program in the early 1980s, also failed. The University of Oslo established in 1970 the first coherent seminar program in adult education in Norway which, however, is not a degree program. In Sweden currently there are two university programs in adult education, as there are in Finland.

### Research in Adult Education

Research in adult education is always difficult to document, as much of it is in related disciplines and is not necessarily kept in evidence in adult education literature and registers of research. This is also true of Europe. Since teaching and research in the universities are the opposite sides of the same coin, what can be said of the training of adult educators applies equally as well to research as far as universities go. There is, however, a very crucial qualification to this statement. In a number of European countries, research in adult education is carried out in research institutes which are separate and independent of the universities. The most notable example of this is the institute in Leningrad, employing some 200 research workers. Another major institution for research is the well-funded and staffed Pedagogical Centre of the

German Folk High School Association in Frankfurt, with a staff of 80. The Norwegian Parliament established in 1976 an independent Norwegian Institute of Adult Education, with a staff of seven researchers and four consultants. The Danish government established a similar research institute in Copenhagen in 1984. Thus the continental European trend seems to be toward the establishment of major independent research institutes, rather than or in addition to university based research.

Direct university contribution to research in adult education in Western Europe is best established in West Germany and France. In Italy there is some recent promising development. The most significant contribution to research in the Nordic countries is provided by the Swedish universities, followed by the universities in the Netherlands and in Finland. In Norway, university research in this discipline is in beginning stages, and in Denmark there is very little evidence of university involvement. In Eastern Europe, the most active universities can be found in Yugoslavia, with Hungary, Poland and Czechoslovakia following closely behind.

#### Funding of University Level Adult Education

The European countries made great strides in the 1960s and 1970s in terms of legislation concerning adult education and funding of this growing enterprise. This is true of Western and Eastern Europe alike. The Scandinavian countries were the leaders in this area. West Germany and France provided model legislations. The East European countries supported adult education as a means of political education and as a basis for rapid industrialization. However, approaching the mid-1980s and in the current economic climate, the one overriding finding of this study is that adult education at all levels (with some notable exceptions of vocational training) is suffering budget cuts all over Europe. The political ideology of the particular government does not seem to make much difference, as the cutbacks in government support are happening in capitalist, 'middle-of-the-way', socialist and communist countries alike. The only noticeable difference is the magnitude of these cuts and the finesse with which they are applied. Given that in many of the European countries the involvement of the universities in adult education is very recent, it is not surprising that the budget cuts to adult education seem to be most severe in this area.

#### The Future of University Continuing Education in Europe

The adverse economic situation arrived in Europe just at the time when the universities were beginning to wake up to their responsibility for adult education. This is most likely to set back the involvement of universities where this was beginning to happen, and reduce the involvement in countries where this was relatively well established. On the other hand, there is concern in many of the countries that the universities, faced by declining numbers of 'regular' students, will discover continuing education as a way of coping with problems of over-staffing, will take over continuing education from well established voluntary associations and, given the lack of their understanding of adult education, will wittingly or unwittingly destroy what took decades to build. At this time it is not possible to say with any certainty what positive or negative forces will impinge on university level continuing education in the second half of the 1980s.

#### References

This overview is based on visits to a great number of institutions and associations, many interviews, and extensive review of literature in several languages other than English. Space does not permit, and it would not serve any useful purpose in this case, to list these as references here.

TRAINING FOR "TAKING OVER":  
THREE ASIAN MODELS FOR EDUCATIONAL FIELDWORKERS

Victoria J. Marsick<sup>1</sup>

Abstract

This paper analyzes three Asian training models for educational fieldworkers who are expected to empower villagers in making choices and taking action in the context of health programs. "Taking over" is defined. The models are described. Supportive factors in the program context are highlighted: goals and institutional support, cultural readiness, cross-cultural inputs, selection of workers, and community support. Curriculum is analyzed in terms of take-over points: involving clients in designing, interpreting educational dialogue, emphasizing process, basing learning in experience, focusing on problems, peer learning, and participatory methods of learning.

"TAKING OVER": DEFINITION AND CONTEXT

This paper looks at training for a kind of empowerment that I call "taking over". The term, introduced by Srinivasan (1977) and reflected in my interviews, is a way of looking at the world, a perspective or general approach to life that might be colloquially described as doing things for oneself. In the Asian context studied, "taking over" became both a personal perspective and a social process, in which individuals worked with others as communities in defining, planning and carrying out change. Educationally, it involved a conscious reexamination of some aspects of one's life in terms of the proposed change, thus departing from fatalistic norms of traditional societies and from planned change based on coercion.

This paper is based on a grounded theory study of three different models in Nepal, Taiwan and the Philippines. The research design used participant observation and interviews with 146 administrators, trainers, trainees, clients and representatives of agencies doing this kind of training in Asia. The focus of the study was fieldworkers in health and family planning programs, who were educational links between villagers and service professionals. Their role was to establish and maintain dialogue around the planned change.

The training was to develop the knowledge, attitudes and skills needed for dialogue. The models departed from traditional lecture-oriented passive training called into question by Freire (1970), Illich (1972) and others. Instead, the models experimented with active learning that, to varying degrees, simulated the experience workers were to have with clients.

The Nepal model was part of an overall behavioral change strategy based on building a

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trust relationship with clients rather than relying primarily on knowledge to prompt change. The Taiwan model, on the other hand, focused primarily on knowledge as a tool in communicating information for change. The Philippines model emphasized skills for communities in setting priorities and in selecting technical workers who were then further trained as educators.

All three models broke down the traditional vertical, authority-centered relationship between trainers and trainees, as was seen essential to the relationship workers would have with clients. Training was to provide the opportunity to experience, understand and replicate this peer perspective in dialogue, as discussed below.

#### NEPAL: SEEING THROUGH THE EYES OF THE VILLAGERS

The program context in Nepal was the Family Planning/Maternal and Child Health Project, a vertical service delivery program which shifted from a clinic-centered medical base to a home delivery behavioral-educational base. A team of outside consultants influenced program design. They recruited and trained Nepalese trainers in the tasks village workers would carry out, in professional characteristics of change agents, and in teamwork. These trainers then redesigned the curriculum. Training was originally conducted for two months, in a live-in center in the field, by alternating experience in living and working in villages with analysis.

Briefly, the stages of the training were as follows. Trainees lived with villagers to understand their viewpoints and build a trust relationship. They then collected and analyzed specific information about problems people perceived they had. Training then helped develop knowledge and skills in solving problems. The last phase was practicing and maintaining dialogue, applying new skills, and building professionalism.

Key learning methods in the first phase included participant observation, role play, group dynamics, and informal socialization. The next phase emphasized analytical skills through nondirective discussion, reporting, and keeping field diaries. The third phase relied on more traditional lecturettes, question-and-answer, and directed discussion. Methods in the last phase were nondirective discussion and support in problem solving.

#### TAIWAN: TECHNOLOGY OF INVOLVEMENT

The program context in Taiwan was the national family planning program, implemented by various agencies, with training conducted by the Chinese Center for International Training in Family Planning. The strategy was adapted from competency-based modular materials originally designed by the East-West Center through a collaborative process. Modular materials were based on performance objectives, used active learning methods, and could be self-paced. The modules were used for in-service training, with sessions ideally lasting one week, with 18 hours slotted for each module, at a live-in seminar site. In some cases, they were shortened and used individually or in groups at work sites. Modules were typically introduced with a lecturette, followed by individual or group exercises, and closed with a plenary reporting and discussion session.

In adapting the modules, the Chinese Center modified the strategy by emphasizing group process instead of individual silent self-instruction. They also simplified methods, leaving out extensive use of field visits, role play, case studies or extra readings. They retained a group discussion base, moving learners from the passive listening mode to what they called a systematic deepening of understanding through sequencing ideas, interconnected learning methods, group problem solving and sharing of experience, and practice sessions.

## THE PHILIPPINES: OWNING THEIR OWN PROGRAM

The Philippines Rural Reconstruction Movement (PRRM) is a non-governmental community development organization which sprang from the parent International Institute of Rural Reconstruction, founded by Taiwanese Jimmy Yen in 1952. The fieldworkers studied were Barangay (neighborhood) Technicians, a variation on the concept of the Chinese barefoot doctor. Unlike the other two programs, this worker was a volunteer selected by the community, who taught class as well as doing home visits.

Training was conducted for both the Community Education Committees who selected the Barangay Technicians, and for the Technicians themselves. In both cases, the format was a sequenced series of short-term, live-in, problem-solving workshops lasting anywhere from three days to a month each. Since villagers were to "own their own programs", training included leadership development as well as educational or technical knowledge and skills. PRRM alternated its inputs with community initiatives, starting with an informal consultation workshop, after which community leaders shared ideas with neighbors, and then re-contacted PRRM for the next step toward selecting and training workers. The core of all training was problem solving. While formats varied, a composite typical session might include: orientation, problem identification, problem solving, action planning, improving technical/social skills, acquiring educational skills, and certification.

### FACILITATING "TAKING OVER": PROGRAM CONTEXT

The overall program context plays a crucial role in determining the degree to which trainees are expected and enabled to "take over" once back on the job. Training can prepare for this, but unless the program desires and supports it, the behavior will not be maintained. This was particularly reflected in the degree to which program goals espoused pure dialogue vs. persuasion, and the kinds of institutional support provided. Quality of supervision was critical, given that this often resembles policing rather than joint problem solving. So also were administrative requirements, such as the pressure to meet targets, and actual vs. desired reward systems.

Several contextual factors seemed significant in encouraging or impeding "taking over". One of these was cultural readiness, or the degree to which the country's culture, and that of the organization, supported values implied in "taking over": democracy, individual choice, critical consciousness, and flexibility in responding to new demands of people who have become aware that they have choices.

A related factor was the nature of the cross-cultural inputs to the program's design. All three programs were influenced by outside consultants. The Nepal program involved an intensive four-year input by a team of consultants from the University of California, Berkeley, who modeled the behavioral change strategy they introduced, expecting and trying to deal with resistance. Consultants to PRRM came and went for short-term assignments, allowing PRRM breathing space for their own adaptations. The Taiwan consultants were one step removed, with ideas developed at the East-West Center adapted in-country. Relationships between consultants and counterparts in all three models were similar in that counterparts were encouraged to "take over" as cultural brokers in adapting models. This was similar to the core variable identified by Reynolds (1973) in his study of institution building -- role sharing.

Two other program factors were significant, at times more so than the actual training design itself: selection of workers and the way in which the community was involved. Many have written on the needed characteristics of change agents and the dilemma of whether they

are born or made (Batten and Batten, 1962; Carlaw et. al., 1975; Etling, 1975; Havelock and Havelock, 1973; Zaltman and Duncan, 1977). I concluded that training can build a new identity as change agents, but that selection factors are important, particularly in light of time constraints and resistance that workers encounter on the job, which can erode fragile identities.

Finally, programs are most conducive to "taking over" when communities take a strong hand in the process, although Shrivastava and Tandon (1982) among others point out how divisive communities can be in such programs. The Philippines model went furthest in this direction, enabling community decision making and support for workers who were accountable to them.

#### FACILITATING "TAKING OVER": THE CURRICULUM

In discussing her work with PRRM, Srinivasan (1977) identified take-over points. I found these in my study as well: involving clients in designing, interpreting educational dialogue, emphasizing process, basing learning in experience, focusing on problems, and participatory learning methods.

Pursuing the notion of internal consistency, if designers want trainees -- and ultimately their clients -- to "take over", they must be involved in designing from the earliest stages. Trainers have little control over the overall program, but they can decide who participates in the training design. The ideal is probably representation from all levels, but there are tradeoffs in time, money, simplicity, and relevance that influence this choice.

A critical take-over point was the interpretation of the educational role of fieldworkers, particularly the way in which training encouraged trainees to themselves reflect on their role in free dialogue. The Nepal and Philippines models encouraged this more than Taiwan. None of them pursued it to the level of empowerment envisioned by Freire (1970). Related to this was the degree to which training emphasized experiencing the process of being a change agent, including dialogue. To different degrees, all models emphasized process rather than pure theory.

Similarly, all models were experience-based, with the type and extent of experience related to the above factors. To be experience-based does not mean to simply include it. Rather, learning comes from the analysis of experience provided as a starting point, as in Nepal; drawn from daily practice, as in the Philippines; or included as practice, as in Taiwan. The key to deciding whether experience should be provided first or after a concept has been introduced was whether or not a "right" answer was expected, or whether learners were to interpret an ambiguous situation and provide their own answer. In all cases, sufficient time was needed for trainees to draw their own conclusions. Theory was not excluded when experience was introduced first, but rather followed the development by trainees of their own frameworks.

All models emphasized problem identification and problem solving. The Philippines model built training around clear steps toward this end, while the Nepal model wove it into collection and analysis of information from the villages. In the Taiwan model, problems were more often framed by the materials designers than from the direct experience of trainees.

A major feature of these models was peer learning which broke the traditional vertical relationship between teacher and learner. Peer learning is identified as significant to adult learning by various theorists. My research showed that neither trainees nor trainers were fully ready for this major reversal of traditional expectations. In all three cultures, teachers have been experts. Status barriers result from and reinforce this relationship. Despite initial frustration, however, traditional roles were reversed.

Finally, the curricula for "taking over" have emphasized participatory learning methods and materials, depending on the degree to which the program truly espoused free dialogue. Participation was highly nondirective in the original Nepal model, semi-directive in the Philippines model, and very guided in the Taiwan model. While methods differed in all three, discussion was always central. The type of question used was also critical, as Srinivasan (1977) learned. Questions must help participants frame and reframe problems, and analyze them from different perspectives, to reach full dialogue. Likewise, all models discouraged lengthy lectures, despite encountering initial resistance to these methods. Role play and informal socialization were effectively used in all models, along with group work.

#### References

- Batten, R. R. & Batten, M. (1962). Training for community development. London: Oxford University Press.
- Carlaw et. al. (1974). The process of education: The Bandung model. Indonesia: Work Experience and Health Demonstration, Office of Provincial Health Development, Bandung.
- Etling, A.W. (1975). Characteristics of facilitators: The Ecuador project and beyond. (Doctoral dissertation, University of Massachusetts, Amherst). Dissertation Abstracts International, 36, 846A. (University Microfilms No. 75-16, 554)
- Freire, P. (1970). Pedagogy of the oppressed. New York: Continuum.
- Havelock, R.G. & Havelock, C. (1973). Training for change agents. Ann Arbor, Michigan: Institute for Social Research.
- Illich, I. (1972). Deschooling society. New York: Harrow.
- Marsick, V.J. Training for "taking over": Three Asian models for educational fieldworkers. New Delhi: Sterling, in press.
- Reynolds, R.B. (1973). Institution building and the development process. Unpublished doctoral dissertation, University of California, Berkeley.
- Shrivastava, O. and Tandon, R. (1982). Participatory training for development. New Delhi: Society for Participatory Research in Asia.
- Zaltman, G. & Duncan, R. (1977). Strategies for planned change. New York: John Wiley & Sons.

PROFESSIONAL TRAINING THROUGH COLLABORATIVE RESEARCH:  
AN EGYPTIAN CASE STUDY

John T. Rowntree<sup>1</sup>

Abstract

This paper describes the rationale, structure, and operation and assesses the strengths and weaknesses of a three-year collaborative agricultural economics research and training technical assistance project in Egypt. Collaborative research activities linking Egyptian Ministry of Agriculture and University of California agricultural economists were the principal vehicle through which the project contributed to the professional development of Egyptian agricultural economists and to the research and decision-making capabilities of the Ministry of Agriculture. Unique features of the Egyptian agricultural research systems and of the project structure contributed to the success of the collaborative research model of professional training for agricultural economists in Egypt.

INTRODUCTION

Training of less developed country (LDC) professionals as part of technical assistance projects usually focusses either on short or long term overseas training or on the provision of host country workshops and short training courses. These approaches have some disadvantages. The overseas training is very expensive and usually affects only a few host country professionals, having little impact on the host country research system. The practice of providing in-country workshops or short training courses suffers similar shortcomings as the training is neither integrated into the host country's broader educational objectives nor designed to overcome the institutional constraints on professional research in the host country. An alternative model for providing professional training in LDC's was used in the U.S. Agency for International Development (USAID) sponsored Agricultural Development Systems (ADS) Project linking the Egyptian Ministry of Agriculture (MOA) and the University of California (UC). This project established collaborative research teams of Egyptian and UC professionals as the principal vehicle for training Egyptian professionals in applying contemporary research techniques and methodologies to practical policy relevant research questions posed by the MOA. The collaborative research teams were supported in an educational environment that included some overseas training and in-country workshops and training courses, along with research management training, outlets for publication and public dissemination of research findings, and a wide array of research and educational support components.

PROJECT RATIONALE

Egypt has for centuries been the intellectual and educational center in the Middle East. Its educational institutions have been the main producers of doctors, engineers, economists, agricultural researchers and other professionals for the whole region. Unfortunately, Egyptian students, scholars, and researchers were, for national political reasons, cut off from western educational and research institutions for almost a decade and a half, from the early 1960's to the mid-1970's. After 1973 the Gulf countries increased their demands for Egyptian professionals and skilled workers of all kinds. Today, approximately two million Egyptians, or about ten percent of the Egyptian labor force, are working in the Gulf states. Thus by the late 1970's, the Egyptian research systems had been weakened both by the increased demand for

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trained Egyptians by wealthy neighboring oil states and by a decreased quantity and quality of supply of newly trained researchers, particularly those with western overseas exposure.

During the period when Egyptian scholars were cut off from western educational institutions, overseas training consisted primarily of study in Eastern Europe or the Soviet Union. This was particularly limiting to agricultural economists, who, while well trained in planning techniques, were not familiar with market and price analyses. The opening of the Egyptian economy following 1973, and more so after 1977, created new, market-oriented problems, but the Egyptians were not trained to analyze them. The Egyptian agricultural economics profession began to feel the limitations and constraints of having little opportunity for travel, study, or scientific interchange with western countries.

Another constraint on the Egyptian agricultural research systems was the bureaucratic division between government and university researchers. Until recently there was little exchange of personnel or interchange of ideas between Egyptian ministry and university institutions. This inhibited the introduction of new ideas, methodologies, and techniques into government and ministry analyses, and it restricted the policy relevance of university research.

Several other factors have also severely constrained the Egyptian research systems. A cultural milieu that supports seniority over ability or productivity as a basis for promotion, extremely limited financial resources, and poor libraries (all foreign journals subscriptions were suspended to Egyptian libraries after 1973 due to lack of funds!) and research facilities all contributed to a weak research environment.

The ADS Project attempted to ease these bureaucratic, seniority, resource, and institutional constraints on the research systems, the training and development of professional agricultural economists, and the research capabilities of the MOA. The project was designed to upgrade the entire agricultural economics profession in Egypt, to increase exposure to contemporary western agricultural economics methodologies and techniques, to strengthen the agricultural research systems in Egypt by increasing interchange between university and ministry researchers, to increase the financial and other resources for researchers, and to ease the bureaucratic and seniority constraints on the professional development of younger agricultural economists.

#### PROJECT DESCRIPTION

The ADS Project engaged in a wide range of educational and research activities contributing to the professional development of the scientific community in Egypt and improving the ability of the MOA to plan, implement, and evaluate programs promoting the development of the agricultural sector in Egypt. It extended over five years and spent more than \$15 million to provide administrative, technical, and secretarial support for sub-projects in agricultural economics, the horticultural sciences, food science and technology, and several other smaller projects. The agricultural economics sub-project, the focus of this paper, spent approximately \$3.5 million over its three year life (1980-83) and sponsored 23 research activities, engaging 128 Egyptian Ph.D. agricultural economists and 145 junior Egyptian personnel in collaboration with 46 (part-time) UC agricultural economists. The short-run contribution of the project was to provide training for and to engage about 270 members (or about 80 percent) of the Egyptian agricultural economics community in policy-relevant research and to offer technical and policy guidance to the MOA policy makers.

The mandate from the MOA was to study six major policy areas of priority research: Price Policy, Agricultural Marketing and Distribution, Human Capital and Social Institutions, Food Security Policy, Allocation of Development Resources, and Land and Water Resource Use. Research proposals were solicited from and submitted by both Egyptian and American university economists and were reviewed by the Joint Egypt-California Economics Technical Committee. Guided by the advice of the technical committee, the project administration implemented research activities focused in one or more of the areas of priority research. Examples of the wide range of research topics dealt with included: an analysis of the export potential for Egyptian wintervegetables to European markets; a study of the impact of food subsidies on consumer welfare, foreign trade balances, and food security; an analysis of the socio-economic

impact of farm mechanization on cropping patterns and rural labor markets; an economic evaluation of the feasibility of introducing biogas technology to use livestock manure and crop residues to produce cooking gas and organic fertilizer while increasing fodder availability; and studies on cropping patterns, the efficiency of cooperatives, government pricing policies, and marketing and post harvest efficiency.

Due to the central ADS Project support, the agricultural economics sub-project was able to become effective at the beginning of its three years of operation and was able to spend up to 85 percent of its funds on research and educational activities. The typical research activity operated for two and a half years, involving 5-6 Egyptian Ph.D.'s and 6-7 Egyptian research assistants with M.S. or B.S. degrees. Operating on an average annual budget of \$46,000, each research activity had about four months of UC agricultural economist collaboration per year and sponsored about three 3-6 week training visits by Egyptian collaborators to UC during the life of the project.

The research took place in an environment of educational and support activities including short courses in techniques, workshops and seminars as outlets for discussion and exposure of research products, library development, secretarial services, microcomputer services and training availability. Thus the program enjoyed the full range of teaching, research, and extension facilities associated with a land grant university such as UC.

### PROJECT IMPLEMENTATION

Egyptian and UC Technical Committees were formed to review proposals, to establish policy, and to provide technical guidance for the project. An Egyptian director and two UC directors, one in Egypt and one at UC Davis, administered and coordinated all aspects of the program. All activities were approved and routinely evaluated by the technical committees.

Proposals were submitted by Egyptian and UC agricultural economists and then further developed by opposite country counterparts, making each proposal a collaborative effort. Early in the project the Egyptian and UC directors in Egypt organized proposal writing workshops and seminars to which agricultural economists from all Egyptian universities and all relevant research institutes in the MOA and other ministries were invited. UC economists who submitted promising proposals were invited to visit Egypt to work on the further development of the proposals with Egyptian counterparts. During this period, proposal policy focus, methodology, and team members' roles were determined and sharpened. Four research activities were underway within 5 months, fourteen within 10 months, and 23 within 18 months. The proposal development stage was the most difficult, fluid period, involving much negotiation regarding choice of topics, identification of team members, and development of work plans.

In the implementation stage, the collaborative mode was made the first priority: proposals coming from one side were submitted to the other side's potential counterparts for further development, and all proposals were "joint" before final approval and implementation. Similarly, collaboration between MOA and Egyptian university agricultural economists was also required and every research team had some MOA researchers as well as some Egyptian university researchers on the team.

The Egyptian team members devoted 10-50 percent of their time to the research activities and were paid an incentive in addition to their base pay in the university or MOA to participate in the research activities. The Americans typically devoted about 4 to 12 weeks per year to the research activity, one third to one half of which would be spent in Egypt. The remainder of the time would be spent at their home university, including some collaborative work with Egyptian team members when they came to the U.S. Over the three years of the project, each of the research teams sent an average of one team member per year to the U.S. for 3-4 weeks to work on the project with their collaborator, to work in the libraries, or to deal with computerization and analysis of complex problems.

In Egypt most research teams held weekly or biweekly team meetings during the entire research period. These meetings maintained continuity and established responsibilities. The Egyptian and UC directors in Egypt regularly visited many of these team meetings. In addition, monthly research team leader meetings were held at which research management problems were dealt with and integration of research issues among the activities was accomplished.

Research management training was also accomplished at these meetings. The team leaders thus became an integral part of overall agricultural policy research in Egypt.

Short and long term training in the U.S. was also available to Egyptian researchers. Three doctoral study scholarships were competitively offered. During the three years of the project, there were ten one-year post doctoral fellowships awarded. These were highly competitive, requiring submission of a research proposal, candidate interviews with the Egyptian and US technical committees, and satisfactory performance on an English exam. Half of the fellowships were awarded to MOA and half to university personnel. These opportunities for overseas training acted as incentives to the younger researchers.

A working paper series was developed to provide outlets and visibility for researchers. Technical and editorial assistance was offered to all teams by the UC project director in Egypt. The UC project director in Egypt was also available to provide technical assistance to all teams in the absence of the UC collaborators.

The project co-directors designed an integrated program of education, research, and extension activities, reflecting the positive aspects of the land grant model. Weekly seminars conducted throughout the life of the project provided outlets for researchers to air findings and share ideas. Egyptian and visiting UC agricultural economists shared in the presentations. Specially designed "English for Economists" courses were taught throughout the project. The English course materials were developed from actual working papers submitted to the project by researchers. Technical training workshops in survey analysis, cost-benefit techniques and microcomputer operation were continually made available to team members. Large policy workshops, with participation of up to 150 persons, often addressed by the Minister of Agriculture, USAID officials, and key Egyptian policy makers, provided agricultural economics its extension and policy outreach. At these major policy workshops twelve to twenty research papers were presented, discussed, and summary workshop papers were widely circulated in the MOA and other Egyptian institutions. This provided high visibility for the researchers and to the research findings on the policy relevant questions.

#### PROJECT ACCOMPLISHMENTS

The quantity and quality of the policy-relevant research accomplished by the ADS Economics Sub-Project was substantial. At the end of the project 183 working papers had been produced, some 15 papers had been published in American professional refereed journals, and 3 books had been published on the basis of the project research. Numerous other papers had been submitted to journals and many Egyptian and UC economists were engaged in continuing collaborative research. Hundreds of copies of all the working papers were distributed throughout Egyptian ministries, universities, and libraries.

This researcher training provided a sound basis on which future research efforts could build. Under the guidance of senior Egyptian and American agricultural economists, these researchers directly contributed to the project's policy relevant research and gained greater appreciation of how to determine research priorities, set research goals, collect data, design surveys, use contemporary techniques of regression analysis and linear programming, review professional papers, work with advanced computer programs, and write and discuss analytical and policy papers.

The research results had substantial impact on policy formation within the MOA. As most of the Egyptian agricultural economics profession, including virtually every MOA employed agricultural economist was engaged in project research and activities, the vast outpouring of research working papers and the highly public forum given by the seminars and policy workshops aided the MOA by creating an environment conducive to policy changes. The project particularly contributed to the debate and gradual policy evolution in the area of agricultural pricing policy.

The impact of the program was sufficiently positive that the MOA (with support from USAID) is, within its research institutes and in technical assistance projects, pursuing the continuation of the collaborative research mode, the linking of university and ministry researchers together with foreign consultants, and framing the research program with educational, training, and outreach components. The MOA continued the collaborative research program on a



reduced scale following the end of the technical assistance project. A review of MOA agricultural economics research one year later revealed that the MOA and Egyptian university agricultural economists were continuing to submit proposals, organize research teams, produce and report results in working papers, and hold policy workshops as a forum for research findings and policy discussion. The model of collaborative research teams linked to training and organized policy discussion is being incorporated into future research program planning. The MOA's research institutes now have a mandate to link ministry and university researchers and to integrate training and outreach with the research effort on all projects.

### IMPLICATIONS

The positive impact of this research program was partly due to the scale of the project, engaging almost the entire agricultural economics profession in Egypt, including research assistants and junior researchers who received training as the next generation of agricultural economists. The collaborative team structure created a congenial working environment for ministry and Egyptian university researchers. By linking training and research, the teams were enlarged sufficiently to allow the inclusion of younger personnel, breaking down the limitations of the seniority principle. In this way, research opportunities were provided to junior Egyptian university faculty and ministry economists who otherwise would not have had access to financial, institutional, or collaborative research resources. The collaborative team structure enhanced cooperation by breaking down the isolation of the ministry from the university researcher in addition to bringing individual researchers into contact with one another. The scale and intensity of the program created great enthusiasm and excitement among the country's agricultural economists. More importantly, it generated a certain creative tension between Egyptian university and ministry personnel who had previously worked separately.

The research thrived in the educational environment created by the project. The project created the research infrastructure necessary to promote researcher development, namely, the seminars, workshops, training courses, and English courses, along with library and research facility development, making available books, journals, research materials, calculators, and microcomputers. The research was practically oriented to dealing with critical policy issues facing the MOA, while state-of-the-art methodologies and techniques were being employed by researchers, creating an innovative heuristic environment.

The incentive structure to researchers was also changed by the project. The project naturally made available financial resources, but more importantly, it offered status and visibility to productive researchers. It provided exposure for promising scientists, both in an actively promoted working paper series and in the large agricultural economics policy workshops where research findings were shared with policy makers and others outside the research community. Furthermore, it generated additional awareness of and enthusiasm to participate in the broader international economics community of scholars and in opportunities for professional publication of collaborative research products in international journals.

The strengths of the project came from its adaptation to and integration into the Egyptian educational and research systems while creating new relationships and organizational structures which overcame the bureaucratic, seniority, resource, and institutional constraints on professional development and research in Egypt. The key contributions were the collaborative team structure, the setting of research in a learning environment, and the creation of visibility and status for researchers and their findings.

THE DISTANCE LEARNING PROGRAM  
AT IKIPUJUNG PANDANG  
INDONESIA: PROBLEMS AND  
RECOMMENDATIONS FOR ITS  
IMPROVEMENT

Amal Sahide<sup>1</sup>  
Thomas F. Trail  
Ronald M. Jimmerson

Abstract

The purpose of the study was to describe the distance learning program at Ikipujung Pandang University to fulfill their need for teachers. Ikipujung Pandang University introduced a special program for continuing education and training of teachers located in rural areas. Major problems encountered to date were: 1) student learning difficulties, 2) problems related to the development and distribution of learning models, 3) geographic isolation, and 4) problems related to managing the learning centers.

INTRODUCTION

Background Information

The Institute of Teacher Training and Educational Sciences in Ikipujung Pandang, South Sulawesi Province is one of the teacher training institutions for secondary and post-secondary school teachers in Indonesia. Ikipujung Pandang consists of six colleges. Each college is made up of several departments and each department has a degree and non-degree program. The undergraduate program requires a minimum of 144 credit hours and a maximum of 160 hours. The program ranges in duration from four to seven years after senior high school. The graduates from this program will be teachers in senior high school.

The Directorate General of Higher Education of the Ministry of Education and Culture recognized that graduates in the field would need additional knowledge in their subject matter fields and to improve their teaching skills. However, these graduates must begin working immediately upon graduating in order to fulfill the demand for teachers. The need for teachers is particularly acute in rural areas where secondary schools lack teachers.

For the first time, non-degree program students at Ikipujung Pandang graduated in 1980. Since then they served as secondary school teachers for two or more years in the eastern part of Indonesia. High school graduates were also major participants in the program.

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## Problem and Objectives

The Distance Learning program at Ikipujung Pandang was implemented in the 1982-1983 academic year. Much work has been done to develop and evaluate the program. The task force at the Distance Learning Program at Ikipujung Pandang has identified some problems related to the implementation of the program. The writer identified the major problems as 1) students learning difficulties, 2) the problem with development and distribution of learning modules, 3) problems related to geographic isolation, and 4) problems related to learning centers.

The basic objectives of the study were 1) to describe basic concepts, characteristics, and general aspects by which distance learning programs are organized; 2) to describe the distance learning program at Ikipujung Pandang; 3) to identify problems with the implementation of the distance learning program at Ikipujung Pandang; and 4) to develop specific recommendations for improvement of the program.

## Procedures

The researchers conducted a computer search on the literature of distance learning. The overview of distance learning programs around the world were used as a basis for presenting a description of the distance learning program in Indonesia. A survey was sent to faculty members in Indonesia who were involved in the Distance Learning Program. Materials and reports concerning the Distance Learning Program at Ikipujung Pandang were reviewed. After reviewing the literature presenting the description of the Distance Learning Program, the researchers made a list of problems which related to the implementation of the program and recommendations for improvement.

## DISTANCE LEARNING PROGRAM AT IKIPUJUNG PANDANG

## Rationale

The Distance Learning Program at Ikipujung Pandang is one of the eleven distance learning programs in Indonesia. In 1981-1982 the Distance Learning Program was designed to improve the quality of secondary teachers in South Sulawesi Province. The basic objectives of the program are : 1) to improve the quality of secondary school teachers who graduate from the non-degree programs, and 2) to improve the teachers' ability in teaching learning processes.

In the 1982-1983 academic year, there were over seven thousand junior high school teachers in South Sulawesi Province. Of the total, 25% had a senior high school education. They were teaching junior high school pupils although they had merely graduated from the senior high school themselves. Based on their high school certificates, these teachers were categorized as unqualified for teaching at the junior high school level.

The same academic year, 50% of the total number of junior high school teachers in this province had certificated from PGSLP, the former teacher training institution for junior high school. A large number of them have served as teachers for more than ten years. They expressed a need to improve their teaching skills in order to improve the quality of their teaching.

The establishment of the Distance Learning Program at Ikipujung Pandang was intended to provide solution to the problems that are faced by secondary school teachers in rural areas. Additional training enables these teachers to learn new ideas and new concepts. For various reasons, these teachers are not able to enroll at the university for additional training on a regular and full-time basis. Establishment of the Distance Learning Program was designed to provide access for individuals who wanted to undertake university study, especially in educational sciences.

In the 1983-1984 academic year over ten thousand high school graduates applied for university admittance. Only 25% were admitted. President of the University, Dr. P. Parawansa explained that the establishment of the Distance Learning Program is intended to overcome such a problem. He stressed that the objectives of the project were to: 1) increase the university's enrollment by the open university programs and 2) to improve the quality of teachers.

In the 1982-1983 academic year, there were over three thousand teachers enrolled in the Distance Learning Program. Their official positions varied in rank and salary. Programs offered were initially at the Diploma 2 level in the areas of natural science, mathematics, English, and home economics. Teachers were required to take basic courses in educational science as well. These included teaching strategies, instructional media, teaching-learning interaction, evaluation, and teaching practice.

### Students and Courses

A printed course book is the basic instructional medium used in the Distance Learning Program. The course book can be described as a learning module. Modules are self-instruction lessons for learners. A module is an instructional package dealing with a single conceptual unit of subject matter. It is an attempt to individualize learning by enabling the students to master one unit of content before moving to another.

The basic module consists of three main components: The student activity booklet, worksheet, and answer sheet. The first component, the student activity booklet, includes an introduction to the course, the course objectives, learning activities, course content, and references. The worksheet component contains assignments or questions that the student is to do or to answer. The answers to these assignments are found in the third component, the answer sheet.

Each module is written by a "course team" consisting of specialists and editors in the specific subject matter field. These are faculty members at the university and they are responsible for selecting the curriculum content for the modules.

The Distance Learning Program operated at 15 learning centers located in local secondary schools. Distance Learning students attend these learning centers, usually during weekend afternoons or on Sundays, for individual study, group discussion, tutoring and taking examinations. Students also pick up their materials at the learning centers.

Tutoring is a technique which is employed in the Distance Learning Program. There are currently 48 tutors involved in the program. They are required to have a B.A. or Masters' degree in education with major emphasis in the subject matter field they tutor.

The students who completed their examinations at the end of the first year of their program did well. Over 90% passed final examination in their subject matter area and in basic education. This is similar to the results of conventional education at the university. Tutors noted that even with the difficulties of geographic displacement and problems with development of materials for the first year, the motivation of students was very high.

## PROBLEMS AND THEIR RESOLUTION

### Student's Learning Problems

The most obvious characteristic of Distance Learning is that students are not on campus. They are physically distant from the teacher for most of the time during the learning-teaching period. Students of the Distant Learning Program in Indonesia still have problems reading and writing. They feel a need to improve their reading and writing skills in order to succeed in their learning activities. A major problem is that of managing their own learning effectively, particularly in scheduling and using time effectively. The total time that most teachers have available for part-time study each week may be no more than 10 to 15 hours.

The curriculum of the Distance Learning Program requires that the distance learning students take an average of 10 credits each semester. One credit then means distance learning students require 2 hours and 50 minutes of study time each week. Survey results indicated that managing time, according to the students, was a major problem.

#### Problems Related to Learning Modules

On the part of the university, a major problem was the fact that the development of learning modules is behind schedule. This is because the faculty members who write modules are busy in their regular jobs and they lack time for writing these modules. It is also reported that because of the lack of qualified personnel and resources, the duplication and distribution of learning modules frequently lags behind schedule.

Members of the learning task force also cited that the faculty members' contribution is the weakest component in the program. Creating a learning module that meets the criteria for good distance learning materials, which is an effective teaching tool, requires a high skill level. Because faculty members have not had the experience of writing learning modules, they do often do not meet the basic criteria.

#### Problems Related to Geographic Isolation

Students in Distance Learning Programs are at a distance from their educational institution, their teacher, and their friends for most of the learning-teaching process. It is clear from the Indonesian case that because of the geographical isolation and the problems it creates, distance learning students have some particular needs and require special help. One of the major problems cited by students is that both they and their tutors at the district centers need to meet with faculty members of the university who write learning modules. They need to provide more information concerning the content of learning modules and other information related to their learning difficulties.

The task force of the program has planned that every semester faculty members who write learning modules meet with distance learning students in provincial districts to conduct face to face instruction and to discuss learning difficulties that distance learning students experience. The first indications are that this plan is improving some of the problems brought about by geographic isolation.

An additional problem is the need in improving training for tutors who work with students at the district centers. Most of these teachers have not received training in educational methodology and both students and tutors have requested assistance.

#### Problems Related to Learning Centers

Learning centers are one form of support service for distance learning students. Distance learning students attend the various 15 centers, usually during week-day afternoons or on Sundays for individual study, group discussion, tutoring and to take examinations. Learning centers are also the places where the students pick up their learning modules and supplementary materials. The learning centers provide a support for students while offering a meeting space. While the facilities may be limited or not quite appropriate to students' needs, at least one student need has been met by the learning center.

A major problem encountered in the Distance Learning program has been that some students have difficulty attending learning centers regularly because they live far from the learning center. There appears to be a high correlation in terms of attendance on a regular basis at the learning centers with the distance from the learning center. Students who live far from the learning centers have indicated that perhaps additional materials and guidance could be given to them to organize their time more effectively when they cannot make the trip to the center.

## SUMMARY AND CONCLUSIONS

Distance learning is a system of providing education for students without them having attend classes on a regular, full-time basis at a conventional educational institution. [Holmberg, 1981].

A Distance Learning Program was established at Ikipujung Pandang, Indonesia to: 1) overcome the limitation of space faced by conventional educational institutions, 2) provide an opportunity for teachers to continue their studies, 3) provide educational opportunity for teachers in geographical isolated areas, and 4) deliver a cost effective program when compared to conventional classroom methods. A much higher proportion of the teachers are employed, married, or are older than the average university student. [Wedemeyer, 1981]

The teachers select a Distance Learning Program based upon their educational needs. Four basic categories of instructional media used in the program are: print, audio-visual, practical work and interpersonal communication. Print is the most important and commonly used medium in the program. Academic achievement of the teachers was about the same as regular university students.

The following conclusions were reached.

- 1) The general objective of the program at Ikipujung Pandang is to support educational development and innovation in rural Indonesia.
- 2) In the short-run, the objectives of the program are to improve the quality of secondary school teachers who graduate from non-degree programs. For the long run, the objectives are to increase university student enrollments and to improve the quality of teachers.
- 3) Learning modules supported by tutorial activities were the instructional media used in the first year of the program.
- 4) The implementation of the program is now in it's second year and some problems need to be resolved. These are: a) student learning difficulties, b) problems related to the development and distribution of learning modules, c) problems related to geographic isolation, and d) problems related to learning centers. Recommendations for resolving the problems were made.

### References

- Holmberg, B. Status and Trends of Distance Education. Koran Page, London, 1981.
- Wedemeyer, C. Learning at the Back Door: Reflections on Non-Traditional Learning. University of Wisconsin Press, 1982.

AGRICULTURAL EXTENSION FOR THE PROGRESSIVE OR MARGINAL FARMER?  
THE T & V SYSTEM IN SOME SRI LANKAN VILLAGES

Rita Schneider-Sliwa<sup>1</sup>

Abstract

This paper examines whether the contact farmer selection in the T & V System is biased towards wealthier farmers, and its implications for development. 1984 survey data on 130 contact and follow farmers from 10 villages in Sri Lanka's Gampaha District are used in cross-tabulations and discriminant analyses.

Introduction<sup>2</sup>

Improving the effectiveness and quality of agricultural extension services is a pivotal element in any strategy to raise food production and to combat hunger and malnutrition. The World Bank promoted Training and Visit (T&V) System of agricultural extension is seen as a more effective extension approach than previous ones, through its rigid hierarchical structure that permits the flow of information from the research center to the village on a regular, fortnightly basis. Information at the village level is passed on in two-steps whereby the village extension worker gives the extension message to 'contact farmers' who in turn pass this on to the general farming population at large, the 'follow farmers'.

Since the contact farmer regularly receives the information and inputs that are pertinent to that particular stage in the cropping season, the selection of contact farmers is of utmost importance for general agricultural development.

While the contact farmer must have leadership potential in farming matters,

"the contact farmers should not be the community's more progressive farmers who are usually regarded as exceptional so that their neighbors would not follow them. . .The majority of the farmers would perceive better performance by the contact farmer not as a result of improved practices but rather as a result of the contact farmers's more advantageous resource position (Benor and Harrison, 1977).

This paper examines whether the contact farmer selection is biased towards the wealthier farmers, and addresses whether or not such a bias could be counterproductive.

Data

The study area was one randomly selected Agricultural Instructor (A.I.) Range in Sri

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<sup>2</sup>The author wishes to thank G. Feder and R. Slade whose 1984 study on the Contact Farmer Selection in Haryana, India, inspired the present report, and whose approach was generally borrowed here.

Lanka's Gampaha district. Random samples of 64 contact and 66 non-contact (= follow farmers) were selected from 10 villages of this A.I. range.

The interview by structured questionnaire, which was adapted from Hindori and Van Renselaar (1982), took place in July/August 1984. It focused on

- a. socio-economic status of contact and follow farmer households
- b. extension contact between contact and follow farmers
- c. contact and follow farmers' adoption of specific farm practices recommended by the village extension worker.
- d. use of inputs and value and quantity of outputs

For this study, however, only the data relating to a and b above were used.

### Results from Statistical Analyses

An initial insight into the selection of contact farmers was provided by cross-tabulation. Considering the distribution of contact and non-contact farmers by farm size showed that there was little difference in proportions of contact and non-contact farmers in the marginal (less than 2.5 acres) and small farmer (less than 5.0 acres) categories. Striking, however, was the disproportionate distribution of contact and noncontact farmers in the poorest and best off farm size categories. Almost one third of the contact farmers (32.8%) were relatively well off with holdings in excess of 5 acres. The corresponding percentage for non-contact farmers in that farm size category was just over 10%, and this difference was statistically significant. By contrast, almost a third (29%) of the non-contact farmers were near landless, while only about 11% of the contact farmers were in that category.

These simple cross-tabulations suggested that relative wealth as represented by farm size was a determinant in the selection of contact farmers. To further examine this lead, discriminant analysis was used where the dependent variable was binary (contact or non-contact farmer) (Nie, et al. 1975). This was related to independent variables reflecting educational attainment, previous membership in a village development society and/or special short-term agricultural training, relative wealth reflected in size of owned holdings, value of land, number of acres under high value crops, and regular monthly off-farm income.

Examination of the univariate F-statistics of the discriminant analysis indicated that significant variables for distinguishing between contact and follow-farmers were: membership in a rural development society and/or previous short term agricultural training, as well as all variables reflecting the farmer's resource position, i.e. number of acres owned, number of acres under high valued crops, value of output as well as expenditures on inputs, land values and off-farm income. The final discriminant function, reflecting both the intercorrelations among variables and their relationship to being a contact farmer or not, employed only three variables - membership in a rural development society and/or previous agricultural training, number of acres under high value crops, and off farm income. Examination of the standardized discriminant function coefficients indicated that farmers who are members in a rural development society, have more acres under high value crops and have more off-farm income, were more likely to be contact farmers. That number of acres under high value crops showed up as important is particularly interesting given that the T&V system is not oriented towards these crops, but rather towards basic staples.

To gain a more complete picture, it was useful to consider also the mean values of those variables indicated as significant by the univariate F-statistics. Looking at these indicated that the distinction between contact and follow-farmers was largely on the basis of relative wealth. Contact farmers had almost twice as much land, twice as much off-farm income and 2.5 times higher value of land than follow-farmers and these differences were statistically significant. Interesting was that education did not seem to make the expected difference, with follow farmers having only slightly lower educational attainment than contact farmers. Noteworthy further was that while membership in a rural development society and/or short-term agricultural training were significant in distinguishing contact from follow farmers, the difference in mean values was not nearly as pronounced as one would have assumed.



## Implications of Results for Development

The statistical analyses do bear out that the contact farmer selection is biased towards the relatively wealthier farmers. This extension bias can be counterproductive, as proposed by Benor (1977) and explained next.

Although many believe that relatively wealthier farmers are more "innovative" (Feder and Slade, 1982) marginal and smaller farmers are not necessarily less innovative. This is evident from the sample of farmers from India's Rajasthan Province. When introduced to improved farming practices, small farmers were clearly equally or more innovative than the wealthier farmers as measured by their adoption rates (Singh, 1979).

That this extension bias towards the wealthier may even be counterproductive is further indicated by the Sri Lankan data. While almost all contact farmers, irrespective of their farm size got regularly advice from the village extension worker, they appeared to monopolize the extension message to some extent. A relatively large percentage of the contact farmers (21.7%) reported that they did not have any follow farmers or even contacted them. Almost 50% of all follow-farmers surveyed, did not know anyone or more of the contact farmers of their village, i.e. while they may have known the contact farmer personally, they did not know him in his function as contact farmer; nor were they aware that some farmers received regular extension advice from the village extension worker.

So far, then, the analysis suggests that not only is the selection of contact farmers biased towards the relatively better off, but also many of these contact farmers do not perform as desired. Indeed there is a chance that the extension message never trickles down to the small and near landless farmers. In extending the agricultural advice, the contact farmers themselves may be biased towards relatively wealthier follow farmers as was evident from this survey. The majority of those follow farmers who never saw their contact farmers was near landless (18%) and marginal (16.6%). The proportions of follow farmers without extension contact, however, decreased with increasing farm size; only 1.5% of the wealthy follow farmers (over 10 acres) reported no extension contact.

The extension bias evident here attests to the persistence of a traditional approach to the diffusion of technology in agriculture which focuses on "~~innovativeness~~" characteristics of the adopter and sees agricultural development occurring through a demonstration or trickle-down effect. That this trickle-down effect does not work as well as hoped for can be implied by the above findings. In other words, the T&V system (in the study area) is only as good as its weakest link, the contact farmer; where he fails, the whole system fails, and the establishment of the T&V hierarchy by itself does not guarantee agricultural development. This, of course, has been pointed out in a more general context by Nobel Laureate Th. Schultz, as well as L.A. Brown, in their pioneering works on peasant agriculture and innovation diffusion respectively. Schultz (1964), for example, observed that even small farmers are innovative, efficient and responsive to economic opportunity; they remain poor, however, because modern high pay off inputs are not made available to them. Brown (1981) found similarly from over 50 empirical studies in agricultural and nonagricultural settings in more and less developed countries, that the major constraint in innovation diffusion is not the innovativeness of the adopter. Rather, the major constraint was an institutional one, that is, when and where an innovation was made available by its propagator.

While agricultural development may be hampered by the selection of contact farmers who are not acceptable "role models" or who monopolize the extension message, the latter may have a further anti-developmental impact on the rural sector.

Because the contact farmers get first hand information and supplies, they can advance as a group, increase elitist entrenchment, and cause landlessness and outmigration. To understand this, consider that empirically, the diffusion process is characterized by a logistic curve. This implies that those who adopt innovations early on (and contact farmers are the first that are exposed to innovations), will increase their output. Since the early adopters, however, are relatively few, the addition to aggregate output is relatively small. This, and the usual lag time in agricultural price response, means that

the unit price does not decrease. In other words, early adopters are able to sell a greater quantity at constant prices, thus experiencing a windfall gain ("adopter rent"). As more people adopt, however, the addition to aggregate output will cause prices to fall and latecomers, experiencing the full downswing of prices, may not gain at all from adoption. In order to adopt, however, these farmers may have indebted themselves; with meagre earnings they may have to sell out to the already wealthier farmers and may have to migrate, as was shown by Havens and Flinn (1975).

It can be concluded then, that the selection of relatively wealthier (often assumed to be more "progressive") farmers can be counterproductive for long-term agricultural development. Furthermore, because these contact farmers may and often use the extension contact to strengthen their already privileged resource position, they may exacerbate already existing problems such as inequality, landlessness and rural outmigration. It is necessary therefore, that policy makers more carefully monitor them. While T&V extension can and often does increase total food output, such success in aggregate output terms should not lead policy makers to ignore the fundamental question of development, first asked by Seers (1972): "what happens to inequality, poverty, and unemployment as development occurs?" In adaptation of this, we suggest that future research addresses more specifically how T&V affects inequality, poverty and landlessness (as well as agricultural productivity) in rural areas.

#### References

- Arasasingham, S.R. 1982 "Experience with the Training and Visit System of Extension from Agricultural Extension and Adaptive Research Project." Paper read at the Asian Regional Workshop on the Training and Visit System of Extension Chiangmai, Thailand, Nov. 27-Dec. 6, 1982.
- Benor, D. and J.Q. Harrison 1977 Agricultural Extension, the Training and Visit System, Washington, D.C., World Bank.
- Brown, L.A. 1981 Innovation Diffusion - A New Perspective, New York, Methuen.
- Feder, G., and R. Slade 1982 "The Acquisition of Information and the Adoption of New Technology," World Bank Agricultural and Rural Development Department, Discussion Paper No. 2.
- Feder, G. and R. Slade 1982 "Selecting Contact Farmers for Agricultural Extension: The Training and Visit System in Haryana, India." World Bank Agricultural and Rural Development Department, Discussion Paper No. 3.
- Feder, G. and R. Slade 1984 "Contact Farmer Selection and Extension Visits in Haryana, India." Quarterly Journal of International Agriculture, March.
- Havens, A.E. and W.L. Flinn 1975 "Green Revolution Technology and Community Development: The Limits of Action Programs." Economic Development and Cultural Change, 20, 210-34.
- Hayami, Y. 1971 "Conditions for the Diffusion of Agricultural Technology: An Asian Perspective." in American Journal of Agricultural Economics 1.
- Hindori, D. and J. Van Renselaar 1982 "The Training and Visit Agricultural Program in Matara District: An Evaluation." Agrarian Research and Training Institute Report.
- Nie, N.H., C.H. Hull, J.G. Jendins, K. Steinbrenner and D.H. Bent, 1975. Statistical Package for the Social Sciences. New York, McGraw-Hill.
- Ranawera, N.F.C. and G.A.C. de Silva "An Evaluatory Study of the Training and Visit System of Extension (T & V) in Sri Lanka." Paper presented at the National Seminar on the Training and Visit System in Sri Lanka, Peradeniya University, Nov. 17-19, 1982.

Schultz, T. 1964 Transforming Traditional Agriculture.

Seers, D. 1972 "What Are We Trying to Measure? in N. Baster (ed.). The Measurement of Development.

Singh, I. J. 1979 The Small Farmers and Landless in South Asia. World Bank Staff Working Paper, No. 320.

Von Blanckenburg, P. 1982 "Training and Visit Systems in Agricultural Extension: A Review of First Experiences." Quarterly Journal of International Agriculture (Frankfort) 21:  
6-25 Jan/March 1982.

**A MODEL OF CULTURE FOR CROSS-CULTURAL ADULT EDUCATION:  
EXAMPLES FROM AGRICULTURAL RESEARCH MANAGEMENT TRAINING**

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Robert W. Werge

**Abstract**

A model of culture is presented as a tool for designing cross-cultural programs of adult education. Culture is viewed as consisting of three major components: material environment, social organization and ideology. The model is used in the context of designing training courses in agricultural research management for administrators from different countries.

**INTRODUCTION**

During the past decade, the concept of culture has come into wide use in the U.S. business environment. Faced with explaining superior performance of Japanese firms in manufacturing and design, commentators and analysts have used culture to describe and compare foreign as well as domestic corporations. Along with this new application of the culture concept has come an enlarged concern with cross-cultural training for managers, sales representatives, administrators and negotiators who deal with firms from different countries or whose own organizations include individuals from different countries. This concern has also been shared by governmental agencies concerned with international relations and development.

This paper deals with cross-cultural aspects of management training in the field of international development; it is based upon a series of training courses carried out by USDA for agricultural research managers from developing countries. The paper, however, addresses one of the weaknesses in cross-cultural adult education, namely the lack of a systematic model of culture to use in training design. The paper presents a model of culture which permits educators to analyze cultural similarities and differences between groups of adult learners and, by so doing, to adapt training materials, methods and curriculum to meet their needs.

The model which this paper presents is based upon the work of a group of anthropologists who could be called cultural materialists (Harris 1968). These theorists regard culture as having three major aspects. The most important aspect in determining human behavior, is the material or technological environment. The second aspect is the social organization, largely determined by the material environment, but also being influenced by the third component, ideology. In this paper, these three components are discussed as being equally important in deciding how educational programs can be cross-culturally relevant.

A few words should be said concerning methodology. Data for this paper was gathered by the author while conducting a total of four training courses in agricultural research management for groups of research administrators during the period 1980-1984. The most recent overseas presentation was a three week course in Pakistan given in 1984 and it is from that experience that many of these examples are given. In addition, the author has organized presentations of the same course in Zaire, Malawi and Bangladesh. Extensive prior work experience at an international research institute in Peru and continuing contacts

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with U.S. research administrators has also been used as a basis for comparison. Information has been gathered in an "action-research" mode in which, as an organizer and trainer, the author had to collect, analyze and apply findings on a daily basis in order to guide the educational process to a satisfactory conclusion.

After a brief description of the model, the paper presents brief examples of cross-cultural comparisons used in deciding upon course design and draws implications for the design of curriculum. The final section of the paper is a short summary. It is hoped that by presenting this model, other educators in the cross-cultural field can further test its utility in other situations.

### THREE COMPONENTS IN A MODEL OF CULTURE

In designing educational programs in a cross-cultural perspective, three aspects of culture should be examined. These aspects might be viewed as three layers, each one grounded in the one beneath, whose whole is more than the sum of its parts. The first, or bottom layer, is the material base, that is, the physical environment and the technology employed by a group to capture energy and exploit the environment. For a band or tribe, this includes the physical environment surrounding them, its resources and their technology for exploiting it; for a research organization, material culture includes their resources in land, infrastructure and technology and the way in which those resources are transformed and exchanged. The second layer is that of social organization and social structure, that is, the types of interactions exhibited by a group of humans. For a whole society, this includes factors such as kinship and political organization; in a research organization, it includes such factors as the type of hierarchy, behavioral norms and ceremonies. The third layer is that of ideology, that is, the concepts and values shared by a group. Ideology includes such factors as religious belief and philosophy, moral codes and metaphysics; in a research institute, it includes the belief in science as a means of discovering truth.

The task for the cross-cultural educator is (1) to examine each of these layers of a group's culture, (2) to analyze the interconnections between these three layers in defining behavior within the group and with other groups, (3) to utilize a comparative method in defining similarities and differences with his/her own culture with that of students/trainees, and finally (4) to adapt his/her lessons, in terms of principles, behavioral modifications or tools, to the other culture.

In this paper, this triple tiered model of culture will be examined in relation to an ongoing adult educational program in the field of agricultural research management. Management can be defined as the directing or controlling of behavior and resources within a complex organization. Agricultural research management is currently a topic receiving increasing emphasis by international organizations who have been investing heavily in the capacity of developing countries to carry out research activities. The management of agricultural research resources and personnel is viewed as a major limiting factor in the ability of such countries to utilize additional inputs in the form of research infrastructure, training and equipment.

#### Component 1. The Material and Technological Base

In comparing agricultural research systems or institutions, the first area to examine is its physical and technological underpinnings. That is, what is the nature of the infrastructure, the equipment, and its material resources? Since the function of research is to create knowledge, one especially critical type of infrastructure is information technology. The effectiveness of a research organization is highly influenced by the type and amount of information to which it has access. Broadly defined, this includes the

books in its libraries, the journals to which its scientists subscribe, and, increasingly, the computers and computer programs which store and process data on its budget, personnel, equipment and experiments.

In comparing information technology between research operations in different countries, one is struck by its relative absence in developing countries. When they are present, library materials are often limited and very outdated, victim of the inability to obtain foreign currency for publications from abroad and to systematically produce domestic journals and serials. Domestically produced journals and publications are sporadically produced; research reports are poorly duplicated and of limited distribution. Personal computers are only beginning to be utilized on a limited individual basis; few computer systems are in place for storing or analyzing nation-wide data.

A research manager in Pakistan, for example, deals in an entirely different material culture than one in the U.S. where information technology is not a limiting factor. In the U.S., managers complain of "too much information," stating that "it is hard to keep up with the journals and publications coming across the desk." Computer systems are an integral part of the infrastructure; ~~terminals with hook-ups into complex data-base systems are commonplace.~~

These differences in available technology in the two countries helps to explain some differences in the the very nature of the educational process for researchers. In Pakistan, for example, a training course for researchers normally consists of a large number of lecturers, as many as 20 to 30 for a five day course, each delivering a lecture on a specialized subject. This type of structure is required in a country where important information is still transmitted orally; speaking and listening continue to be the major means of transferring information within the scientific community. Other forms of training, such as those used more widely in the U.S. depending upon discussion or small group activity, however, assume that participants have equal access to information, usually in written form. After all, "if you don't know the answer," Americans are told from the time they are youngsters, "you can always look it up." In places like Pakistan, there often is no place to look it up.

But the differences in information technology imply that a course component in information management, for example, has to be treated very differently in each country. In Pakistan, for example, information management includes working on ways scientific staff or support staff can be enabled to seek out information on an ongoing basis from free sources overseas, such as from specific agencies set up for international information dissemination, or through establishing networks with foreign scientists in their own fields. While foreign exchange is not normally available, most institutions do have money for maintaining correspondence. Methods of organizing publications and internal publication series are covered; alternative approaches to organizing seminar series are also covered.

The point to be made is that the material culture of the research manager's institution has to be examined and a educational curriculum developed around the limitations and possibilities thereof. Material culture provides the framework for human behavior and examining the material conditions of the organization is the first step in defining the possible approaches to take in an educational program.

## Component 2. Social Organization

Based upon the configuration of material resources and constraints, patterns of social organization and interaction become the next focus of cross-cultural concern. Often social behavior has been the only area of cross-cultural concern because the emphasis in

management upon the behavioral sciences, especially psychology, prepares specialists to see culture on this level. And since management training in the U.S. is concerned with behavior modification within an institutional environment, this concern becomes translated in a cross-cultural context into a concern for culture change.

Patterns of human behavior and interaction in agricultural research institutes differ markedly between cultures. For example, meetings between scientific staff and research directors in the U.S. are generally characterized by a relatively open flow of information and low distance maintenance between different levels of the institutional hierarchy. I hasten to add relatively because one can cite examples of research institutions where that does not occur; nevertheless the social norms in the U.S. allow us to see such examples as "negative" cases, ones which are disfunctional rather than typical. Meetings of counterparts in Pakistan, however, are generally characterized by a one way flow of information (namely from superior to subordinate), and high distance maintenance. Social norms in Pakistan tend to reinforce such patterns as being desirable; open discussion in a group where information is offered from a subordinate to a superior is regarded as being disfunctional and viewed negatively as a subordinate acting "out of line."

Such differences in social behavior in meetings can be related to the material culture of the organization as well as to the values held within the ideological superstructure. Information technology, as has been noted, is scarce; information is scarce and a valuable commodity. Access to information represents a potential source of power. In an organization in which status relations (reinforced through a rigid civil service system) are strictly defined, information going from lower to higher ranks, especially when occurring in a "public" setting such as a meeting, is a violation of established power relationships. Instead of information sharing, the real function of a meeting within a Pakistan research organization is normally the reinforcement of power relations; it is a public forum in which superiors exercise their superiority by "telling" subordinates what is expected or what must be done. Information-sharing, as is conceived in the U.S. often to be the function of a meeting, occurs between individuals of the same status or, in a social context, of the same family or village.

Since the function of meetings is different, training in conducting meetings, a common staple of a management curriculum, is necessarily different for a U.S. vs. a Pakistani group of research administrators. For a Pakistani administrator interested in information from subordinates, but unable to compromise formal status positions, it is important to develop tools which can ask for data in a "private," not "public," forum and in a neutral atmosphere. For example, use of simple survey instruments, use of scoring techniques, and use of selective interviews can be emphasized in a curriculum. The major point to emphasize is that social behavior which in one culture is viewed as "disfunctional" may not be so in another; looking clearly for the functions of social behavior provides clues to the techniques which will, in fact, make for improvements in managerial behavior.

### Component 3. Ideology

A culture's ideology, that is, its commonly held values, beliefs and philosophy, is rooted in the material and social conditions of its people's existence. In the present context, this can be most clearly seen when dealing with abstract concepts. For example, a major staple of U.S. management training is "time management." Talking of time as something to be managed reflects a belief that time is, in fact, a valuable commodity or a thing (a belief reflected in American English in which time is utilized almost exclusively with verbs also associated with money, that is, spend, save, waste, get, give). Such a view is a function of a highly industrialized and monetized economy in which an individual's labor is bought and sold.

Such a concept of time, however, is not widely shared in other cultures. Even in U.S. subcultures, one "does" time in jail or confinement, a concept more akin to that of other cultures in which time may be viewed as a part of the physical environment, more akin to air than to a manipulable commodity. When questionnaires were given to Pakistani research managers on topics suitable for a research management course, the two lowest ranked items (after planning, motivation, evaluation, etc.) were consistently time management and conducting meetings, because, in the words of one respondent, "they didn't make sense."

It is the implicit ideology in management theory which is most troublesome in a cross-cultural context. For example, one of the most common paradigms in looking at the issue of motivation is Maslow's Hierarchy of Needs. (Hersey and Blanchard 1977). In this paradigm, Maslow posits a set of basic needs from lowest to highest which must be satisfied in order for an individual to work at his/her greatest potential. These needs are, in order, physical, safety, social, esteem and, the highest, "self-actualization." Of self-actualization, Maslow writes, it is "What a man can do, he must be." Self-actualization is the desire to become what one is.

Maslow's scheme is clearly reflective of a culture which places a higher value upon individual (and male) achievement than upon group (be it family, corporation or village) need. But such a value system does not, however, reflect those of other value systems of other societies. Thus in working with Pakistani institutions and in other countries, the paradigm has been simplified to reflect only three levels of needs, basic, social, and intellectual, so that one can talk about types of needs and the primacy of some in certain cases, but one does not create a dichotomy between the individual and the group and assume the supremacy of one over the other.

#### SUMMARY

This paper has presented a model for analyzing culture which can be utilized for designing cross-cultural programs in adult education. The paper proposes that the educator or trainer conceive of culture as being a set of forces which operate on three major levels. These are the levels of material environment, social organization and ideology. In examining those elements of a curriculum which may be cross-culturally relevant, the educator needs to examine all three levels, view them as interconnected and mutually reinforcing and then decide how the elements of a curriculum can best be changed, adapted or dropped in order to meet the needs of a different culture group. Examples were drawn for training courses carried out in the field of agricultural research management.

#### References

- Harris, Marvin 1968. The Rise of Anthropological Theory. New York: Columbia U. Press
- Hersey, Paul and Kenneth H. Blanchard 1977. Management of Organizational Behavior. 3rd ed. New Jersey: Prentice Hall. pp. 30-45.



AN ANALYSIS OF ADULT LEARNING STYLES  
USING THE MYERS-BRIGGS TYPE INDICATOR

Dennis E. Campbell<sup>1</sup>

Abstract

This paper summarizes the initial results of using the Myers-Briggs Type Indicator (MBTI) to determine the learning style preferences and cognitive structures of Department of the Air Force logistics continuing education learners. Although other patterns are noted, preliminary surveys show the learners are fact oriented, deal on an impersonal basis, are practical and matter-of-fact, and have a preference for using technical skills. Learning styles follow patterns of self-work, lecture based, use of audio-visual devices, and participation for practical experience. Learners prefer well-defined, ordered activities, and want to know why before learning.

INTRODUCTION

This paper reports initial findings of learner style of military and civilian learners attending logistics continuing education courses at the School of Systems and Logistics, Air Force Institute of Technology. Form G of the MBTI served as the survey instrument used to assess learning styles because of its growing acceptance and use among researchers, and acclamation of its validity and reliability. Survey results are used to structure lessons and learning activities for maximum effectiveness.

A detailed explanation of the MBTI is beyond the scope of this paper. However, a brief description of the author's interpretation and conceptual framework of the MBTI matrix is offered. Specific descriptions of the four dimensions (E/I, S/N, T/F, and J/P) and their conceptual base may be found in Lawrence (1982), Keirsey and Bates (1978), and Myers (1962).

The author views the E/I dimension as how a person prefers to deal with information. E's (Extroverts) center on people or material objects as their prime intake source of information. While I's (Introverts) are internally oriented, intense, and deeply interested in internal reactions. The E/I dimension tells how a person absorbs or takes in information.

The S/N and T/F dimensions give clues as to how a person uses his mental processes. The mental process view is recognized by leading researchers well versed with the MBTI (Lawrence, 1982) (Keirsey and Bates, 1978) (Myers, 1962). Myers refers to the use of the S/N dimension as a perception process -- "becoming aware of things, people, occurrences, or ideas" -- and the T/F dimension as a judgment process -- "coming to conclusions about what has been perceived" (p. 51). Thus the combination of the two dimensions and their variables gives insight to a person's cognitive structure.

Since the first dimension deals with taking information in and the next two dimensions involve how information is processed, the J/P dimension represents how a person provides the processed information back to the environment. The J preference includes decision, future plans, completeness, and closure. While the P preference is characterized by adaptation, open options, less deadlines, and pending attitudes. With this brief explanation of the author's interpretation of the underlying theory of the MBTI, an analysis of the data is presented.

(1)

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## RESULTS

This portion of the paper summarizes the results of administering MBTI surveys to 189 learners attending logistics management continuing education courses. Table 1 lists the frequency and percentage distribution by type of those learners surveyed.

TABLE 1

FREQUENCY AND PERCENTAGE OF SIXTEEN TYPES IN SELECTED  
DEPARTMENT OF THE AIR FORCE LOGISTICS CONTINUING EDUCATION COURSES  
(Frequency/Percentage)  
(n = 266)

<u>ISTJ</u> 93 (34.96%)	<u>ISFJ</u> 15 (5.64%)	<u>INFJ</u> -----	<u>INTJ</u> 20 (7.52%)
<u>ISTP</u> 18 (6.77%)	<u>ISFP</u> 4 (1.5%)	<u>INFP</u> 6 (2.26%)	<u>INTP</u> 16 (6.02%)
<u>ESTP</u> 9 (3.38%)	<u>ESFP</u> 1 (.38%)	<u>ENFP</u> 3 (1.13%)	<u>ENTP</u> 9 (3.38%)
<u>ESTJ</u> 49 (18.42%)	<u>ESFJ</u> 4 (1.5%)	<u>ENFJ</u> 4 (1.5%)	<u>ENTJ</u> 15 (5.64%)

Research has shown that the general population's distribution of type dimensions range as listed below. While it is not suggested this investigation mirrors the general population, the dimension percentages are reported in Table 2 for comparison to emphasize the uniqueness of the learners.

TABLE 2

COMPARISON OF GENERAL POPULATION AND STUDY DIMENSION DISTRIBUTIONS  
(n = 266)

<u>GENERAL POPULATION</u>	<u>STUDY DISTRIBUTION</u>
E vs. I: 75% to 25%	E vs. I: 35% to 65%
S vs. N: 75% to 25%	S vs. N: 73% to 27%
T vs. F: 55% to 45%	T vs. F: 83% to 14%
J vs. P: 50% to 50%	J vs. P: 75% to 25%

Given that the two internal dimensions of type (S/N and T/F) provide insight on how intelligence is used and that this use is related to learning styles or patterns, frequency and distribution measured for these dimensions are of value. Data for these dimensions, termed "temperament" by Kretschmer (1925) and expanded by Keirsey and Bates (1978), are reported in Table 3.

TABLE 3

TEMPERAMENT DISTRIBUTIONS  
(n = 266)

ST:	169	(63.5%)
SF:	24	(9.0%)
NF:	13	(4.9%)
NT:	60	(22.6%)

Thus, the preponderance of preferences are noted as ST. A measure of the four corners of the type matrix shows that TJs account for 177 or 66.54% of the preferences. Additionally, STJs account for 142 or 53.38% of recorded type.

TABLE 5

**LEARNING CHARACTERISTICS  
OF I, S, T, AND J TYPES**

1. Works easily alone (I)
2. Likes lectures (I)(T)
3. Likes direct experiences (S)
4. Likes audiovisuals (S)
5. Prefers well-defined goals (S)
6. Prefers practical tests (S)
7. Needs to know why before doing (S)
8. Linear learner with strong need for order (SJ)
9. Wants logically-structured, efficient materials (IT)

Source: "Relating Type to Instructional Strategies", Margaret Morgan as reported in People Types and Tiger Stripes, Gordon Lawrence, Center for Applications of Psychological Type, Inc., Gainesville, FL, 1982, page 53.

**IMPLICATIONS**

Teaching Style: The benefits of classifying student learning characteristics by type have obvious application to teacher style. Teachers who present information counter to student learning style increase the risk of ineffective learning. Teachers who possess type characteristics similar to student type or are sensitive to and practice teaching in similar styles enhance learning potential. Students are more likely to understand, enjoy and seek out learning activities to which they identify. The author does not suggest all teachers adopt as a prime teaching style those techniques desired by the majority of students. Although it seems reasonable that the main thrust of teacher style should follow learner patterns, a combined type teaching pattern that reaches all learner types would be most effective. While some adaptation to learner style is necessary, an acquiescence is undesirable. Teachers must be sensitive to learner preferred methods to increase learning and retention.

Instructional Programs: Type characteristics offer tremendous potential for program design, implementation and administration. An obvious starting point is to develop learning situations and activities conducive to learner type and disposition. All learners have a right to expect programs and learning activities that offer them the best chance to develop. Understanding type and incorporating the theory into programs should assure this right.

All types are not evenly distributed in various learning activities. Though populations may be attracted to specific types of educational activities, programs should not be so rigid as to exclude characteristics of other learners. Personal considerations and flexibility is key. One can see that certain teaching techniques favor particular learning styles while restricting others. Programs must take this fact into account.

Learner Responsibilities: Although some teaching styles and programs favor certain learners, use of type does not excuse learner responsibility. Most competent educators acknowledge learning as a shared responsibility. Learners must identify their best learning style(s) and activities and make their preferences known. Where their needs cannot be accommodated, they must stretch their mental processes to match the methods by which information is presented. Where information is offered by fictional, speculative, and subjective means, the realistic and pragmatic learner must adapt and visa versa. Each type has strengths and weaknesses. Learners must become more sensitive to their strong points as well as points for potential learning problems. To increase the probability of improved learning and retention of meaningful information, learners must know their limitations. While it is not suggested that learners completely change their style, it is suggested learners become aware of areas that hamper them and take action necessary to make learning a greater reality.

The MBTI is a useful instrument to categorize and identify specific preferences of cognitive structure. In this instance, the MBTI reveals a dramatic skew to the left of the type matrix and suggests that the preponderance of learners surveyed recorded learning

Other measure combinations can be developed; however, the significance of these data is beyond the scope of this paper. This paper reports basic data measured by the MBTI for the purpose of discerning patterns of learning style. Conjecture of learning style is limited to a superficial analysis of information thus far discussed.

#### INTERPRETATION AND DISCUSSION OF FINDINGS

This portion of the paper offers an interpretation of the data and suggests some generalized opinions about learning style(s) unique to this investigation. While other learning styles are certainly attributable to the learners surveyed, the discussion within this paper includes only the major noticeable type found. The purpose is to center on what could be termed as a prime, or most noticeably frequent, learning style among those surveyed and to share information about the interpretation of data.

The preceding tables reveal the frequency of specific type preference among the defense logistics continuing education learners surveyed. The order of type discovered is shown in Table 4.

TABLE 4

#### FREQUENCY AND PERCENTAGE OF DOMINANT TYPE ORDER (n = 266)

ISTJ:	93 (34.96%)
STJ:	142 (53.38%)
TJ:	177 (66.54%)
J:	200 (75.19%)

The preponderance of the I, S, T, and J dimensions suggests several conjectures about learning style can be made concerning these learners. Compared to findings of Myers (1962), Lawrence (1982), Keirsey and Bates (1979), these data suggest the learners:

Focus their attention on: Facts  
Handle facts with: Impersonal analysis  
Tend to be: Practical and matter-of-fact  
Prefer to deal with: Objects and facts through  
technical skills (Myers, 1962)

Lawrence reports that the four dimensions serve as learner motivations and allow specific type preference to categorize learners according to learning style. Lawrence believes:

Introverts (I): Look inward for ideas and clues; show deep concern for fewer interests; and are reflective rather than active.

Sensors (S): Are interested in the literal meaning of concepts; use a step-by-step learning process; and deal less with patterns or possibilities.

Thinkers (T): Are committed to logic; and de-emphasize human feelings.

Judgers (J): Prefer clear work plans; may be impulsive; like closure and deadlines. (Lawrence, 1982)

Lawrence (1982) suggests that STJs are "analytical, fact-minded, practical organizers, managers of detail and systems (p. 15). Keirsey and Bates label the ISTJ as "dependable", "extraordinarily persevering", "thorough", "able to handle difficult and detailed figures", and "patient with institutional procedures" (pp. 189-192).

The prime learning characteristics attributable to the learners surveyed in this research summarized in Table 5 on the next page.

preferences of pragmatic, realistic, objective and decisive characteristics. While other learner preferences and styles were noted, the I, S, T, and J dimensions were in the obvious majority. Teachers, administrators, and learners alike must be cognizant of the other learning dimensions identified to fulfill their responsibilities for maximum learning.

#### References

1. Keirsey, David and Bates, Marilyn. Please Understand Me, Del Mar, CA: Prometheus Nemesis Books, 1978.
2. Kretschmer, E. Physique and Character, New York: Harcourt Brace, 1925.
3. Lawrence, Gordon. People Types and Tiger Stripes, Gainesville, FL: Center for Applications of Psychological Type, Inc., 1982.
4. Myers, Isabel Briggs. Manual (1962): The Myers-Briggs Type Indicator, Palo Alto, CA: Consulting Psychologists Press, 1962.

# CRITICAL REVIEW OF ADULT LEARNING PRINCIPLES FROM A SELF-DIRECTED LEARNERS' POINT OF VIEW

Claudia Danis<sup>1</sup>  
Nicole Tremblay<sup>1</sup>

## Abstract

A critical review of adult learning principles regarding the nature of learning, the learning process, the environment and the adult learner is carried out by means of a comparison of learning principles found in the literature with those found in self-taught adults' learning experiences.

## PURPOSE OF THE STUDY

Principles regarding adult learning have been proliferating in the Adult Education field of theory and practice. A great majority of these principles, however, seem to rest on atheoretical, unverified bases. Moreover, most of these learning principles are intermingled with teaching principles and discussed from an overtly institutionalized point of view. In order to identify the prevailing learning principles from the adult learners' point of view, in a context as free as possible from formal educational biases, the present study focused on self-directed learning.

The purpose of the study is to compare the learning principles suggested by experts in the Adult Education literature with those suggested by successful self-directed learners in the description of their own learning experiences in a natural societal setting.

## METHODOLOGY

The 10 subjects of the study met the following criteria (Penland, 1976): they had been engaged in long-term self-directed learning projects (at least four years); were socially recognized as experts in their field of learning by organizations; had less than 10 years of schooling; their knowledge and skills in their field of learning had not been acquired in school nor at work.

The method implied a three-phase strategy. In the first phase, an exhaustive review of the literature was carried out in order to identify the learning principles which have been explicitly suggested in the literature by Adult Education experts. Principles related to teaching and to cognitive aspects were not retained. A thematic analysis followed and thus was elaborated a framework comprising four dimensions: 1) the nature of learning, 2) the learning process, 3) the learning environment, and 4) the adult learner.

In the second phase, a content analysis of the self-taught adults' learning experiences was carried out. Five steps were followed: identifying the facts and events of each learning experience; comparing the identified events/facts with similar events/facts of the other learning experiences; formulating a preliminary hypothesis regarding each prevailing event or sequence of events; identifying the preliminary hypotheses which were present in all 10 learning experiences (100% consensus) and formulating the retained hypotheses as principles.

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In the third phase, a comparative analysis of the principles suggested by the subjects with those suggested by the authors was conducted. Some principles suggested by the subjects were found to be in accordance with those suggested in the literature; some were in disagreement and others had not been mentioned in the literature. A critical review of the identified principles followed.

## FINDINGS

### Nature of Learning

The first dimension deals with two aspects: learning is an internal process and learning is a developmental process. The most outstanding finding suggested by the subjects regarding the internal process is the following principle: "the self-taught adults are able to identify, by themselves, the personal qualities or traits which characterize them as learners and which facilitate their learning". Regarding the developmental process, the most outstanding finding is related to the increasing self-awareness acquired during the learning process and may be stated as the following principle: "the self-taught adults transcend their own learning process and set forth rules and principles regarding their own learning process or regarding learning in general (meta-learning)".

### Learning Process

The second dimension deals with three aspects: the learning process is cyclical, its central dynamic is the adult's experience and this process implies decision-making. The most outstanding finding regarding learning as a cyclical process reveals that there are, actually, qualitatively different sequences in the subjects' learning process, but that these sequences are not unidirectional nor cyclical since there seems to be no recurrence of the same events or elements in a consistent order. The subjects' process does not even seem to correspond to the problem-solving process which is also, as presented in the literature, a linear representation of learning/action sequences. A principle may be stated, in disagreement with the authors' point of view: "the self-taught adults proceed in a heuristic manner within a learning approach which they organize around intentions, redefine and specify without following any predetermined patterns". Another notion opposing the authors' linear representation of the learning process is the emphasis on the impact of random events upon the entire learning process. Thus, another principle may be stated: "the self-taught adults take advantage of any opportunity that random events may offer them in order to learn".

With respect to experience being the central dynamic of the learning process, the findings corroborate the authors' principles, but some specifications may be brought about: "all self-taught adults' learning approaches consist of a time for action and of a time for reflection, both occurring simultaneously or alternately".

The decision-making implied in the learning process was analyzed, taking into account the management of the learning process, the needs assessment, the learning content, the learning methods, and the pace of the learning process. The authors' principle regarding management of the learning projects appears to be but an operational consequence of the principle defining the learning process as being cyclical. The subjects do not describe their learning process in terms of management nor do they seem to follow the linear, predetermined steps of planning and evaluation. Regarding the needs assessment, the subjects do not describe their progress in terms of specific objectives. Needs seem to be detected by these self-taught adults as they proceed with their learning/action. The following principle may be stated: "the self-taught adults are able to specify their learning goals only once they have mastered certain knowledge and skills". Regarding the learning contents, some findings are in agreement with the corresponding principles suggested by the authors, but also provide new insights: "the more knowledge or skills the self-taught adults have acquired, the more they will seek assistance from specialists in their field of learning"; "self-taught adults have a tendency to narrow down their learning content to specialized aspects of their field of learning"; "the more self-taught adults specialize in their field of learning, the more their interest for their learning content increases". With respect to self-directed learning contents as such, the large number of years and the amount of energy dedicated to the same field

of learning by each subject of the present study illustrates the exactness of the principle stating that the self-directed learners tend to choose one particular field. However, a new principle may be introduced: "the self-taught adults, while specializing in their field, open out to related fields of learning or transfer their acquired knowledge/skills to related fields of learning". Regarding the learning methods and the pace of the learning process, findings from the subjects' learning experiences fully corroborate the authors' principles: the self-directed adult learners do use a variety of settings, methods and resources in order to learn and emphasize the importance of controlling the pace of their own learning process.

### Learning Environment

The third dimension deals with the influence of the environment on adult learning and the use of the learning media. Regarding the influence of the environment, the subjects of the present research emphasize the two-sided transactions they engage in with their immediate environment rather than the one-sided support they could receive from that environment. Regarding the use of the learning media, findings from the subjects' learning experiences are in agreement with the authors' principle stating that the adults use a variety of media. However, it must be specified that "the use of books or consultations with experts only occur once the self-taught adults have familiarized themselves, in various ways, with their field of learning". One of the most outstanding findings regarding the use of human resources can be formulated as the following principle: "the self-taught adults build up networks of resources which evolve in terms of the level of expertise the learners have acquired in their field of learning".

### Adult Learner

The fourth dimension deals with the self-directedness, motivation and orientation to learning of the adult learner. The notion of self-directedness emphasized by the authors characterize the subjects of the present study. However, the subjects do not bring out, as the authors do, the need of the adult learner to be seen by the others as being a self-directed individual. A plausible explanation for this could be the fact that they are not learning in a formal setting where their right to be self-directed has to be granted by external educational agents. The self-taught adults rather emphasize their need to be seen as competent in their field of learning. Regarding the locus of control, the analysis of the subjects' learning experiences brings out the following principle: "throughout their learning process, the self-taught adults assume the monitoring of their own learning, even when consulting an external agent or participating in a formal educational activity".

With respect to motivation, the subjects seem to emphasize different aspects or notions from those suggested by the authors. While the latter speak of positive growth as being one of the main motives, the subjects specify that "the self-taught adults' motivation arises from curiosity, interest or challenge". They specify, moreover, the following: "the self-taught adults' motivation increases as their competence is recognized and as they are invited to transmit their knowledge or skills to others". The subjects equally emphasize much more than the authors do, the importance of pleasure linked to learning as such. The assumed link between learning and developmental tasks or roles is not at all emphasized by the subjects of the present study. This link rather seems to be but one factor among many others, and is brought out only by a minority of respondents. In fact, this relationship sometimes seems to be reversed, the adults' learning projects serving as motivation underlying the choice of developmental tasks or social roles.

Regarding the orientation to learning, three main notions stand out: immediacy of application, efficiency and the pragmatic application of adult learning. With respect to time perspective, self-taught adults do not limit themselves to learnings that are to be applied in an immediate future. Most of them also seize opportunities to acquire knowledge or skills that may eventually be useful in the long term. Furthermore, they seem to be "learning-centered", "subject-centered" rather than being "performance-centered" as it has been assumed by the authors. The self-taught adults do indeed have a pragmatic approach to learning in the sense that what is learned must be applicable to action. But this practical application of knowledge and skills in their field of learning should not be confounded



with a merely utilitarian approach in which only knowledge or skills related to immediate real-life tasks or problems would be acquired by the adult learners.

### IMPLICATIONS FOR PRACTICE

The implications for practice presented here will mostly be of interest to the educators working with adults in formal settings and who are interested in the self-directed learning approach. Educators must be aware, of course, of the need to adapt any notion or principle derived from the learning experiences of self-taught adults learning in an informal setting, to their specific educational setting and particular type of clientele.

The principles which seem most relevant and provide the most useful implications for the formal educators are the following:

Principle 1: "Self-taught adults are able to specify their learning goals only once they have mastered certain knowledge or skills."

This principle implies that the educators should not ask the adult learners to assess their own needs, to set their objectives, to plan their own process and to evaluate their learnings until the learners have had time to familiarize themselves with the basic aspects of their field of learning. This contradicts some actual practices which, for example, make a precocious use of pre-established self-directed learning contracts.

Principle 2: "Self-taught adults' learning approaches consist of a time for action and of a time for reflection, both occurring simultaneously or alternately."

This principle implies that educators, in their planning of an educational activity, should provide periods especially devoted to some kind of reflective activity that alternate with periods of action. Reflection should also be part of the periods of action. This can mostly be achieved through an adequate choice and use of specific methods.

Principle 3: "Self-taught adults proceed in a heuristic manner within a learning approach which they organize around intentions, redefine and specify without following any predetermined patterns."

This principle implies that the learners have already acquired a high degree of autonomy and that they have the opportunity to actualize it. Even if this situation is less likely to occur in a formal setting, it nevertheless suggests some guidelines for the educators: need for flexibility, an openness to change and respect for the adults' own learning approaches.

Principle 4: "Self-taught adults build up networks of resources which evolve in terms of the level of expertise they have acquired in their field of learning!"

This principle implies that the educators would facilitate learning by inciting the adult learners to consult the many resources available in the classroom, in the institution (such as peers, teachers, or other professionals) and in their social environment. Educators could even incite them to build their own networks.

Principle 5: "Self-taught adults transcend their own learning process and set forth rules and principles regarding their own learning process or regarding learning in general."

The learning process which is developmental in nature, brings about a change in the adult learners towards increased self-direction and self-awareness (Brundage & Mackeracher, 1980). The educators should be conscious of the importance of self-awareness which appears to be an inherent part of the learning how to learn process.

A study of adult learning principles from a self-directed learners' point of view may bring about some modifications of the educators' rules or guidelines for action. Indeed,

some principles which have been taken for granted will have to be verified in specific educational settings, with regard to particular types of adult learners. This applies especially to the general principles suggested in the literature which came into disagreement with the learning principles suggested by the self-directed learners. The findings call for a critical review of the teaching process, of the environment, of the interaction with the adult learners and even of our basic assumptions regarding adult learning.

#### References

- BRUNDAGE, D.H.; MACKERACHER, D. (1980). Adult Learning Principles and Their Application to Program Planning. Toronto: Ontario Institute for Studies in Education.
- DANIS, C.; TREMBLAY, N. (1984). Manifestations de méta-apprentissage en situation d'autodidaxie . Proceedings of the Third Annual Conference of the Canadian Association for the Study of Adult Education. Montreal: CASAE/ACEEA.
- FERINGER, R. (1978). The Relation between Learning Problems of Adults and General Learning Theory. Speech given before the Annual Adult Education Research Conference. Texas: AERC. ED 152 992.
- HAMM, C. (1982). Critique of Self-Education. Canadian Journal of Education, 7 (4).
- KNOWLES, M.S. (1980). The Modern Practice of Adult Education. Chicago: Association Press, Revised and updated edition.
- PARSONS, J.; JOHNSON, T. (1978). Adults Learn Differently than Children - An Examination of an Old Basic Assumption. Kansas State University. ED 166 372.
- PENLAND, P.R. (1981). Towards Self-Directed Learning Theory. Paper presented at the Annual Meeting of the Adult Education Association. ED 209 475.
- PETERS, J.M.; BANKS, B.B. (1982). Problem-Solving in Non-Formal Settings by Literate vs. Non-Literate Adults. Proceedings of the Lifelong Learning Research Conference. University of Maryland: LLRC.
- PINE, G.J.; HORNE, P.J. (1969). Principles and Conditions for Learning in Adult Education. Adult Leadership, 18 (4).
- PRATT, D.D. (1984). Andragogical Assumptions: Some Counter-Intuitive Logic. Proceedings of the Adult Education Research Conference.
- SMITH, R.M.; HAVERKAMP, K.K. (1977). Toward a Theory of Learning How to Learn. Adult Education, 28 (1).
- STUBBLEFIELD, H.W. (1983). Contemporary Adult Learning Theories: A Historical and Comparative Analysis. Proceedings of the Lifelong Learning Research Conference. University of Maryland.
- ZEMKE, R.; ZEMKE, S. (1981). 30 Things We Know For Sure About Learning. Training/HRD, June Edition.

## EFFECTS OF LEARNING STYLE AND LEARNING ENVIRONMENT BY LEVELS OF LEARNING

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### Abstract

The investigators sought to determine if individuals in different learning style categories would achieve more in certain learning environments, and if this matching would affect their ability to learn at different levels. An analysis of covariance (ANCOVA) revealed that learning style and learning environment do interact to affect achievement. However, a multiple analysis of covariance demonstrated that there were no differences between learning style and levels of learning. It was also found that there was no difference between rote questions and understanding questions for each of the learning environments in a paired comparison t-test.

### INTRODUCTION

In the relatively short time since its inception, the microcomputer has been able to touch all aspects of human life. It is no longer a question of whether or not the microcomputer will be used, but rather a question of when and to what extent it will be used. Predictions are often stated that the microcomputer will become as commonplace in the home as the telephone and television are currently (Rockart and Scott Morton, 1975).

For adult educators, the challenges provided by this medium are enormous. Not only are the opportunities apparent for training the current adult population, but the future adult population may be well acquainted with learning projects on the microcomputer. Relatively few research studies are available to provide us with information on how adults, with varied learning styles, can best learn basic computer programming for the microcomputer.

The delivery system of non-credit adult education programming provides an opportunity for adults of all ages, educational backgrounds, and occupations to learn a variety of subjects. However, the available adult education programs on basic computer programming for the microcomputer demonstrate that many methods are employed at varying degrees to train persons in this area.

It is generally agreed that all students do not learn in the same ways. While several approaches attempt to establish research on individual differences, no single theory has found widespread acceptance (Danielson and Seiler, 1979). Two concepts, however, have been developed to foster an understanding of how people process information: cognitive style and learning style. The concept of "learning style" appears more recently in research, but includes many of the insights from the earlier research in cognitive style.

Although several instruments have been developed to measure learning style, they each have much in common. By comparing the work of researchers in fields ranging from psychology to management training, McCarthy (1980) found that learning style research presented almost perfectly parallel learning schemes. She developed her comparison based on David Kolb's research because it "represented a breakthrough in formulating learning style findings into model form," (McCarthy, 1980, p. 26).

This approach is represented in the following comparison of learning style research based on the model developed by Kolb.

David A. Kolb (1974) identifies four styles of learning based on the theory of experiential learning: accommodators, assimilators, divergers, and convergers. He states that adults will have a predominance in one of these four styles, although other styles can be developed.

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To identify the learning styles, Kolb provides a model based on experiential learning theory, which is founded on the Jungian (Jung, 1923) concept of styles or types. The experiential model emphasizes the important role that experience plays in the learning process, an emphasis that differentiates this approach from other cognitive theories of the learning process (Kolb, 1976).

In this model, learning is conceived as a four state cycle:

The learner, if he is to be effective, needs four different kinds of abilities: Concrete Experience abilities (CE), Reflective Observation abilities (RO), Abstract Conceptualization abilities (AC), and Active Experimentation (AE) abilities. That is, he must be able to involve himself fully, openly, and without bias in new experiences from many perspectives (RO); to create concepts that integrate his observations into logical sound theories (AC); and to use these theories to make decisions and solve problems (AE). (Kolb, 1976, p. 3)

Examination of the four stage learning model suggests that learning requires abilities that are polar opposites and that the learner must choose which set of learning abilities he will bring to bear in a specific learning situation. Therefore, learning styles are developed through trying to resolve conflicts in family, school, or job. These conflicts do not have to be major or critical, as long as they involve decisions regarding which of the polar extremes of their learning abilities to use (Kolb, 1976).

### STATEMENT OF THE PROBLEM

How do learning environment and learning style interact to affect achievement by levels of learning in basic computer programming courses? More specifically, the following research questions will be explored:

(1) If individuals who prefer the Reflective Observation mode of learning are classified as assimilators and divergers and those who prefer the Active Experimentation mode of learning are classified as convergers and accommodators, then will assimilators and divergers achieve more than accommodators and convergers on a comprehensive examination in a conforming environment and those identified as accommodators and convergers achieve more than assimilators and divergers in an independent environment?

(2) If individuals who prefer the Abstract Conceptualization mode of learning are classified as convergers and assimilators and those who prefer the Concrete Experience mode of learning are classified as divergers and accommodators, then will convergers and assimilators achieve more on the rote level of learning questions than accommodators and divergers and will accommodators and divergers achieve more on the understanding level of learning questions than assimilators and convergers?

### THEORETICAL FOUNDATION

The theoretical basis for the present study is the Lewinian formula-- $B = f(P, E)$ , or Behavior is a function of the Person and the Environment (Hunt and Sullivan, 1974).

B-P-E analysis requires first identifying each of the three components--Behavior, Person, and Environment--in the specific situation. A B-P-E analysis of a psychological experiment would specify the Behavior (or dependent variable), viewing it as jointly determined by the Person (kind of subjects) and the Environment (treatments or independent variables). (Hunt, 1975, p. 217)

The B-P-E formula requires that problems be stated and conclusions be drawn in a differential form. Because there is a strong tendency to look for the one best approach in education, a differential approach will overcome simplification of the problem. Cronbach and Snow describe this aim as:

.. to establish a spirit (or better, a "grammar") within which educational researchers and planners think routinely of learner variables when designing or selecting instructional treatments, and of manipulative treatment conditions when defining school-relevant individual difference variables. (Cronbach and Snow, in Hunt, 1975, p. 218)

The present study includes each component of the Lewinian formula as variables: (1) achievement is identified as "Behavior," (2) learning style is the "Person," and (3) learning environment is the environment. Therefore, the adjusted formula would read:

Achievement = f (Learning style, Learning environment).

### RESEARCH DESIGN

The research design employed in this study is quasi-experimental. The scientific problem is to determine if learning environment and learning style will interact to affect achievement by levels of learning in basic computer programming. An interaction is said to be present when "a situation has one effect on one kind of person and a different effect on another" (Cronbach and Snow, p. 3).

## Population

Adults enrolled in formal non-credit programs of basic computer programming are identified as the population to be considered. Ten classes of students enrolled during the fall semester of 1983 in five Area Vo-Tech Centers in Oklahoma were included in the study. Since the total number of students produced unequal cell sizes, a table of random numbers were used to eliminate students in each cell that exceeded fifteen. Therefore, the total number of subjects included in the study is 120.

## Learning Style Inventory

Adult learning style was determined for each subject by administering the Learning Style Inventory (LSI), a self-administered instrument developed by David A. Kolb. Reliability coefficients of approximately .80 have been established for the questionnaire by applying the Spearman-Brown prophecy formula for split-half reliability for five different groups of individuals (Kolb, 1976).

Validity for the Learning Style Inventory has also been established through correlations with the Myers-Brigg Type Indicator (Myers, 1962), the Thematic Apperception Test (TAT), and the FIRO-B (Schultz, 1958).

Reliability coefficients and validity estimates for the Learning Style Inventory were also calculated for adult students included in the study and a pilot study consisting of six subjects.

## Achievement

The achievement level of individual students was determined by a comprehensive examination given at the completion of the course. All instructors involved in the study agreed upon desired outcomes (minimum competencies) before the study began; therefore, minimum content was consistent for the ten groups. A pre-test composed of 20 questions was administered to each of the ten groups. If results of the pretest indicate that no difference exists between the groups, post-test results would be used to determine the achievement level of subjects. If a difference exists between the groups, an analysis of covariance was used.

A multiple choice pre-and-post test was designed to include the two independent levels of learning: rote and understanding.

## ANALYSIS OF DATA

In the first stage of data analysis, pretest measures were scored and demographic data were coded. After each class had completed its sixth session, the post-test was administered. Computer-scoring methods were used for the pre-and post-test measurements to produce reliability estimates for each class.

The second stage of data analysis consisted of merging the pre-and post-test measure with demographic responses by an identification code assigned to each subject. Utilizing the Statistical Analysis System (SAS), a packaged computer system, data were grouped by class and summarized for learning style, learning environment, and demographic information.

The original data yielded 165 observations. Since the statistical techniques of ANCOVA (Analysis of Covariance) and MANCOVA (Multiple Analysis of Covariance) were to be used, cell sizes were examined. Since cell sizes were not equal, a table of random numbers was used to eliminate observations in each cell that exceeded fifteen. This process produced a total of 120 observations for the final analysis.

## Tests of the Hypotheses

Three hypotheses were tested in this study, each arising from a research question. Each hypothesis will be presented, followed by the results of its test.

1. There will be significant interaction effects between learning style and learning environment on combined rote and understanding achievement scores.

(1.1) Assimilators and divergers will achieve more than accommodators and convergers in a conforming environment.

(1.2) Accommodators and convergers will achieve more than assimilators and divergers in an independent environment.

The hypothesis was tested by a 4 x 2 Analysis of Covariance (ANCOVA) with learning style and learning environment identified as classification variables and the combination of rote and understanding categories of the post-test covaried by the subject's pre-test score as the dependent variable. Results of the ANCOVA indicate significant interaction effects between learning style and learning environment ( $F = 5.96, p > .0001$ ).

Further analysis revealed significant main effects for learning style ( $F = 3.94, p > .0103$ ), learning environment ( $F = 14.90, p > .002$ ), and the interaction of learning style and learning environment ( $F = 6.86, p > .0003$ ). Means and standard deviations are reported in Table 3. A post-hoc comparison procedure, Tukey's HSD test, was conducted to examine the differences between group means. This produced a minimum significant difference of 2.19817 for learning style and 1.1808 for learning environment. It can then be concluded that learning style and learning environment do interact to affect achievement. Thus, the first hypothesis was supported.

2. There will be significant interaction effects between learning style at the rote and understanding levels of learning.

(2.1) Accommodators and divergers will score higher than assimilators and convergers on the rote level of learning questions.

(2.2) Assimilators and convergers will score higher than accommodators and divergers on the understanding level of learning questions.

This hypothesis was tested by a  $4 \times 2$  MANCOVA (multiple analysis of covariance) with learning style identified as the classification variable and levels of learning (rote and understanding) covaried with pre-test scores as the dependent variables.

The MANCOVA procedure for learning style produced significance for the rote level of learning questions ( $F = 2.80, p > .0294$ ). However, the understanding level of learning questions was not significant ( $F = 2.20, p > .0729$ ).

A secondary analysis using post hoc Tukey's HSD tests was conducted on the rote level of questions by learning style. Comparisons were made among the possible combinations of the four categories of learning style. Results indicated that the minimum significant difference of 1.28241 was obtained in two of the learning styles. Therefore, the second hypothesis was rejected. However, an interaction was present for the rote level of questions.

3. There will be a difference between learning environments at the rote and understanding levels of learning.

(3.1) Students in the independent environment will attain more at the understanding level of learning.

(3.2) Students in the conforming environment will attain more at the rote level of learning.

This hypothesis was tested by a paired comparison t-test by learning environments with levels of learning as the comparison variable. Results of the t-test indicate that there is no difference between rote questions ( $t = -2.979, p > .5085$ ) and understanding levels of learning questions ( $t = -2.9458, p > .0826$ ) for each of the learning environments. Therefore, the third hypothesis was not supported.

### Summary of the Data Analysis

There were three hypotheses postulated by the study. One of the hypotheses was supported and two were rejected. Results of the data analysis demonstrated that there were significant interaction effects between learning style and learning environment on achievement scores. Although interaction effects were present for learning style and rote level of learning, interaction effects were not significant between learning style and the understanding level of learning. Finally, no differences were found between learning environments and levels of learning.

### DISCUSSION AND CONCLUSIONS

The main question raised in this study is whether or not learning style and learning environment interact to affect achievement. It was predicted that subjects preferring the reflective observation mode of learning would learn best in a conforming environment and subjects who preferred the active experimentation mode of learning would learn best in a independent environment. Results of the study supported this expectation.

These outcomes are congruent with earlier investigations which have shown an interaction between learning style and learning environment (Hunt, 1975, Domino, 1968).

One unexpected finding of the present study was the lack of relationship between learning style and learning environment with levels of learning. Previous studies have found a difference between learning style and achievement at different levels of learning (Danielson and Seiler, 1979, and Coop and Brown, 1970).

Learning and cognitive style research is only beginning to influence the delivery of programs. Additional investigations, specifically with other populations and subject matters, are warranted to develop definitive approaches to instructional methodology.

Finally, although the results of this study did not support the achievement by levels of learning premise, future investigations may reveal this aspect of learning to be an important consideration for the design of non-credit adult education programs.

It is generally agreed that all students do not learn in the same ways. In the case of non-credit adult education courses, the diversity among student learning styles presents an interesting challenge to the instructor. What influence does instructional strategy have on the ability of adults to learn in a particular subject area? Can instructional strategies be planned to induce a high level of achievement for most students? These questions continue to be addressed by researchers.

The concept of learning style has demonstrated some promise as a means of identifying individual difference characteristics of students. Although there is some evidence that specific learning styles "learn best" within certain conditions, it has not yet been established what relationship the type of learning style and the type of learning environment have on the ability to learn different concepts. Such information could provide insight into the design of instructional strategies for the delivery of adult education courses.

#### References

- Coop, R.H. & Brown, L.D. Effects of cognitive style and teaching method on categories of achievement. Journal of Educational Psychology, 1970, 61(5), 400-405.
- Cronbach, Lee J. & Snow, Richard E. Aptitudes and Instructional Methods: A Handbook for Research on Interactions. New York: Irvington Publishers, Inc., 1977.
- Danielson, J.E. & Seiler, William J. Learners cognitive style and levels of learning in television and print instruction for use in open learning: An exploratory study. Lincoln, Nebraska: ERIC Document Reproduction Service, ED 180 036, 1979.
- Domino, George. Interactive effects of achievement orientation and teaching style on academic achievement. Journal of Educational Psychology, 1971, 62, 427-431.
- Gagne, Robert M. & Briggs, Leslie J. Principles of Instructional Design. New York: Holt, Rinehart and Winston, 1974.
- Hunt, David E. Person-environment interaction: A challenge found wanting before it was tried. Review of Educational Research, 1975, 45, 209-230.
- Kolb, D. Experiential Learning: Experience as the Source of Learning and Development. Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1983.
- Kolb, D. Experiential Learning Theory and the Learning Style Inventory: A reply to Freedman and Stumpf. Academy of Management Review, 1981, 6(2), 289-296.
- Kolb, D., Rubin, I., McIntyre, J. Organizational Psychology: An Experimental Approach. New Jersey: Prentice-Hall, 1971.
- Kolb, D. Learning Style Inventory Technical Manual. Boston: McBer and Company, 1976.
- McCarthy, Bernice. The 4Mat System: Teaching to Learning Styles with Right/Left Mode Techniques, Oak Brook, Illinois: EXCEL, Inc., 1980.
- Rockart, J.F. & Scott Morton, M.S. Computers and the Learning Process in Higher Education. New York: McGraw-Hill, 1975.

## The Relationship Between Locus of Control and Value Orientations in Adult Learners

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### Abstract

The purpose of this study was to describe the relationship between Locus of Control and Value orientations of adult students. Demographic information and data from Rotter's Internal-External Locus of Control Scale and Rokeach's Value Survey were gathered from 413 Adult learners in a university. The results showed that LOC orientations shifted as age increased and that males were more internally oriented than females. Partial correlations of terminal and instrumental value rankings with Locus of Control scores controlled for age and sex showed that more internally oriented persons valued self-respect, wisdom, freedom, and a sense of accomplishment, while externally oriented persons valued family security, a comfortable life, national security, and salvation.

Historically people have used institutions of higher learning as a means of initial career preparation and generally for social mobility. In recent years numbers of adult learners have turned to universities for career enhancement, career 're-tooling' and/or preparation for entrance to higher positions within their own agencies and institutions.

On the whole, one would assume that these returning adults of varying ages would reflect differences in their value orientations and in their sense of self-sufficiency and/or self-reliance as compared to younger learners. Observation of university faculties suggest, however, that they do not make any significant distinction between the age levels of adult learners nor of their greater sense of self-directedness in learning nor of their value differences. That is, all learners are perceived as "kids" who need to be taught the content irrespective of any individual differences they may possess.

To what degree is that a valid assumption? Should faculty pay more attention to differences in age, self-reliance and value orientation of adult learners who are becoming more prominent in their classes? To date answers to these questions have not been systematically studied for adult learners.

The literature on adult development suggests the idea that as age increases there is an internal orientation shift in perceived self-control and values (Levison, 1978; Gould, 1978; and Knoop, 1981).

Researchers primarily concerned with issues of personal control and self-reliance have tended to approach the issue from the theoretical basis of social learning theory (Rotter, 1966; Phares, 1976; Lefcourt, 1982, 1983). This theoretical perspective stresses the belief that behaviors are determined simultaneously by the variables of expectancy and reinforcement value. Specifically, these researchers have stressed the idea of Locus of Control (LOC) which refers to the belief about the causal relationship between behavior and the subsequent occurrence of a reinforcement. External control refers to a belief that fate, luck, chance, or powerful others mediate the causal relationship. Internal control refers to the belief that the occurrence of reinforcements are contingent upon one's own behavior.

Additionally, research by Rokeach (1973) has shown that there are developmental patterns in values with the aging process. More specifically, Rokeach (1979) described two main types

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of values: terminal or ends values and instrumental or mean values. Terminal values refer to goals that are worth striving toward (e.g., freedom and equality), while instrumental values refer to conceptions of desirable modes of behavior that help to attain valued outcomes (e.g., honesty and responsibility).

What has not been studied systematically is the relationship that may exist between Locus of Control and values of adults who use the university as a means of mid-career professional development, career change, and/or re-entry into the work force. Accordingly, the purpose of this study was to describe the relationship between Locus of Control and Value Orientations of adult learners in a large urban university.

Specifically, the following research questions guided this research:

1. What are the LOC orientations of adult learners in a university setting and is there a shift in LOC to a more internal orientation as age increases?
2. Do males and females have different LOC orientations?
3. What are the values of adult learners in a university setting and do value priorities shift as age increases?
4. Do males and females have different value priorities?
5. What is the relationship that exists between sex, age, LOC, and values of adult learners in a university setting?

### METHOD

The study was delimited to undergraduate and graduate students ranging in age from 18 years to over 50. Subjects were enrolled in education programs at Virginia Commonwealth University in Richmond during the 1983-1984 academic year. There were 413 subjects (337 females and 76 males) in the final sample.

Rotter's Internal-External Locus of Control Scale was used as one of the instruments. This instrument, developed by Rotter (1966), consisted of 23 question pairs and used a forced-choice format plus six filler questions. The Rotter IE scale has been judged appropriate for use with college educated adult subjects (Lefcourt, 1981).

Rokeach's Value Survey was the second instrument used. This instrument consisted of 18 alphabetically listed terminal values listed on one page and 18 alphabetically listed instrumental values listed on a second page. Subjects rank order each list of values according to the relative importance of each value to themselves.

A three part survey comprising demographic data plus the two instruments were given to full-time instructors to distribute to their on and off-campus classes. Part I requested demographic data including items such as age, sex, teaching experience, marital status, and proposed teaching level. Part II consisted of Rotter's IE Locus of Control Scale and Part III included Rokeach's Value Survey (Form D). Subjects were asked to take the questionnaires home, complete and return them via a self-addressed envelope. There were 413 useable questionnaires returned for data analysis. This represented slightly more than a 50% return rate and was deemed appropriate for this pilot investigation. The data presented herein represent the first phase of a proposed five year study of adult students in various professional schools within the university.

### RESULTS AND DISCUSSION

Question one asked what are the LOC orientations of adult learners and if there was a shift in LOC to a more internal orientation as age increased. Question two asked if males and females have different LOC orientations. Table 1 displays the data for these two questions respectively. On the Rotter IE scale the lower the score the more internally oriented a subject is. In this sample, the older age groups showed descending mean scores. The analysis of variance suggested that as age increased the more internally oriented the subjects were. This result is consistent with that of Knoop (1981). This generalization holds true except for age group 45-49 whose mean score was 8.29, just under that of the 35-39 age group (M=8.30). However, the generalization is still valid since in most other studies, a mean score below 8.50 is considered an internal orientation on an IE scale that runs from 1-23. Thus, it should be noted that, for this study, most of the subjects in this sample from a School of Education were internally oriented but that the older students were more so.

The data also showed that male LOC mean scores were lower than female mean scores in this sample. Thus while both males and females tended toward the internal orientation, the males were significantly more so. Similar results were reported by McNeill and Jacobs (1980).

**Table 1. Locus of Control Mean Scores By Age and Sex**

Age	N	Mean	SD	Number and Percentage of Subjects with LOC of 8 or Less	
18-22	100	10.69	4.17	32	32.0
23-29	107	8.79	3.89	52	48.6
30-34	70	8.40	3.98	36	51.4
35-39	56	8.30	3.82	34	60.7
40-44	40	7.80	3.41	24	60.0
45-49	17	8.29	4.03	10	58.9
50+	23	7.74	4.17	13	56.5

$F(6, 406) = 4.73, p < .0001$

Sex	N	Mean	SD	Number and Percentage of Subjects with LOC of 8 or Less	
Males	76	7.82	3.50	45	59.2
Females	337	9.20	4.12	156	46.3

$F(1, 411) = 7.38, p < .007$

Question three addressed the value priorities of adult learners in a university setting and asked whether or not there was a shift in these priorities as age increased. The seven age groups were collapsed into three age categories for statistical purposes.

Based on the mean rankings for terminal values by sex and age, it was found that the top five most important terminal values for females (18-22 years) were "self-respect," "true-friendship," "happiness," "family security," and "freedom." Females (ages 23-39) ranked "self-respect," "family security," "happiness," "inner harmony" and "freedom" as their top five values. And, females over 40 ranked "self-respect," "family security," "freedom," "inner harmony" and "happiness" as their top five. Females across all age groups seemed to share similar value priorities, except for "true friendship" which was listed as the second ranked value for the youngest group, but not included in the two older age groups.

The top five terminal values for males (ages 18-22) are "true friendship," "self-respect," "wisdom," "happiness," and "family security." Males (23-39) ranked their top five values as "self-respect," "freedom," "wisdom," "family security" and "inner harmony." Finally, the top five values for males 40 and over were "family security," "self-respect," "a sense of accomplishment," "wisdom" and "freedom." Across all male and female age groups "self-respect" was ranked either first or second. Similar results were obtained with an adult male and female sample by Linder and Bauer (1983). "True friendship," ranked as the number one value for 18-22 year old males, was not included in the top five ranks of the other two male age groups. "Happiness," ranked number four by the 18-22 year old males, was also not ranked in the top five by the other older two groups. Peculiar to males (23-39 yrs.) was the inclusion of the value "inner-harmony" which did not appear in the top five ranks of the other two male age groups. In other words, there appeared to be an apparent shift in the value priorities between age groups. For example, the oldest males ranked "a sense of accomplishment" as their third most important value which was not ranked in the top five by the younger male groups. According to Rokeach (1973) the value "a sense of accomplishment" should increase in importance in adolescence and the college years and then gradually decline in importance in later years. This result was not found in the present study. However, for the value "self-respect," the present results are consistent with Rokeach's (1973) findings that this value becomes very important to young adults and older adults.

Question four addressed the issue of whether or not males and females have different value priorities. Again examining the top five terminal values for males and females and comparing them across all age groups, it was found that the males placed a higher importance on the value of "wisdom" than did the females. "Self-respect" occupied either the first or second rank for males and females of all ages, and family security was highly valued by both groups. "Self-respect" and "family security" were reported as value priorities for males and females by Linder and Bauer (1983). Females of all ages ranked "happiness" among their top

five values but only the youngest males ranked "happiness" among their top five. "Freedom" was a value shared by both males and females in all age groups except for the youngest males. Both males and females in the 18-22 year age group ranked "true friendship" as their first and second value priority respectively, but the other males and females did not include this value in their top five ranks.

The mean rankings for instrumental values by sex and age were computed and analyzed. The data indicated that the top five instrumental values for females across all age groups were quite similar for the first four values, viz., "honest," "responsible," "loving," and "independent." However, the youngest female age group ranked forgiving as their fourth value priority. All three female age groups ranked their fifth value priority differently, viz., "helpful" (18-22 year olds) "capable" (23-39 year olds) and "intellectual" (40 and over age group).

The top five instrumental values for males were quite similar. "Responsible," "honest," "broadminded," and "loving" generally were ranked 1-4 respectively except that "capable" was the third ranked instrumental value for the oldest males. The youngest and oldest males ranked "helpful" as their fifth value while the 23-39 year old males ranked "intellectual" as their fifth value.

Males at all age levels ranked "obedient," "clean" and "cheerful" among their lowest instrumental values. Females across all age groups ranked "obedient," "clean," and "imaginative" as their lowest values. Males and females shared common low value priority for "obedient" and "clean."

Question five asked what relationship existed between sex, age, LOC, and values of adult learners in a university setting. Partial correlations of terminal value rankings with LOC scores controlled for age and sex are displayed in Table 2 (Quade, 1974). A positive correlation showed that the more internal one was the more one tended to subscribe to that value. Conversely, a negative correlation meant that the more external one was the more one subscribed to that value.

The data indicated that more internally oriented persons valued "self-respect," "wisdom," "freedom" and "a sense of accomplishment." While the correlations were not strong, the  $p$  values indicated a trend toward a positive relationship between LOC and these terminal values. Conversely, more externally oriented persons valued "family security," "a comfortable life," "national security" and "salvation." Again the  $p$  values suggested a trend to support these findings.

Partial correlations of instrumental value rankings with LOC scores when controlled for age and sex are shown in Table 3. The data indicated that more internally oriented persons

Table 2. Partial Correlations of Terminal Value Rankings With Locus of Control Scores Controlling For Age and Sex

<u>Value</u>	<u>Partial Correlation</u>	<u>P-Value</u>
Self-Respect	.071	.064
Wisdom	.069	.086
Freedom	.062	.094
A Sense of Accomplishment	.060	.100
A World of Beauty	.048	.198
True Friendship	.026	.529
Inner Harmony	.024	.491
Equality	.020	.598
Mature Love	.018	.631
Social Recognition	.009	.821
An Exciting Life	-.009	.814
A World of Peace	-.010	.785
Happiness	-.019	.631
Pleasure	-.029	.454
Salvation	-.042	.278
National Security	-.047	.212
A Comfortable Life	-.071	.064
Family Security	-.077	.048

Note: P-value is for a two-tailed test.

valued "intellectual," "logical," "polite," "honest," "ambitious," and "independent" modes of behavior. These findings are consistent with past research depicting internally oriented persons as independent, competent, and intellectual (Crandall and Crandall, 1983).

**Table 3. Partial Correlations of Instrumental Value Rankings With Locus of Control Scores for Age and Sex**

<u>Value</u>	<u>Partial Correlation</u>	<u>P-Value</u>
Intellectual	.055	.168
Logical	.038	.350
Polite	.037	.338
Honesty	.021	.580
Ambitious	.017	.655
Imaginative	.015	.695
Independent	.010	.800
Courageous	.008	.824
Responsible	.005	.902
Loving	-.002	.952
Capable	-.007	.850
Forgiving	-.018	.640
Self-Controlled	-.021	.583
Obedient	-.023	.555
Clean	-.025	.509
Helpful	-.035	.386
Broadminded	-.040	.311
Cheerful	-.105	.006

Note: P-value is for a two-tailed test.

#### References

- Crandall, V., & Crandall, B. (1983). Maternal and childhood behaviors as antecedents of internal-external control perceptions in young adulthood. In H.M. Lefcourt (Ed.) Research with the locus of control construct: Vol. 2. Developments and social problems (pp. 53-103). New York: Academic Press.
- Gould, R.L. (1978) Transformations. New York: Simon and Schuster.
- Knoop, R. (1981) Age and correlates of locus of control. The Journal of Psychology, 108, 103-106.
- Lefcourt, H.M. (Ed.) (1981) Research with the locus of control construct (Vol. 1). New York: Academic Press.
- Lefcourt, H.M. (1982) Locus of control: Current trends in theory and research. Hillsdale, New Jersey: Erlbaum.
- Levinson, D.J., Darrow, C.N., Klein, E.B., Levinson, M.H., and McKee, B. (1978) The seasons of a man's life. New York: Alfred A. Knopf.
- Linder, F. and Bauer, D. (1983) Perception of values among male and female undergraduate students. Perceptual and Motor Skills, 56, 59-63.
- McNeill, B.W. and Jacobs, M. (1980) Effects of locus of control, sex, and failure of causal attribution. Psychological Reports, 46, 1137-1138.
- Phares, E.J. (1976) Locus of control in personality. Morristown, New Jersey: General Learning Press.
- Quade, D. (1974) Nonparametric partial correlation. In: H.M. Blalock, Jr. (Ed.) Measurement in the Social Sciences: Theories and Strategies (pp. 369-398). Chicago: Aldine.
- Rokeach, M. (1973) The nature of human values. New York: Free Press.
- Rokeach, M. (1979) Understanding human values: individual and societal. New York: Free Press.
- Rotter, J.B. (1966) Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 80 (1, Whole No. 609).

An Investigation of the Occupational Reading  
Demands of the Plumbing Trade

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Abstract

The primary purpose of this study was to compare the curricular reading demands encountered by plumbing apprentices in the educational setting with the occupational reading demands encountered by journeyman in the actual incumbency situation. The secondary purpose was to examine the role and treatment of reading, as both an educational tool and a vocational skill, in the curricular setting. Reading-related issues arise from, and implications exist for the fields of functional/occupational literacy, content area reading instruction, readability assessment, and technical/vocational education.

This study was an examination of the curricular/training reading demands and occupational/on-the-job reading demands that together comprise the vocational reading demands of the plumbing trade. To date, the actual specific reading demands of the plumbing trade have not been determined, and the current methodologies for attempting the ascertainment thereof have been subject to much criticism. For this reason, the procedures of this study are possibly as significant as the findings. The initial purpose, then, was to determine the variety, complexity, frequency, importance and difficulty of the reading tasks encountered in each component of the vocation, and the concurrent reader strategies and competencies. This study further examined the preparation tradespeople received to handle the reading demands of either component while in the educational/training situation.

As a foundation to this study, a review of the literature pertaining to functional/occupational literacy, content area reading instruction, readability assessment, and vocational education revealed numerous reading-related issues and concerns. In general, there was evidence to suggest that reading is an important occupational skill (Diehl, 1980; Sticht et al., 1971-1978), but it was not known to what extent this was the case for any given vocation, and for the plumbing trade specifically. As well, studies had shown the reading demands while training for a job to be different from reading demands in the actual job incumbency (Diehl & Mikulecky, 1980; Mikulecky, 1981; Moe et al., 1979; Ross, 1980; Sticht, 1978); this has led to serious implications for the training program where prospective tradespeople are supposed to be instructed in the skills required for successful job completion (Lee, 1981; Thornton, 1979). Further to that, studies in the field of content area reading instruction revealed that reading-related problems can be and often are presented by the reading materials, the students, the instruction and/or combinations thereof (Cheek & Cheek, 1981; Conroy, 1980; Herber et al., 1961-1979; Manzo, 1980; Readance, Baldwin & Dishner, 1980; Riley, 1979; Stansell & DeFord, 1981; Thelen, 1979; Thornton, 1977; Vacca, 1981). Finally, studies in readability assessment pointed to the difficulty in assessing the reading level of materials and attempting to match materials to intended users (Abram, 1981; Anderson & Armbruster, 1981; Curran, 1976; Diehl, 1980; Harrison, 1980; Horne, 1979; Irwin & Davis, 1980; Jacob & Crandall, 1979; Klare, 1974; Maxwell, 1978). This study was, therefore, an attempt to tie together four distinct yet interrelated academic fields.

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For this study, subjects were drawn from students in the apprenticeship program and journeyman plumbers in the actual job incumbency. The collection of data for this study was a four-part process, using interrelated procedures and instruments. The first step was to determine and describe the curricular and occupational reading demands. Interviews were conducted with individual subjects (five students and five incumbents), and a "Task Checksheet" was completed by the subjects through verbal interchange with the researcher. This checksheet provided data on the variety, complexity, frequency, perceived importance, purpose and processes of reading tasks encountered in each job component. Following the initial interview, subjects were observed for the purpose of verifying and amplifying the self-report data gathered in the interview. The combined information was used to describe the individual reading tasks encountered in each job component, and to provide a composite profile of the reading demands in each job component for the sake of comparison. The second step was to determine the difficulty of reading materials involved in the trade. A variety of representative materials were subjected to the FORCAST readability formula, and an approximate grade level was determined for each. As well, three selections from the representative materials were assessed for a match to their intended readers. In a second interview, subjects read and verbally recalled the messages of the three selections; and the verbalizations were analyzed for the difficulty that they appeared to present to the readers. The third step was to examine the nature and extent of functional instruction in reading curricular and/or occupational materials. To this end, a questionnaire was administered to students and instructors in a plumbing apprenticeship program. As well, relevant notations had been made during the observation of the students (step one). The final step was to identify any readily-apparent reading-related problems. This was accomplished partially through the analysis of an Attitude Questionnaire administered to subjects in the initial interview, partially from questions on the Functional Reading Questionnaire, and partially from the observation of subjects. Data gathered for the study were analyzed and tabulated to answer the six research questions.

From the results of this study, conclusions were drawn about the curricular, occupational and vocational (combined) reading demands of the plumbing trade. Further conclusions were drawn about the role and treatment of reading in general and vocational reading in particular, in the curricular component of the trade. To begin with, it was possible to outline the curricular and occupational reading demands of the trade. In the curricular job component, a variety of at least fifteen different reading tasks were reported; and tasks were encountered in almost every category of every dimension. Thus, the curricular reading tasks were of very diverse complexities, frequencies, and importance, and involved very diverse purposes and processes. As the vocational reading demands of the plumbing trade are a combination of the curricular and occupational reading demands, it was concluded that for vocational reading, the variety was at least twenty-three tasks: tasks in every dimension category. In vocational reading, tasks were of every complexity (entire book; part of a book/text; part of a book/chart; one-to-three page text; one-to-three page chart; and other); every frequency (less than once a month; once a week to once a month; two-to-four times per week; and daily), and every perceived importance (not important; important but vital; and vital to the completion of a task), and involved every purpose (reading-to-learn; reading-to-do with no learning; reading-to-do with incidental learning; and reading-to-assess) and almost every specific strategy (reread/rehearse; problem solve/question; relate/associate; fact-finding in text; fact-finding in charts; application of special learning strategies; repetition over days or months; single-trial learning; assessing for the usefulness for a particular task; and assessing whether to read more carefully later). As well, in both the curricular and occupational job components (hence, the entire vocation), considerable time was spent reading, alternative strategies were seldom used, reading was considered important, and subjects had a positive attitude towards reading. In summation, the reading demands of the plumbing trade appeared to be far more diverse and significant than is commonly believed; reading is an important vocational skill in the plumbing trade.

The vocational reading demands of the plumbing trade involved a combination of the curricular and occupational reading demands; however, there were important differences between the two. In occupational reading, the variety was greater but the range of categories encountered for each dimension was less than in curricular reading; as well, the most commonly encountered dimension categories were different. Although fourteen tasks were mutually

encountered in both job components, the curricular and occupational profiles of each were never identical and often very different across dimensions. As well, the curricular and occupational profiles of the five most commonly encountered tasks were almost completely different across profile dimensions. Too, the amount of time involved was significantly different between job components. This appears to support the theory that the curricular reading demands of a trade can be very different from the occupational reading demands of the trade, in terms of the use of information gained, and the nature and frequency of tasks encountered (Diehl & Mikulecky, 1980; Mikulecky, 1981; Moe et al., 1979; Ross, 1980).

Besides differences, there were also important similarities between the curricular and occupational reading demands which together comprise the vocational reading demands of the plumbing trade. First the same materials were often used in both job components, and the representative samples of these materials appeared to be somewhat difficult for subjects to comprehend and/or recall. Second, both reading and learning appeared to be very important in both components of the plumbing trade. In curricular reading, the most common purpose was to learn (the individual applied strategies designed to ensure retention of the material read); in occupational reading, the most common purpose was to complete a task but learn the material in the process so that it ceased to function as an external memory; and there was a minimum of "reading-to-do with no learning" tasks in both job components. This contradicts the notion that the literacy demands for job performance may have been overestimated (Jacob & Crandall, 1979); if anything, they are underestimated. This has implications for the standards and prerequisites to apprenticeship programs, and for individual's career planning (ie. plumbing is not just a manual labor job).

What most clearly becomes apparent is that, for all intents and purposes, the educational/apprenticeship component of the plumbing trade may be primarily a "reading" program. Plumbing apprentices spent a great deal of time reading or learning to read a large variety of materials. Reading may be vastly more important in the curricular setting than in the occupational setting: students most commonly read materials of a greater complexity ("entire book" as opposed to "one-to-three page chart"), and students read for longer periods of time. In fact, students spent most of the class time during a six-week apprenticeship program doing literacy activities. This was directly contrary to the incumbency situation where literacy activities took a very small portion of a working day. If reading is so much more important in the curricular setting, perhaps more concern should be shown for student's ability and material's suitability than is currently the case. It was simply expected that students be able to handle such school-related tasks as application forms, schedules, dictionaries, memos, examination questions, and study procedures, almost as a prerequisite to entrance. As well, such work-related tasks as blueprints, trade manuals, safety and medical warnings, material installation procedures, and tool and equipment directions were used as curricular materials, and students were simply expected to "read" them. The emphasis, for all tasks except blueprints, was on what the materials said rather than on how it was said. This effectively made instructors into "interpreters" and kept students dependent on them. Finally, in the curricular setting, absolutely no mention appeared to be made of the eight further tasks reported exclusively encountered by incumbents. The conclusion from this was that, for the most part, the vocational reading demands of the plumbing trade were not treated as a concern in the curricular setting.

Further to that, a great deal of student time was devoted to learning the trade manuals/code books from cover to cover: they are the undisputed source of correct procedures and regulations. This practice appeared to have been for the purpose of passing the trade certification exams; thereafter, the plumber could look up anything he wanted to know. Perhaps the current emphasis on "read-to-learn" in the curricular setting should be modified to the prevalent "reading-to-do with incidental learning" of occupational reading. Granted, some knowledge is essential; but the current standard of what is essential for plumbers to know is the certification exam, not practical applicability. To this end, students also spent considerable time practicing and memorizing potential exam questions. It appeared that the certification interests were being served, rather than the curricular and/or occupational interests of the trade.

From the point of view of the training situation, changes could be made to improve the

preparation tradespeople receive to handle the reading demands of each job component. Perhaps, as Jacob, Crandall and Scribner (1979) suggested, a job-related literacy program should be designed from an understanding of the documents used and the literacy tasks actually encountered on the job. Perhaps the curricular reading demands should be altered to more closely resemble occupational reading demands; Sticht (1978) noted that the transition from student to incumbent requires a shift in the type of reading normally engaged in, and that this would not present a problem if the strategies used for the two types were the same. Perhaps functional reading instruction should be instituted to assist the students with vocational reading materials; Horne (1979) recommended short term support geared to immediate and specific literacy demands. Perhaps the vocational materials are at too difficult a readability level and should be made more "readable".

In summation, from the results of this study, there are implications both for the role and treatment of reading in the curricular component of the plumbing vocation, and, more importantly, for the general attitude towards reading as a vocational skill in the plumbing trade.

#### References (Abbreviated List)

- Abram, M. J. Readability: Its Use in Adult Education. Lifelong Learning: The Adult Years, January 1981, pp. 8-9; 30-31.
- Anderson, T. & Armbruster, B. B. Content Area Textbooks. Urban, IL: University of Illinois, Center for the Study of Reading, 1981.
- Cheek, M. C. & Cheek, E. H. Tips for Administrators on Content Area Reading. NASSP Bulletin, April 1981, pp. 81-85.
- Conroy, M. T. Reading and the Vocational/Industrial Arts Teacher. Reading Horizons, 1980, 20 (3), pp. 229-231.
- Curran, T. E. Readability Research in the Navy. In Sticht & Zapf (Eds.), Reading and Readability Research in the Armed Services. Alexandria, VA: Human Resources Research Organization, 1976.
- Diehl, W. A. Functional Literacy as a Variable Construct: An Examination of Attitudes, Behaviors and Strategies Related to Occupational Literacy. Unpublished doctoral dissertation, Bloomington, IN, 1980.
- Diehl, W. A. & Mikulecky, L. The Nature of Reading at Work. Journal of Reading, 1980, 24 (3), pp. 221-227.
- Harrison, C. Readability in the Classroom. Cambridge, MA: Cambridge University Press, 1980.
- Herber, H. L. Teaching Reading in the Content Areas. New York, NY: Prentice-Hall, 1970, 1978.
- Herber, H. L. & Riley, J. D. Research in Reading in the Content Areas-Fourth Report. Syracuse, NY: Syracuse University Reading and Language Arts Center, 1979.
- Horne, G. P. Functional Job Literacy: Implications for Instruction. Wellesley, MA: The Commonwealth Center for High Technology/Education, 1979.
- Irwin, J. W. & Davis, C. A. Assessing Readability: The Checklist Approach. Journal of Reading, 1980, 24 (2), pp. 124-130.
- Jacob, E. & Crandall, J. Job-Related Literacy: A Look at Current and Needed Research. Bloomington, IN: Center for Applied Linguistics, 1979.
- Jacob, E., Crandall, J. A. & Scribner S. Testing Literacy by Usage. Northeast Training News, November 1979.
- Klare, G. R. Assessing Readability. Reading Research Quarterly, 1974, 10 (1), pp. 62-102.
- Lee, H. D. Dealing with Reading in Industrial Arts. Journal of Reading, 1981, 24 (8), pp. 663-668.
- Manzo, A. V. Three 'Universal' Strategies in Content Area Reading and Languaging. Journal of Reading, 1980, 24 (2), pp. 146-149.
- Maxwell, M. Readability: Have We Gone Too Far? Journal of Reading, 1978, 21 (6), pp. 525-530.
- Mikulecky L. School Training and Job Literacy Demands. The Vocational Guidance Quarterly, December 1981, pp. 174-180.



- Moe, A. J., Rush, R. T. & Storlie, R. L. The Literacy Requirements of a Heating and Air Conditioning Mechanic on the Job and in a Vocational Training Program. West Lafayette, IN: Department Of Education, Purdue University, 1979.
- Readance, J. E., Baldwin, R. S. & Dishner, E. K. Establishing Content Reading Programs In Secondary Schools. Journal of Reading, 1980, 23 (6), pp. 584-585.
- Riley, J. D. Defining Content Area Reading Instruction. Reading World, 1979, 19 (2), pp. 129-134.
- Ross, N. An Analysis of the Nature and Difficulty of Reading Tasks Associated With Beginning Office Workers Jobs in the Columbus, Ohio Metropolitan Area. Paper presented at the Annual Meeting of the American Educational Research Association, Boston MA, April 1980.
- Stansell, J. C. & DeFord, D. E. When is a Reading Problem not a Reading Problem? Journal of Reading, 1981, 25 (1), pp. 14-20.
- Sticht, T. G. Literacy and Vocational Competence. Occasional Paper No. 39, Columbus, OH: The National Center for Research in Vocational Education, April 1978.
- Sticht, T. G. (Ed.) Reading for Working: A Functional Literacy Anthology. Alexandria, VA: Human Resources Research Organization, 1975.
- Thelen, J. N. Just Because Kids Can't Read Doesn't Mean They Can't Learn! or Every Science and Mathematics Teacher is NOT a Teacher of Reading. School Science and Mathematics, 1979, 79 (6), pp. 457-464.
- Thornton, L. J. Relationship of Carpentry Material Installation Instructions and Carpentry Textbooks to Reading Ability of High School Carpentry Textbooks to Reading Ability of High School Carpentry Students. Unpublished masters thesis, Suny College of Technology, Utica,
- Thornton, L. J. Reading Sensitivity in Post-Secondary Occupational Education. Lifelong Learning: The Adult Years, 1979, 3 (4), pp. 12-15; 19.
- Vacca, R. T. Content Area Reading. Boston: Little, Brown and Co., 1981.

## ASSESSING THE IMPACT OF ADULT LITERACY EDUCATION: A PILOT STUDY

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### Abstract

This progress report of a longitudinal study of the impact of literacy education programs for adults includes four types of data (academic achievement, economic gains, community participation, and personal development). Subjects were students in five types of literacy programs: basic education classes, GED/high school diploma classes, post-secondary remedial classes, ESL classes, and volunteer tutorials. Data collected at program entry, program exit, and at one follow-up interval were analyzed in terms of five academic achievement indicators, four economic gain indicators, five community participation indicators, and seven personal development dimensions.

### INTRODUCTION

The Adult Literacy Impact Study is a cooperative longitudinal research project designed to gather, analyze, and disseminate data which documents the impact of adult literacy/basic education programs upon participants. A five-member team from the University of Minnesota, Literacy 85, and Adult Basic Continuing Education (ABCE) programs collaborated in the development of the study. Convinced of the need to document the significance of literacy education to the St. Paul-Minneapolis (MN) metropolitan area, the research team, in 1983, invited literacy providers from ABCE programs, post-secondary institutions, and volunteer projects to present their ideas for research related to adult literacy. Ideas which emerged from this process included: (1) frustration over the lack of public and private support for literacy services, (2) a clear sense of the value of these services to the community, and (3) awareness of the lack of systematic program data collection.

### Statement of the Problem

While various studies have described the extent of adult illiteracy on national and state levels, few have provided information about the impact of literacy education programs. As a result, efforts to seek additional public and private funding for literacy education for adults are met with questions about the accomplishments of current program efforts. In addition, attempts to expand literacy offerings into business and industry sites face inquiries from the corporate sector about the kinds of results that can be expected from such programs. Literacy programs which now serve only a fraction of the population in need of such services (approximately 3% to 5%) are seriously hampered in their efforts to attract necessary funding and other community support. Specifically, the problems this study addressed were:

- ° The need expressed by practitioners in the field for persuasive evidence about program impact to inform policy makers in education, government, business, and the corporate/foundation community
- ° The absence of systematic data collection among literacy providers in ABCE, post-secondary, and private/tutorial programs. Thus, most programs have little or no exit or follow-up information to support fundraising, program evaluation efforts, or program improvement and new service development.

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In designing this study, the research team also noted several other efforts to document program impact: The Godbey-Mohsenin study (1982); the New York State Department of Education survey (1976); and the Darkenwald-Valentine study (1984).

### Purposes of Study

The study addresses two general purposes: (1) to document the impact of literacy programs for participants and for the community, and (2) to develop and test a data collection process involving literacy providers from the major delivery systems.

## METHODOLOGY

The study was designed as a longitudinal project in which data would be collected as students entered and exited programs, and at one or more follow-up points after students completed their programs. In order to determine the impact of literacy education programs, decisions were made as to (1) the areas where impact was possible, (2) what "indicators" of impact would be studied, and (3) how data pertaining to the selected indicators would be collected.

### Determining the Indicators to be Studied

The obvious beneficiary of literacy education programs is the individual student who acquires additional basic academic skills. These newly acquired competencies may enable a person to become employed, to improve his or her employment situation, and to pursue further schooling or training programs. It is also believed that a person's self-confidence improves as he or she experiences success in learning. An adult student is also a member of a community. The community, therefore, may be an indirect beneficiary of literacy programs as program participants contribute community and civic services and add to the economic base.

Thus, four areas were selected for examining the impact of literacy education programs -- academic achievement, economic gains, community participation, and personal development. Specific indicators believed to impact on each of the four areas were selected to study. Five indicators of academic achievement, four economic outcomes, five indicators of community participation, and seven dimensions of personal development were identified.

### Selection of the Subjects

Adults registered in one of five types of literacy programs in the St. Paul-Minneapolis area and reading and/or computing below the 12th grade level comprised the subjects for this study. Instructors and tutors in 15 classroom/volunteer project sites were recruited to participate in the study. Three sites were recruited for each of five program areas -- basic education classes, high school diploma and GED classes, English as a Second Language (ESL) classes, post-secondary remedial classes/tutorials, and volunteer tutorials.

### Instrumentation

A questionnaire was developed to measure the subject's behavior regarding the economic and community participation outcomes, and to acquire selected demographic information. A Program Entry, a Program Exit, and a Follow-up form were developed. Measures of academic achievement in reading comprehension and computation, for native-born subjects, were obtained from the Adult Basic Learning Examination (ABLE) instrument Levels 1, 2, and 3 (Forms A and B). The Standard Test of English Language (STEL) was selected to measure achievement in grammar, usage, and vocabulary of foreign-born subjects. The Self-Assessment Scales (SAS) instrument was selected to provide a measure of seven dimensions of self-esteem.

### Data Collection

Subjects completed the Program Entry, the Program Exit, and the Follow-up questionnaires as appropriate to their progress in the program. In addition, all native-born subjects completed the SAS and the ABLE reading and/or computation test consistent with their program enrollment. Non-native born subjects were administered the STEL and the ABLE reading and/or

computation test if deemed appropriate by the instructor; they did not complete the SAS test because it was considered inappropriate for persons reared in other cultures. Entry and exit questionnaires were administered by teachers/tutors. Follow-up questionnaires were administered by a research assistant to those who could be located and who agreed to participate. The data were collected between September, 1983, and December, 1984.

Table 1  
Number of Subjects Providing Data

Entry Questionnaire		438
Dropped program before exit	180	
Continuing in programs	106	
Exit Questionnaire		152
Declined/unable to locate	51	
Awaiting follow-up	63	
Follow-up Questionnaire		38

### Data Analysis

The data were entered and analyzed on an Apple IIe microcomputer. Missing data were treated as "0's." The DB Master (Version 4) software program was used to develop a format for entering data and for computing frequencies and means; percentages were also computed.

### Limitations of the Study

Some limitations must be acknowledged in interpreting the data. First, the conclusions cannot be generalized to the total population as the subjects do not constitute a sample but a group of individuals who voluntarily agreed to participate in the project. Second, errors of measurement are involved. In addition to the limitations inherent in any instrument, there were undoubtedly errors of recall and of understanding the testing procedures since subjects with limited skills in reading and with English were involved. Third, there were problems with the test administration procedures. It was sometimes impossible to obtain exit data when students stopped attending because of getting a job or for other reasons. Also, teachers and tutors cooperated with mixed degrees of enthusiasm; when teachers/tutors understood and believed in the project, more individuals were tested and the data obtained were more complete.

## FINDINGS

### Description of the Subjects

Of the Entry/Exit subjects, there were slightly more males than females (55% male, 43% female); their range in age was from 18 to 69, and the mean age was 31.6 years. Almost one-half were U.S. citizens (48%) and native speakers of English (45%). The ethnic background was primarily Asian and Caucasian (47% and 36% respectively); Black and Hispanic adults each comprised 7% of the group. The mean number of family members per household was 3.98 and only 23% (N=35) of the students had no responsibility for the household income; almost an equal number (N=40; 26%) reported total responsibility for the household income. Enrollments were almost evenly divided among ABCE (34%), post-secondary remedial (33.6%) and ESL (31.6%) programs. The follow-up subjects provided a similar profile.

### Academic Achievement

Five indicators of academic achievement were studied. For Test Levels 1 and 2, mean grade level equivalents (GLE) from grade 1.0 to grade 9.0 are shown. For Level 3, the ABLE raw scores are equated to percentiles of 10th grade students performing at that level. See Table 2 for the ABLE reading and computation test scores of native-born subjects; the mean scores for non-native born subjects who completed the STEL test were 227 (N=58) at entry, 362 (N=29) at exit, and 200 (N=5) at the follow-up test.

In addition, the percentage of subjects who had a high school diploma or GED certificate was 47.4% (N=72) at entry, 55.3% (N=84) at exit, and 44.7% (N=17) at the follow-up test. The percentage of subjects admitted to post-secondary institutions increased from 36.2% (N=55) at

Table 2  
Means and Percentiles for ABLE Reading and Computation Test Scores

Test Period	R E A D I N G						C O M P U T A T I O N					
	Level 1		Level 2		Level 3		Level 1		Level 2		Level 3	
	N	XGLE	N	XGLE	N	X%	N	XGLE	N	XGLE	N	X%
Entry	68	3.44	34	6.72	22	.57	16	4.81	35	7.13	34	.32
Exit	42	4.27	34	7.40	19	.61	10	4.84	30	7.56	39	.59
Follow-up	4	3.32	13	7.31	1	.58	3	4.26	6	6.03	16	.45

entry to 39.5% (N=60) at exit, and to 42.1% (N=16) at the follow-up interview. Completions of post-secondary education programs (i.e., two-year certificates/degrees) rose from 4.6% (N=7) at entry to 9.2% (N=14) at exit and to 18.4% (N=7) at the follow-up.

### Economic Indicators

Five indicators of economic improvement for literacy students were examined. Generally, there was an increase in the percentage of subjects who were employed, in the mean number of hours worked for pay, and in the mean dollar per hour wage. The percentage of subjects receiving some form of financial assistance remained about the same; however, declines were noted for medical, Food Stamps, AFDC-Refugee, and AFDC assistance. The percentage of respondents receiving Veteran's Benefits and General Assistance increased.

Table 3  
Comparison of Entry, Exit, and Follow-up Students on Economic Variables

VARIABLE	ENTRY (N=152)	EXIT (N=152)	FOLLOW-UP (N=38)
Percent employed	29.6% (N=45)	36.2% (N=55)	47.4% (N=18)
Mean number of hours worked for pay	29.2 hrs. (N=44)	31.4 hrs. (N=48)	38.8 hrs. (N=18)
Mean wage (\$/hour)	\$5.25 (N=45)	\$5.07 (N=47)	\$5.19 (N=17)
Percent receiving financial assistance	57.3% (N=86)	55.3% (N=84)	55.3% (N=21)
Percent receiving:			
Medical Assistance	26.3% (N=40)	23.7% (N=36)	-0- (N= 0)
Food Stamps	26.3% (N=40)	27.0% (N=41)	15.8% (N= 6)
AFDC - Refugee	7.2% (N=11)	7.2% (N=11)	2.6% (N= 1)
AFDC	17.8% (N=27)	20.4% (N=31)	13.2% (N= 5)
General Assistance	5.9% (N= 9)	9.9% (N=15)	10.5% (N= 4)
Veteran's Benefits	2.0% (N= 3)	2.0% (N= 3)	13.2% (N= 5)

### Community Involvement

Six behaviors which adults may contribute to the community were studied. In general, there were increases in each of the six areas examined. It should be noted, however, that a national election was held near the end of the data collection period.

Table 4  
Percentage of Subjects Reporting Involvement in Community Activities

VARIABLE	ENTRY (N=152)		EXIT (N=152)		FOLLOW-UP (N=38)	
	N	%	N	%	N	%
Voted in last election	35	23.0	35	23.0	11	28.9
Registered to vote	26	17.1	37	24.3	13	34.2
Do volunteer work	9	5.9	17	11.2	9	23.7
Officer in organization	2	1.3	3	2.0	1	2.6
Serve on committee	4	2.6	5	3.3	2	5.3
U.S. Citizen	73	48.0	80	52.6	23	60.5

### Personal Development

Seven dimensions of how native-born subjects think about themselves were obtained from responses to the Self-Assessment Scales instrument. In general, there was an increase in mean scores for the tested individuals on all seven dimensions of the SAS test when scores were compared.

**Table 5**  
**Mean Scores of Subjects at Entry, Exit, and Follow-up Testing on**  
**Seven Dimensions of Personal Development**

VARIABLE	ENTRY (N=81) Mean	EXIT (N=81) Mean	FOLLOW-UP (N=20) Mean
Self-Rating	52.75	55.52	57.40
Real-Ideal	26.70	30.88	28.80
Being Known	27.80	31.62	27.60
Performance Sources	27.33	30.23	30.05
Social Sources	44.17	51.63	55.30
Showing Feeling	33.37	35.97	36.20
Well Being	5 73	61.77	63.20

### Data Collection Process

After 15 months' experience with the data collection process, four observations have emerged. First, assessing the impact of literacy education programs in a broad sense -- while complex and challenging -- still seems to be an important and attainable goal. A cooperative approach involving the various providers of literacy education remains a guiding principle of the project. Second, adequate and appropriate administrative supports are crucial. The endorsement and cooperation of administrators of the programs included in the study is necessary for teacher/tutor assistance with the data collection. Funding provides incentives for teacher and subject cooperation in the data collection process, and for monitoring of and facilitating the entire data collection effort. Third, the importance of developing favorable attitudes by the teachers/tutors toward testing in general and toward participation in such a study cannot be overstated. Few literacy teachers/tutors have had experience with or responsibility for testing in the past. The belief that adult learners will not cooperate in any testing is widely held. Fourth, creative solutions to dealing with students who quit attending programs and to keeping track of very mobile "graduates" are critical for obtaining exit and follow-up data.

### IMPLICATIONS

Several implications for adult education practice can be proposed from the study findings. Implications for evaluation and research were suggested in an earlier section. Implications for instruction are related to the decline in test scores after an adult completes a program and to the appropriate use of testing in instruction. The findings can also support policy and funding decisions pertaining to literacy education. Programmatic and administrative implications are raised by the numbers who do not complete programs.

INTERPERSONAL AND INSTITUTIONAL SUPPORT:  
THE IMPACT OF SIGNIFICANT OTHERS

Linda H. Lewis<sup>1</sup>

Abstract

For years adult educators have been concerned with the high dropout rates which characterize adult basic education programs. This study focuses on the importance of personal and institutional support as it relates to the persistence patterns of adult learners enrolled in basic skills classes. Interviews with over 200 adult basic education (A.B.E.) students revealed significant differences in the number of supporters available to learners during their course of study. As a result of this study, high-risk students are those who, based on their marital status, race, or age are subject to significantly more negative influence from significant others (friends, family, co-workers...) which impacts their continuing participation in an educational program. Recommendations outlining ways for minimizing the effects of such counter-support are suggested in an attempt to change the paradigm.

WHO'S THERE TO HELP?

When asked what it was that kept him going during his struggle as the world's second artificial heart recipient, William Schroeder responded--support. In one of the earliest interviews with the courageous patient, Schroeder spoke of the value and importance of friends, family, hospital personnel, and well-wishers during his ordeal. Dr. Allan Lansing, medical director of the hospital's heart institute, commented that the support Schroeder was receiving was more important than most medicines (Wallis, 1984).

It is not a quantum leap to translate Schroeder's needs as individual in a stressful situation and alien environment to the sentiments of undereducated, disenfranchised adults returning to school. Anecdotal accounts of adults re-entering a learning environment, particularly those with histories of negative school experiences, reveal reactions of fear, doubt, and uncertainty. In addition to the trauma of returning after an absence of many years, these individuals are often beset by a plethora of personal, emotional, physical, and financial difficulties.

While in the past the institution's response has been to offer expanded services such as counseling, child care, and transportation, a more integral need is being overlooked. I refer specifically to the need for support from significant others (family, friends, co-workers, employers..) when one returns to school.

Skimming the Literature

Numerous researchers suggest that the impact of events may be altered by the quality of support available to an individual (Hopson, 1981; Brammer & Abrego, 1981; Schlossberg, 1981). Having another individual available to depend upon in a crisis, to provide guidance, or to simply help one to feel valued can be the pivotal determinant in one's successful and continuing participation in an educational program. Boshier (1973) suggests that an adult's participation and dropout can be understood to occur as a function of the magnitude of the discrepancy between the participant's self-concept and key aspects (largely people) in the educational environment. Rubenson (cited in Cross, 1981), another proponent of the value of reference

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groups in shaping attitudes, points to the importance of friends who support the initial decision to return to school and who are key figures during one's participation in an educational program.

The negative reactions of spouses when their mates return to a learning environment have been chronologued repeatedly in the literature (Houle, 1963; Cross, 1981). Family and friends are just a few who have been found to express anger, jealousy, or fear over the adult's decision to commit time, formally dedicated to them, to attend classes (Finn et al., 1980; Harmon et al., 1978). Feelings of rejection or disapproval are easily discernable in the words of significant others:

"Why does he need to go to school? Aren't we good enough for him anymore?" (Friend, age 31)

"I don't know how she expects to get everything done at home if she's off reading them books." (Mother, age 54)

"I said O.K. to school, but I know she'll quit. We like her home with us. Going out nights is a drag. She'll change her mind." (Spouse, age 27)

(Lewis, 1984)

### Adult Basic Education Students: Defining Their Needs

In an effort to learn more about the influence of personal supporters and counter-supporters on undereducated adult learners, a research project was undertaken involving currently enrolled adult basic education students throughout the state of Connecticut. Over 200 learners participated in a series of open-ended interviews either before or after their regularly scheduled classes. The objectives of the study were to:

1. Identify the types and range of personal and institutional supporters available to students;
2. Identify the individuals who were counter-productive (counter-supporters) to the student's participation in an educational program;
3. Determine if certain supporters could be identified as being essential for continuing participation;
4. Determine if the presence of certain supporters could compensate for the absence of others;
5. Determine if the presence of certain counter-supporters could be related to student attrition.

The following typology, adapted from Charles Seashore's work (1979) on support networks, was employed to identify the presence or absence of support and to define the different types of individuals offering positive or negative feedback to students:

#### ROOTERS

People who encourage the student in his/her efforts.

#### CONSTANTS

People who love the student just the way he/she is and don't want the individual to change.

#### RESOURCES

People who assist the student in providing service and information.

#### CHALLENGERS

People who are critical evaluators and mentors who push the student even further.



## TOXICS

People who keep putting the student down and inhibit his/her efforts.

### Adding It Up -- What's Missing?

An attempt was made to elicit the same information about institutional and personal supports without formally structuring the interviewees' responses to coincide with the categories established in the typology. Therefore, respondents were simply asked how the various individuals in their lives felt about their returning to school. The following are highlights from selected interview questions:

#### What was the reaction from significant others in your life to your going to school?

<u>Individual (N=214)</u>	<u>Negative(%)</u>	<u>Positive(%)</u>	<u>Neutral(%)</u>	<u>Didn't Tell Them They're Going to School(%)</u>
Spouse	2.4	92.7	4.9	-
Family Members	2.3	72.4	5.6	7.0
Children*	2.0	85.1	15.5	-
Friends	2.8	68.2	7.5	12.6
Boy/Girl Friends		98.4	1.6	-
Employer	.9	48.0	15.7	35.0

\*71% of those respondents with children stated their siblings actually made it easier to go to school.

#### What kind of support is most necessary for someone to have when they consider going back to school?

	<u>Number of Cases</u>	<u>%</u>
Support from family, friends, counselors, and teachers	113	52.8
Self-Motivation	36	16.8
Self-Esteem/Confidence	15	7.0
Talking With Previous Students	10	4.7
Other	4	1.8

#### Who was the single most helpful and single least helpful person during your course of study?

<u>Most Helpful Person (N=214)</u>	<u>Percentage of Sample</u>	<u>Least Helpful (N=214)</u>	<u>Percentage of Sample</u>
<u>Category</u>		<u>Category</u>	
Self	26.6	No one	69.2
Spouse	14.5	Friends	7.9
Family Members	15.9	Family Members	7.0
Teacher	9.8	Self	4.2
Boyfriend/Girlfriend	6.1	Other (employer, ex-spouse)	11.7
Children	5.1		
Friends	4.7		
Other (counselor, welfare worker, employer)	17.3		

### Analyzing the Data: Who's At Risk?

Statistical analysis of the data included frequencies based on the results of each of 25 interview questions. Oneway Anovas with LSDMOD comparison procedures were employed for answering questions regarding group differences. Frequency analysis of each variable provided the descriptive statistics and indicated unequal sample size for most of the independent variables.

Oneway Anovas were selected since most of the hypotheses were based on questions relating to more than two groups. Due to the unequal sample size in the groups, a test for the

assumption of equal variances was completed using Bartlett - Box F prior to completing the Anovas. Oneway Anovas with a significant F were followed with the LSDMOD procedure at the .05 level of significance.

Based on a variety of demographic variables explored in this research, marital status, race, and age were found to be significantly related to the range, kinds, and numbers of supporters and counter-supporters impacting students' lives. The findings suggest a new connotation for the term "high-risk" to include those students who receive significantly less support, and are subject to more counter-support, than others during their course of study. For example, widowed, divorced and separated students had fewer supporters and more counter-supporters than did married students. To compound the situation, these same individuals had the greatest number of TOXICS and CONSTANTS and the fewest RESOURCES. Hispanics, followed by Black students, had significantly more TOXICS (contrapositives) who related negatively to their educational endeavors.

Family members and friends were found to provide the most negative, as well as the most positive support. While they were the greatest supporters of the student's efforts, they also comprised the largest group of individuals encouraging the adult not to attend class. Children, however, distinguished themselves from spouses and other family members as being the greatest advocates of their parent's undertaking.

Within the institutional context, teachers were seen as major RESOURCES, but were ranked third as ROOTERS and CHALLENGERS when compared to family members and friends. In this study, counselors were identified only marginally as supporters. This may be a reflection of how such individuals are incorporated into A.B.E. programs rather than a comment on their efficacy.

Lastly, students identified themselves as negatively affecting their own progress. Respondents viewed the negative reinforcement they provided themselves as forestalling their own progress and contributing to a self-fulfilling prophecy of under-achievement.

#### Implications for Adult Education

The research suggest that our focus as adult educators must be extended beyond the walls of the classroom. Efforts must be made to involve significant others in the student's educational program and increase their understanding of the process. By expanding outreach efforts to include friends and family, those who feel abandoned or displaced can become acquainted with the positive aspects of schooling. This can be accomplished by employing community aides and former students, who are familiar with the concerns of significant others, to interact as field-based workers and liasons. Historically, if one recalls the home-based programs designed to teach English to speakers of other languages, much of the success of such programs was due to the fact that entire families were involved. While such an approach is another method for teaching basic skill classes, the employment of community aides could be extremely cost-effective way to begin to ameliorate negative home-based or environmental influences without redefining entire programs.

In an effort to break down distinctions and debunk myths, non-students should be invited to visit classes while the students are in session. Special orientation days and activities should be established on an on-going basis opening the doors to friends, as well as sceptics, to have a look. Thus, the goal is to help educate yet another constituency group -- significant others outside of the classroom.

Because certain groups/individuals tend to be subject to more negative influences than others during their course of study, it is incumbent upon adult educators to explore the issue of support with students. By offering a safe environment which promotes open communication, not only will students be able to share concerns which are personally stressful, but also develop coping strategies. By taking an interest in students personally, as well as professionally, educators can guide those in need of special assistance to appropriate services.

Time needs to be allocated within the learning environment for students to get to know one another better and form their own support groups and networks. Traditional programs touting the benefits of totally individualized instruction should rethink their organizational format and consider the importance of groupings and social interaction. As students have an opportunity to develop friends and supporters at school, they are more readily able to withstand the negative pulls and tugs which may be imposed by significant others.

It is also important to take a hard look with respect to the ABE counselor. Too often these invaluable individuals are relegated to roles as test technicians and record keepers unable to spend their time really doing what is needed -- counseling. In some districts,

where funds are scarce, counseling has been assumed solely by classroom teachers. Not only do administrators need to insure that counselors are integral members of the team in every ABE program, but care must be taken to integrate all resource people into the classroom so that they become familiar faces and additional supporters. Because so many individuals, as shown in this study, define themselves as their own worst enemies, counselors can perform a vital service by working with students on developmental issues such as self-esteem, values clarification, study skills, and assertiveness. While time is often allocated within the regular curriculum to work in such areas, a good deal of attention needs to be focused on building such skills.

In order to increase the participation of underdeveloped groups in adult education, adult educators must begin to view the education of learners in a much broader context. The issue of institutional and personal support and its importance for successful and continuing participation in an educational program is yet another avenue for decreasing the risk for high-risk students and improving success ratios.

#### References

- Brammer, L. M. and Abrego, P. J. Intervention strategies for coping with transitions. The Counseling Psychologist, 1981, Vol. 9, 2.
- Boshier, R. Educational participation and dropout: A theoretical model. Adult Education, 1973, 23(4)255-282.
- Cross, K. P. Adults as Learners. San Francisco: Jossey-Bass, 1981.
- Finn, J. D., Reis, C. W., & Dulberg. Sex differences in educational attainment. Comparative Educational Review, 1980, Vol. 24, 2.
- Harmon, L. W., Brik, J. M., Fitzgerald, L. E., & Tanney, M. F. Counseling Women. Monterey: Brooks/Cole, 1978.
- Hopson, B. Response to papers by Schlossberg, Brammer, and Ambrego. Counseling Psychologist, 1981, Vol. 9, 2.
- Houle, C. The Inquiring Mind. Madison: University of Wisconsin Press, 1963.
- Lewis, L. H. High Risk Adult Learners: What Supports Do They Really Need? Hartford: Report to the State of Connecticut, Bureau of Adult and Vocational Education. Fall, 1983.
- Schlossberg, N. K. A model for analyzing human adaptation to transition, The Counseling Psychologist, 1981, Vol. 9, 2.
- Seashore, C. Support systems in the transition world. Unpublished address to the National Training laboratories seminar, University of Connecticut, Storrs, Connecticut, 1979.
- Wallis, Claudia. High spirits on a plastic pulse. Time. December 10, 1984.

**TWO YEARS AFTER THE GED TESTS: EMPLOYMENT,  
EDUCATION, AND TRAINING ACTIVITIES  
OF GED EXAMINEES**

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Andrew Malizio

**Abstract**

Recently several national studies were conducted which focused on the impact of high school completion through the General Educational Development (GED) Testing Program. In the Spring of 1984 the Maryland State Department of Education (MSDE) in cooperation with the GED Testing Service of the American Council on Education conducted the first statewide GED follow-up study. This paper summarizes two nationwide surveys (Cervero and Peterson, 1982; Behal, 1983) and reports in more detail on the MSDE study.

**INTRODUCTION**

The General Educational Development (GED) testing program began in the early 1940's with the development of a battery of tests for United States military personnel who had not completed their high school studies. Today, through the GED Testing Service of the American Council on Education, the tests are administered in all fifty states and territories and in most Canadian provinces. The GED testing program has offered more than five million adults an opportunity to demonstrate that they have many of the skills they would have acquired had they been able to remain in high school.

During April and May of 1980, the GED Testing Service conducted a nationwide survey of 12,500 GED candidates at approximately 250 testing centers. Results are described in *Who Takes The GED Tests?*, Malizio and Whitney (1981). Two other nationwide GED follow-up surveys were conducted recently and a statewide follow-up study in Maryland during the spring of 1984.

**CERVERO AND PETERSON STUDY**

In October 1981, Ron Cervero and Lyn Peterson conducted a joint research study with GEDTS to assess the impact passing the GED Tests has on adults employment and training activities 18 months after taking the tests.

According to Cervero and Peterson (1981), the candidates were very positive about their GED experience—95 percent reported that they would take the tests again if they were starting over. Other highlights of the study include:

- A greater percentage of examinees was employed full-time for pay in October 1981 than was employed in April, 1980 (48% vs. 39%).
- About 35 percent of the persons working full-time for pay in October 1981 were either working part-time for pay, working (non-pay) or unemployed in April, 1980.

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- Approximately 45 percent of the respondents who passed the GED Test participated in some type of educational program. Thirty-five percent of all enrollments were at community or junior colleges, 33 percent of the enrollments were at trade or technical schools.
- Educational plans are even greater than current participation. More than 75 percent plan to attend some sort of educational program--most planning to attend community or junior colleges.

#### BEHAL STUDY

During the spring of 1982, Elizabeth Behal and GEDTS conducted the second nationwide follow-up study of GED examinees to determine which GED examinees enrolled in postsecondary educational programs, the types of programs selected, and whether differences existed between GED examinees who enrolled and those who did not.

According to Behal (1982), nearly 50 percent of the respondents were students at some time between May 1980 and March 1982. Other highlights of the study include:

- About 30 percent of the postsecondary enrollments were at technical or trade schools; community college enrollments represented about 28 percent of the total number of enrollments.
- During the spring of 1982, 20 percent of the respondents were employed in white collar occupations, 41 percent in blue collar occupations, 15 percent in service occupations, while 24 percent were unemployed.
- Those persons who did not enroll in postsecondary programs tended to disagree with the statement "Everyone should go to college." and felt, in general, that it is difficult to be admitted to a college or university.
- Nearly 60 percent of those who had not yet passed the GED Test participated in some type of postsecondary educational program-- 15 percent of these enrollments were at apprenticeship or on-the-job training programs.
- More than 90 percent felt that testing centers should provide candidates information about educational opportunities after high school.

#### MARYLAND STATE DEPARTMENT OF EDUCATION STUDY

During the spring of 1984, The Maryland State Department of Education and the GED Testing Service conducted the first statewide GED follow-up study. Approximately 10 percent of the 1981 and 1982 Maryland GED graduates were randomly selected. Five hundred forty-four graduates responded to the survey. About 175 surveys were returned as nondeliverable for an adjusted response rate of 45 percent.

This study was the first effort by the State to (1) obtain general demographic information on recent GED graduates, (2) identify any changes in education, employment and perceptions of self-worth that have occurred to recent graduates since earning diplomas, and (3) determine student attitudes toward GED instruction.

#### Demographic Characteristics

Participants in the study were predominantly white, female, and born in Maryland. Seventy-eight percent were white, 20 percent black. Approximately 70 percent were female, 30 percent male and 94 percent born in this country (62 percent in Maryland; 32 percent in another state). The average highest grade completed was 9.8 with 66 percent completing the tenth grade or less. The average age of the respondents at the time of the survey (two to three years after taking the test) was 32 years with a range of 17 to 73 years. Nearly 25 percent had been out of school more than 20 years while over 20 percent less than one year.

## Findings

**Awareness and Expectations** When asked how they learned of the GED Test, most respondents reported that they learned about the Test through personal contacts (neighbors, relatives or friends). The second most used source of information about the GED Test was a guidance counselor.

Respondents to a large measure had their expectations for taking the GED Test realized. For example, 25 percent expected passing the GED Test would help them get a promotion and for 16 percent this became true. Further, 23 percent expected to earn more money and 29 percent realized this goal. Likewise, 55 percent hoped to get a job and about 39 percent reported that taking GED Test helped them to gain employment.

**Outcomes-Employment** Respondents reported their employment status both when they took the GED Tests and at the time of participation in the study. Their responses indicate a positive trend in employment. The percentage of full-time persons increased from 40 percent to 54 percent and the unemployed, seeking employment decreased from 23 percent to 18 percent.

Earning a high school diploma apparently pays off economically in a relatively short time for many employed graduates. Income increases were reported by 264 respondents, 75 percent of all persons with paid employment at the time of the study. Of that number 101 attributed their salary increases as a direct result of earning their diploma. The amount of increase for these persons ranged from less than \$2,000 to over \$8,000 with the largest number reporting an increase of less than \$2,000. An estimated net worth of these increases for one year is \$415,000. (Computations were made by taking the average amount of the increment by the frequency for that increment.) From these figures the state dollar return in the form of expected increase in state taxes paid by all 1981 and 1982 Maryland GED graduates over their lifetimes were projected to be an approximate ten dollars for every one dollar invested in the GED Program.

**Education** Graduates were asked to report on their current, past, and anticipated participation in additional formal educational activities. Forty-four percent indicated they either had been or were currently a student. If respondents had participated in education or training since taking the GED Test the most frequently attended institution (35 percent) was a community college, and the least used (five percent) a four-year institution or technical school. Twenty-two percent of the respondents who had not participated in a formal educational activity since graduation planned to do so. As for choice of institutions their response pattern was similar to present or past students.

**Self-worth** The findings reported here support the well-known premise in adult education that most GED graduates have an increased feeling of self-worth as a result of earning a diploma. Nearly 73 percent of the respondents reported greater self-confidence and 93 percent felt the GED program gave them a second chance.

Earning a high school diploma is obviously a happy event. Almost 90 percent reported that their families were pleased, and half felt their lives had gained more direction. Most respondents shared the news with those close to them. About three-fourths of the graduates told relatives, friends, and neighbors. In about half the cases, employers and fellow workers were also told.

**Preparation** The study also examined preparation for the GED Test. Graduates were asked to report if they actively prepared for the test in terms of time, money, means, perception of the quality of preparation and need for retesting.

Although GED preparation is not required in Maryland, over three-fourths of the respondents in the study spent time preparing for the test, and 90 percent of those felt the preparation time was well spent. Respondents prepared for the GED test in several ways, most frequently by taking a class and/or studying from a GED instructional book or manual. In addition, nearly 26 percent had taken the official GED Practice Test. Regarding perception

of preparedness to take the individual subtests of the GED test, respondents overall reported most frequently feeling most prepared to take the Reading Skills Test and least prepared to take the Mathematics Test. Only seven percent felt least prepared to take the Reading Skills Test. This low rating may well reflect the emphasis on reading skills in GED preparation classes.

**Program-Sponsored Instruction** About 43 percent of the respondents (232 persons) in the study had taken GED classroom instruction, most (62 percent) took them through a local school system and 22 percent through a community college. Of that group 149 persons had participated in classroom instruction offered by local education agencies which receive MSDE adult education program funds. Eighty-three persons were in programs which did not.

The availability of GED preparation classes is very well known to GED test takers. Only eight percent were not aware of classes. Respondents reported most frequently learning about classes through personal contacts (neighbors, relatives or friends.) The next most used source of information was public notices.

MSDE-funded instruction program classes have more females, 80 percent, than the non-MSDE classes, 69 percent, and less foreign-born enrollments, seven compared with nine percent. By age, the largest participant group for either MSDE or non-MSDE funded GED classes was middle-aged women (40 - 49 years old). The next groups by size were young women (20 - 24 years old) and young men (25 - 29 years old).

The most notable contrast was the racial composition of MSDE and non-MSDE classes. Enrollments in MSDE funded programs were 86 percent white and 14 percent black, while in non-MSDE program enrollments were 55 percent white and 45 percent black. Participants in MSDE funded program tended to be more full-time employed, less apt to be seeking employment than those in non-MSDE program.

**Length and Adequacy of Instruction** Study participants who had taken program-sponsored instruction, either MSDE funded or not, spent more hours in preparation than non-participants with over two-thirds receiving at least 31 hours of instruction. Further, persons in non-MSDE sponsored programs tended to spend more time in instruction than those in MSDE funded programs.

The vast majority (over 90 percent) thought their classroom instruction was on an appropriate level. Only seven percent found instruction too easy. By individual subtests, the positive rating for instruction ranged from 58 percent for science to 89 percent for mathematics. Thirty-two percent of the respondents who took instruction felt most prepared to take the mathematics test but 35 percent also felt least prepared to take the mathematics test. Except for mathematics, MSDE sponsored program received a slightly lower adequacy rating than non MSDE funded programs. However, science was the only subtest in which there was a significant difference in the adequacy rating between MSDE and non-MSDE programs.

## Conclusions

1. The GED program in Maryland is an excellent public investment. As the findings indicate, public state dollars spent on high school completion programs for adult pay immediate and long-term dividends in terms of increased state taxes. The GED program is also an excellent personal investment. Less apparent but also reasonable to expect is the higher standard of living which accompanies greater salaries. For example, certainly it can be expected that housing, health, nutrition and the well-being of children are positively affected by the higher incomes generated by adults completing high school.

2. While it might be assumed that the need for GED preparation programs would be greater for persons on a lower socio-economic level, MSDE funded instructional programs tend to enroll more persons than non-MSDE funded programs who as a group traditionally may have less economic need for high school diplomas.

3. MSDE funded instructional programs received a good rating for adequacy of instruction in the skills areas (writing, reading and mathematics) of the GED test but a less satisfactory one for instruction in social studies and science. However, these ratings may well reflect the subtest areas that are emphasized in GED instruction as much as quality of instruction.

Results of the two nationwide studies as well as the Maryland follow-up study suggest:

1. Although millions of adults have been served through the GED testing program, millions more could benefit by successfully earning an equivalency credential. Many of those who could benefit are probably unaware that ABE/GED programs exist.

2. Nationally, we now know considerably more about people who take the GED tests and the overall impact taking the tests has on individuals' lives. We need to know more about the people who are not participating in adult education.

#### References

Behal, E.L. (1983). *After the GED tests: Postsecondary education enrollment Patterns and perceptions of GED examinees* (GEDTS Research Studies, No. 5, 1983). Washington, DC: American Council on Education.

Cervero, R.M., & Peterson, N. L. (1982). *After the GED tests: Employment and training activities of GED examinees* (GEDTS Research Studies, No. 4). Washington, DC: American Council on Education.

Maryland State Department of Education (1984). *Maryland GED Follow-up Study*. (Preliminary Report). Baltimore, MD: Author.

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Readers interested in conducting GED surveys in their state, province, or region should contact Drew Malizio or Doug Whitney, GED Testing Service, One Dupont Circle, Washington, DC 20036-1193.



## MARGINAL ADULT EDUCATORS: THE PART-TIME INSTRUCTORS OF ADULTS

James A. Draper<sup>1</sup>

### Abstract

This paper is based on an on-going longitudinal study of the part-time instructors of adults employed by the continuing education divisions of a public school board and a college in Ontario, Canada. The findings of the study will be of especial interest to part-time instructors and administrators of adult education programs. The study provides a profile of these instructors and documents how they feel about their working with adults and their suggestions for improving their teaching environment. This present paper is intended to encourage discussion on this topic, comparing the findings of the research with the experiences of the conference participants. A major report of the entire study is likely to be published in mid-1985.

### Introduction and Rationale

An increasingly larger number of adults in Ontario and elsewhere are becoming involved in learning activities. More leisure time, a rapidly changing technology, curiosity, and greater opportunities for study and travel are only some of the incentives which encourage adults to make a commitment to some kind of purposeful learning. A recent study undertaken by the Canadian Association for Adult Education and the Institut Canadien d'Education des Adultes (1982) indicates that upwards of 38% of adults 18 years of age or older are involved in at least one educational program and, under current trends, this figure is likely to increase.

Paralleling the demand for part-time learning are the increasing number of teachers, counsellors and administrators who are becoming involved in working with adults in educational settings. Many such persons, especially the teachers/instructors, will be trained in areas other than adult education. Many will be needed on a part-time and not a full-time basis. One assumes that all of these instructors will be specialists in some subject-matter, but may not have been trained to understand the process of teaching adults.

Williams (1972) refers to part-time faculty as "the neglected teachers." In the early 1970s, a study done in Canada (Draper and Smith, 1973) indicated that an examination of numerous school employment records showed that upwards of 12% of the total elementary and secondary school teacher population become involved at some time in their careers with the part-time teaching of adults. When one transfers this information into actual numbers, the size of this group is considerable. However, a review of degree and non-degree research, as well as the general literature in adult education, indicates that very little research has been done relating to the part-time teachers of adults.

This present study attempts to learn more about the part-time instructor. It was realized, however, that such an understanding could be best accomplished through a longitudinal study. The information presented in this study covers a three-year period, from 1982 to 1984.

The overall study, still on-going, was guided by a number of questions, such as: Initially, what motivated the part-time instructors to work with adults? What did they need

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to learn as teachers of adults? What resources did they use in order to learn about teaching adults? What are their aspirations with respect to working with adults, that is, would they like to increase their commitment to working with adults? To what extent do these instructors identify with the field of adult education? To what extent do they feel part of the system which employs them as part-time instructors?

### Methodology

The selection of instructors for the overall study was guided by two variables, geography and employing institution. Three geographical areas in south-central Ontario were chosen: a large metropolitan city, a medium-sized city, and a rural/small town region. All part-time instructors employed by the continuing education divisions of the community college and the public school board in each of the three regions were surveyed. Through the use of mailed questionnaires, contact with these instructors was made once a year for the three-year period. Those who returned questionnaires in 1982 became the baseline group. The initial total number who responded in that year was 454. One of the difficulties in a study of this kind is keeping in contact with the instructors over a long period of time.

In this presentation, selected results are reported for the medium-sized city only. This paper is based on the responses from 15 instructors from each of the two institutions.

### Presentation of Data

One noticeable difference between the instructors employed part-time by the two institutions was the greater heterogeneity of the college group, in terms of their full-time occupation. The school board employed a larger number (87%) of certified teachers in its continuing education program than did the college. A variety of subject-matter specialists were employed by the college, including an electrical engineer, an architectural draftsman, a bank loans supervisor, and a building plumbing inspector. Paralleling this, over 50% of the part-time instructors were employed full-time by the same public school board, as compared to the wide range of full-time employers of the instructors teaching for the college.

Both institutions included a wider range of subject-matter courses in their respective continuing education programs. Generally speaking, though, there appears to be little overlap between the two programs, with the school board offering more "leisure time" courses, and the college more trade/occupational oriented courses. At least half of the instructors in both institutions teach fewer than five hours per week, but with a norm of two-three hours for the college, and a greater variation within the school board program. About 30% of the respondents from both institutions indicated that they would like to increase their number of hours teaching adults.

The 1982 respondents were asked if, during the past two years, they had been involved in any "training" program which focused on teaching and understanding adults. Although only two persons from each institution responded "yes," in fact the actual content of the training focused on the subject-matter of their teaching specialty, rather than the process/techniques and psychology of teaching adults. The same group of respondents was asked if they felt fairly certain that they will be teaching adults next year, within the same or another institution. Upwards of 85% replied in the affirmative.

The instructors indicated that a number of factors/resources would make their jobs easier, including: better guidelines from the administrators; job orientation; more suitable classrooms; more facilities and supplies, including better textbooks; discussions with other comparable subject-matter teachers; storage space; and separating the day-time high school, younger students from the older adults. Finally, when this group was asked if they belonged to any adult education organizations/associations, about 2% said "yes."

Respondents were asked what was the most difficult thing they faced, or had to overcome when they first began to teach adults. Responses included: "accommodating a wide variety of adult interests"; "preventing rambling among the students"; "learning to serve the needs of

the adult students"; "convincing the students that the subject-matter was worthwhile"; "having to overcome the fact that some of the adult students were older than me"; "overcoming my shyness and frustration"; and "instilling confidence in the adult students, as learners." Based on their varied experiences, these instructors had much advice to give to instructors who were about to begin teaching adults for the first time.

The study was also interested in knowing whether experiences arising from teaching adults assisted them with their major full-time occupations. Responses included: "a greater ability to deal with people and their problems"; "more effective in committee work"; "better able to set goals and manage my time"; "a greater ability to listen"; "a better understanding of human behaviour"; "a greater appreciation that adults sometimes need extra help"; "more patience"; and "a greater feeling of empathy."

The largest age cohort for those instructors employed by the school board was 46-55 years, and the second largest cohort was 36-45 years. The two largest cohorts within the college program were 26-35 and 46-55 years.

Many more questions were asked of the instructors, including the extent to which they felt part of the institutions that employed them as instructors of adults, and their suggestions on how their employers could give them greater support, as instructors of adults.

### Conclusions and Implications

There are many built-in difficulties in undertaking longitudinal studies in adult education, but there are also a number of values that can come from such studies. Administrative and funding support could increase the number of such studies.

In this study, there are a number of noticeable differences between the two institutions, including the age of instructors, courses taught, and teacher certification. The school board instructors are slightly older, most are certified teachers, and the courses they teach are generally leisure, hobby-type courses or formal upgrading ones. Also, most of the instructors are employed full-time by the same school board that employs them as part-time instructors of adults.

Many of the instructors employed by both institutions would like to increase their commitment to teaching adults, although financial constraints within the institutions would seem to make this somewhat unlikely. Few of the instructors have had any training as adult educators, that is, most learn to teach adults through first-hand experience. Interestingly, there seems to be a reasonable amount of security within both groups about continuing their employment as part-time instructors. Many are quite clear and specific about how their part-time instructing could be made easier and a number of them expressed feelings of being peripheral to the system that employed them. This situation could be improved. Furthermore, the research shows that in some cases, the instructors' experiences in working with adults are transferrable to other situations, including full-time employment, family, and any number of human interaction situations.

Finally, it is quite clear that the instructors are not familiar with, or do not identify with, the adult education professional organizations, nor do they subscribe to their journals. One might assume that these instructors, at least a sizeable number of them, are not familiar with the literature in adult education. Such organizations might take note of this fact.

### References

- Canadian Association for Adult Education and Institut Canadien d'Education des Adultes (1982). From the Adults' Point of View. Toronto: CAAE, 35 pp.
- Draper, James .., and Smith, M. Elizabeth (1973). "Part-Time Teachers of Adults." The Alberta Journal of Educational Research, Vol. XIX, No. 3, pp. 224-231.
- Williams, F. Neil (1972). "The Neglected Teachers: The Part-Time Faculty." Adult Leadership, September, pp. 83-84.

NOTES AND COMMENTS ON THE PANEL  
"LIFELONG LEARNING - A PROBLEM OF  
DEFINITION, POLICY AND VALUE."

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ABSTRACT

In an effort to develop a controversial framework for discussing "Lifelong Learning: Its problems of Definition, Policy and Value," I have assembled a group of highly regarded individuals who are heavily involved with adult Learning. I have asked all of the participants to discuss their positions on the problems of definition, policy, and value within the framework of the triad: "How should Lifelong Learning be understood, who should determine its purpose, and which reforms are necessary to achieve its purpose?" Beyond this general guiding framework, I have asked each contributor to prepare remarks which reflect the unique views of the organizations they might represent. Diverse as that representation is, our goal, is not to seek consensus, but rather, our goal is to provide a conceptual map of the Lifelong Learning debate, reflecting the distinct interests of the United States Government, a National Member Association of Continuing Education, a University Services Bureau, a University Academic Graduate Division, and individual perceptions on the philosophy of Adult Education.

Hal Beder's recent conference on "Rekindling Lifelong Learning" was successful in many ways, not the least of which was to draw attention to a dwindling enthusiasm for self-directed learning in juxtaposition to the rising demand for learning as an extension of the Human Capital Theory. Has Lifelong Learning succumbed to a policy vacuum? Or, for that matter, did it ever stand alone as a meaningful policy issue in the United States? What would be the value of rekindling or reconstituting this ambiguous notion of Lifelong Learning? Were it revived (assuming a revivification), what should be the policy focus? How could some particular understanding of Lifelong Learning be useful as an educational policy construct?

One view about the concept "Lifelong Learning" is that it bridges the duality between previous notions of institutionally-based education of adults and the individual self-directed learning which is fostered as personal and social enhancement.

As a concept unifying previously competing notions of formally convened adult basic education, job training higher education, and the self-directed activities of learning and learning systems, one wonders whether the values which guide public policy would shift from an emphasis on human capital development toward personal and social fulfillment. The former assumes an occupational skills model, based on prescribed vocations for which to train; whereas, the latter presupposes a cultural skills model, tied to literacy and civic competencies essential to the human vocation which is expressed in occupations.

Yet, it might be that this debate on the role of Lifelong Learning in American Society is being carried on by a minority of individuals who deal with adults on a professional basis. Perhaps the priority of adult learning as a public policy is a function of its role as peripheral to the educational system itself. For example, last year a Presidential

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Conference on Excellence in Education - a Conference oriented toward examining the strengths, weaknesses and directions for the educational system - bypassed Adult Education, Continuing Education and Lifelong Education, emphasizing the primacy of primary and secondary education as the conduits for educational reform. Does this suggest that omitting Lifelong Learning from questions of national educational excellence is presumptive evidence that the education of adults is perceived as "distant" to the structure of education? Indeed can Lifelong Learning be a central aspect of the American Educational system, or is it necessarily on the fringe - at the so-called "periphery?"

Despite the claim of "peripheral" status, it is usually characteristic of emerging educational activities and services that they be accompanied by questions of "Professionalism," some of which are serious to the activities and services as a profession, distinct from other recognized professions (it often occurs that the further away one is from traditional activities and services, the greater is the concern and effort to achieve traditional sanctions and social recognition).

With respect to "professionalism" within the realm of adult learning, with all of its constituencies, is a new wave of concern and research, surrounding issues of standard competencies, certification, licensure, regulation, and "Professional Ethics."

Perhaps focusing on such introspective issues such as "Professionalism" in Lifelong Learning reinforces the pre-mature nature of the adult educational enterprise and its role on the outskirts of the educational structure, and, therefore, educational policy.

As a further consideration, the activities of education are often given a certain social value, depending upon the nature of the problem being treated. What it means to be at the "fringe" of the educational system is, first, to be a part of the system, and also, to deal with problems not associated with either the main stream of social or educational priorities.

It might well be that in the case of Lifelong Learning, the phrase "Esse Est Percipi" appropriately applies. "To be is to be perceived" gets translated into "What Lifelong Learning is, is how it is perceived." Whether that perception transcends the "Professionals" in adult learning to social and educational policymakers is a fundamental question.

Critics are sometimes suspicious of panel titles which, beyond simple exploration, imply a promise of resolving very complex issues. Holding up a promise of resolution, two approaches are often taken which usually surface in a pattern quite dissimilar from one another.

The first route followed in some symposia is to presuppose a temple of wisdom and invite eager listeners to partake in a ceremony designed to "shed the light" through intuitive revelation or deductive reasoning and to arrive at an insight into the problem and a pathway to resolution, if not indeed, a new theory.

The other approach might be described as a "Sherlock Holmesian" investigative method which attempts to unravel the conceptual and political mystery by exploring the social conditions and sequence of events which cause us to even raise such questions. A "Jack Webbian" scrutiny of the facts of "what is" and how it has evolved is expected to reveal what ought to be - classic fallacy of wandering from the realm of the "is" to the domain of the "ought."

That this panel avoid the trappings of these approaches, each of the participants was asked to discuss their positions on the problems of Definition, Policy, and Value within the framework of the triad: "How should Lifelong Learning be understood, who should determine its purpose, and which reforms are necessary to achieve its purposes?" Furthermore each participant was asked to prepare remarks which reflect the unique views and diverse interests of the organizations they represent.

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## Government and Adult Education in Canada

Alan M. Thomas<sup>1</sup>

### Abstract

A judge in Thunder Bay, Ontario, recently reduced a fine from more than \$7,000 to \$1,000 when the defendant, accused of having defrauded the government of Canada by using unemployment insurance benefits to complete a bachelor's degree in psychology, argued, "The Unemployment Insurance Commission (UIC) helped me get a degree and now I don't need the UIC... I'm trying to be a guy with a career and a family but the UIC you have to be an unemployed bum, how come people can collect pogeys and not do anything?" (Globe and Mail, October 16, 1984). In Canada, apparently, common sense is worth a discount of 85%.

It is unlikely that the judge understood that the case before him was just one example of the total lack of any coherent concept for the management of lifelong learning, or continuing education, in Canada. Canada is, however, not alone in its possession of this vacuum. A recent article in Convergence on continuing education in Australia (Duke, C., 1984) indicates a similar confusion; a confusion common to most countries in the world. Part of the reason for this confusion is the rapidly increasing demand for re-entry to formal educational systems at all levels by new and unconventional (i.e. older) students.

The forces which have combined to produce the enormous rate of re-entry are familiar to us all. Equally familiar is the fact that re-entry has been, and remains, selective with respect to original educational success, income, and occupation. That fact would appear to be consistent in all of the industrial societies. Two observations are possible. One is that the education of adults in most of these countries in 1985 bears a striking resemblance to the educational provisions for the young prior to the introduction of what has come to be called, ironically, "free compulsory education". That is to say the rich take care of themselves, the middle class is adept at utilizing what public resources there are, and the poor get little or nothing. The second observation is that in terms of the organization of educational opportunities, what we have is Ptolemy before Copernicus. A great deal of effort and multitudinous special arrangements exist. In addition, there is no reason to believe that systems of education catering to entire life-cycles can ever be as simple as the ones designed for children in the past century. Nevertheless, until we select the proper sun for the center of this universe, we are doomed to fail, and to fail precisely where no democratic society can afford failure.

It will come as no surprise to this conference that the proper sun must be learning, rather than education. Learning is what individuals do; it is an activity rather than a possession, and it is not coercible. There is no need to bore this audience with further definition, except to point out that the "learning perspective" is a difficult one to achieve, and equally difficult to maintain. A hundred years of conditioning, and the very powerful institutional interests of formal education, incline the imagination to equate the two. However, to succeed even briefly in viewing the world through the perspective of learning is to go to the heart of the society in a way that few other perspectives allow. The founders of the liberal state insisted that the ultimate political power be lodged with the individual who alone is capable of learning.

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All societies have to, and have always had to, cope with the fact that members of their populations are capable of learning throughout their lives. The demand for such flexibility manifests itself in four principal events: (A) the emergence of new generations; (B) disasters involving the majority of the population, such as plague, famine, and other natural disasters, but principally (in the last 500 years) war; (C) large scale changes taking place within generations, a more recent phenomenon; and, (D) adjustments required for groups or individuals within the population such as the physically or culturally handicapped. Each of these phenomena can be met by one of two responses. One is to eliminate the source of the demand; a response most frequently observed with respect to manifestation (D), such as the treatment of lepers or of certain brands of criminals (though we should remember that Herod is reported to have tried to deal with an example of manifestation (A) in this manner). The other is to accommodate the necessary learning required by the individuals concerned in order to cope with the situation.

Any society has four principal modes of response to these demands for learning. (1) It can permit any learning that is not obviously destructive of the society as a whole. Everyone will recognize in this mode the outlines of the common law society. (2) It can encourage the pursuit and achievement of certain specific objectives associated with the need to learn by putting particular resources at the disposal of the learners, without specifying the manner of use or the particular outcomes. In this mode we can recognize activities which we have traditionally associated with "culture" and increasingly, over the past century in North America, with religion. (3) The society may utilize the "directive" mode, which brings us into the all too familiar realm of education and its attendant wealth and power. We are most familiar with the application of this mode to learning manifestation (a), the emergence of new generations. However, we need to realize that the directive response on a mass scale is of relatively recent origin. (4) The final mode of response is one of prevention. In this case, the society finds the particular learning outcomes either repugnant, such as in the present case of forms of pornography, or destructive, such as the non-medical use of drugs, and utilizes its maximum resources of prevention, including the law, to drive them out of the society. Success in such a response is uneven. Learning is, in itself, a powerful dynamic, quite apart from what is being learned. Other than by killing, exiling, or somehow containing the source of such learning, the only recourse a society has is to try to maximize the satisfactions associated with acceptable learning objectives associated with the first three responses. It would appear that success in this area has been mixed.

The foregoing formulation of manifestation/response mode is advanced as a natural evolution of concern for "life-long learning", and as a substantially improved basis for understanding what is happening in our societies. We are surrounded by the rhetoric of "change" (what used to be called progress, though the characteristic optimism has vanished) and we should know that all change involves somebody learning something he or she did not know before. Therefore, this formulation allows us to embrace wider horizons of "change" and to put them in terms of human learning, or the lack of it. It also provides a basis for understanding what is happening to the educational systems in our countries and further, what responses might be most effective.

Canada is chosen as an example primarily because I know it better than any other society at any period in its history, and indeed to any organization. Many of the insights utilized in its development arose from close studies of training and education in large non-educational organizations in Canada during the past decade (Thomas et al, 1981).

In the activities associated with Mode (1) response, we find as suggested earlier, the lineaments of the common law society. The basic condition of such a society, that anything can be done which is not expressly forbidden (in contrast to "normative" societies, such as France, and most of the socialist societies where model behaviour is enshrined in the law) is easily translated into: anything can be learned that is not expressly forbidden. This translation becomes increasingly so as we



progress towards the so-called information society. Canada has inherited the same legal foundations as the United States and, like the United States, has departed from that foundation substantially, into forms of administrative law which, in fact, functions in various areas (broadcasting for example) as in normative societies. This has resulted in a number of social innovations, in which Canada has provided considerable world leadership; for example, the increasing practice by large semi-judicial bodies of providing the means by which small, impoverished groups can appear competently before them. This practice not only provides for the small groups in question to learn how to represent their interest to the greater society it also provides that the greater society hears that representation. The progress is slow, and was more prevalent in the palmy sixties than at present, but it is a principal that has not been lost. In this mode are, of course, to be found the basic freedoms, guarded continuously by both our societies--speech, movement, religion, and association. As adult educators we need to be especially attentive to the maintenance of the freedom of association, since all of the literature in adult education indicates that adults learn more from other adults than from any other single source. It is worth noting that, in Canada, it is hardly a century since the last of the anti-conspiracy laws were repealed.

What is relatively new in Canada is a proliferation of Bills of Rights at the federal level and in all provincial jurisdictions. The novelty of these new acts has caused us to turn to American experience, sometimes to the wrong experience. What is important for us is that Bill of Rights share, everywhere, a common proscription of discrimination with respect to those things that cannot be changed by learning--place of origin, color, age, and, until recently, gender. While such acts have spread generally throughout Canada, the matter of age remains contentious and there is considerable variance among the provisions in different jurisdictions. It is an area that bears our close attention and which, in general, it does not get.

The real importance of the manifestations that are responded to via Mode (1) is that it is here that the decisions are taken about how and for what the other model responses will be utilized. The maintenance of the basic freedoms to learn already described is directly related to how learning will be treated as a proper object of the other responses. Most of the visible decisions about the utilization of prevention are taken within the Mode (1).

In Mode (2) response, we find a range of activities usually associated with culture, but which, under the impact of electronic media and the politicization of culture, are becoming more and more central to our concerns. Traditionally, this response included the support of museums, libraries, art galleries, artistic performing companies, parks and wilderness reserves, and, more recently, educational television. In Canada, the maintenance of federal authority over broadcasting introduces some interesting political gymnastics, involving the permission to allow educational agencies which are entirely provincial in status to enter into the realm of broadcasting. A moment's reflection will remind you of how tense and difficult a matter this proved to be in the case of the province of Quebec, where language, the currency of first radio, and then television, is the basis of the resurgence of cultural determination and political independence. In recent years, with the rise of cultural and then political nationalism in that province, the social contract has been highly visible and its fragility remains alarming, though perhaps less so than a decade ago.

The Mode (2) response has a subsection, in which certain agencies, labour unions, industries, voluntary groups, etc. are formally assigned the task of achieving specific learning outcomes and are assisted in various ways to achieve them. A prime example is the provision of federal funds to the labour movement since 1977 for the undertaking of education (Thomas, Abbey, 1983).

The federal government has always been held responsible by the electorate for the state of the economy. Until recently, that condition seemed sufficiently divorced from the education of children to allow the federal government to depend, albeit

somewhat uneasily, on the educational efforts of the provinces. A consequence of that dependence is that the education of adults was allowed to slip firmly into provincial hands. Increasingly, as the separation between education and economic health has narrowed, the federal government has reduced its educational support, and diverted funds into Mode (2) responses, thereby throwing the conventional systems, particularly the post-secondary system, into turmoil.

There are advantages and disadvantages to the use of Mode (2) responses, more that can be examined in the limits of this paper. They have not received much attention because the dynamics have not been understood. By using the Mode (2) response, the funder entrusts the achievement of learning objectives to those agencies most likely to use them, thus reducing the "school to work" programs. In addition, the student has a prior relationship with the provider of the learning resources, as an employee or member, or something of the sort. Problems of recruitment and motivation are alleviated. There is evidence in the evaluation of the labour organizations' programs (Thomas, Abbey, 1983) that individuals who do not normally participate in publicly provided programs did participate in the programs provided by the labour organizations of which they are members. However, the learning results are not transferable by the individual; those most in need, that is, those outside employment or membership, get the least assistance; competency of teaching and evaluation is hard to develop and maintain, and the arrangements can be terminated with little of the outcry that attends the closing of a school or a formal program.

The Mode (3) response, the formal educational systems, is all too familiar, but the activities involved become more understandable if they are seen as a Mode (3) response; that is, as one among several model responses to demands for learning. The educational system(s), with their characteristic isolation of the learner as "student" from the rest of society, float in a sea of learning. It is, however, a sea that is subject to differentiation, description, and classification.

In Canada, as elsewhere, the educational system is large, powerful and expensive. It is also more totally publicly controlled than in the United States. However, as in the United States, these systems have lost their domination of knowledge, research, and learning. What they retain is the exclusive right to certify and not a great deal more. In addition, as new bodies of students, new in the sense of representing different compositions of age and background, have invaded the educational agencies, the missions of these agencies have become blurred, and they and their publics have become increasingly uneasy about their present and future.

Canada represents a useful example of a society which has, since the turn of this century and within the complexities of its federal structure, increasingly utilized (almost exclusively) the Mode (3) response in order to meet the developing demands for learning. Although its peculiar position in North America has prevented it from ignoring Mode (2) responses to the degree they have been ignored elsewhere. Since the late seventies it has been apparant, though not very clearly expressed, that the limit of the utilization of Mode (3) responses has been reached. For a variety of reasons and with a variety of consequences, not the least being confusion, Canada, at all levels of jurisdiction, is now moving away from this exclusive dependence. This shift leads to greater and greater complexities in relationships between the characteristic agencies of the various modes, and to considerable difficulty particularly for the individual learner, in understanding what is taking place and where resources are, or ought to be, located and discovered. Characteristic issues arising under these conditions, requiring investigation and understanding, are those associated with control.

We have reached a turning point in the explosive growth of adult education and adult learning. The limits of the utilization of the formal system, in terms of its design to meet the needs of children and youth, have been reached. We can go no farther without some radical transformation of those agencies--the School Board in Canada is an excellent example of such a transformation--and of the search for alternative means of meeting the consuming need for learning.

### References

Duke, C. (1984). Issues of Organizing Adult Continuing Education. Convergence. 17 (2).

Judges Reduces Fine (1984, October). Globe and Mail.

Thomas, A., and Abbey, D. (1983). Labour Canada's Labour Education Program: An Evaluation, 1977-1983. Ottawa: Labour Canada.

Thomas, A., et al. (1981) Learning in Organizations. Toronto: Department of Adult Education, Ontario Institute for Studies in Education.

AN ANALYSIS OF THE POLICIES AND ISSUES WHICH RESULTED IN THE FORMATION OF THE  
 MARYLAND FIRE-RESCUE EDUCATION AND TRAINING COMMISSION  
 USING THE SYSTEMS THEORY MODEL OF POLICY FORMATION

Bruce J. Walz<sup>1</sup>

Abstract

The systems theory model of policy development was applied to the formation of a state emergency service training agency. The various inputs which resulted in the formation of the agency were investigated through a literature search and personal interviews. Environmental influences, demands, and supports which constituted the input side of the model were identified.

INTRODUCTION

The purpose of this paper is to determine the issues and policy which resulted in the creation of the Maryland Fire-Rescue Education and Training Commission, an agency of the State Board for Higher Education. This analysis will be conducted within the framework of the systems theory model of politics as conceptualized by Easton (1965). Emphasis will be directed towards the inputs side of the model, specifically the environment, demands and support.

To provide a framework for this analysis of policy, the following research question has been formulated:

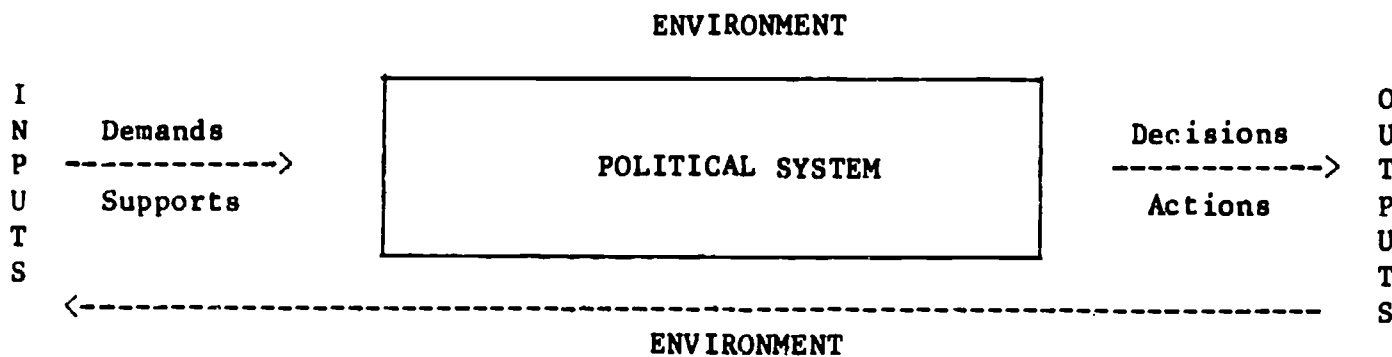
What were the system inputs--environmental influences, demands, and supports--which were transformed by the political system and outputed as the Maryland Fire-Rescue Education and Training Commission (MFRETC)?

Two approaches were used to answer the research question. First, a literature search and review was conducted to provide an overview of the Commission's history and actions as well as insight into the system inputs involved. Second, personal interviews were conducted of individuals involved with the formation and operation of MFRETC.

Systems Theory--An Overview

Systems theory has been applied to a number of phenomena and processes, both natural and man-made. The "system" consists of inputs, a "blackbox" which transforms the inputs, and the resulting outputs. The system exists within an environment which impacts upon the components of the system.

David Easton in A Framework for Political Analysis (1965), applied systems theory to the political process. Public policy is the result-output of the political system. An outline of the systems model is presented below (Dye, 1972).



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## POLICY ANALYSIS

In order to analyze the varied inputs and environmental influences which resulted in the formation of the Maryland Fire-Rescue Education and Training Commission, and thus answer the proposed research question, three areas will be investigated. These are environmental influences, demands, and support.

### Environmental Influences

A number of environmental influences came to bear on the Maryland emergency services in the 1970's. However, one influence which has always been present and is the driving force behind the fire service is the annual loss of life and property due to fire. This fact supports the need for well organized and highly trained firefighters.

In 1972, President Nixon appointed a National Commission on Fire Prevention and Control (NCFPC). Among the many recommendations of the NCFPC contained in their report entitled America Burning (1973) was the establishment of a national fire academy and minimum standards for firefighters. Also in 1973, the Joint Council of National Fire Service Organizations established the National Professional Qualification System for certifying fire service personnel. These actions had two major impacts on the Maryland fire service. First, there was now a "federal focus" on the fire problem and firefighter training. The newly formed United States Fire Administration began developing recommendations for state firefighter training and competency standards. To avoid federal control of state training, the Maryland State Firemen's Association (MSFA) began development of a mechanism for statewide training standards (R. J. Smith, personal communication, February 28, 1984).

Second, in 1973, Montgomery County, Maryland, implemented a county firefighter qualification system based on the National Professional Qualification System. These two actions served to begin a statewide trend to coordinate and review emergency services training.

The middle 70's were also a time of increased accountability for governments and their agencies. With the war in Vietnam and the scandal of Watergate, the public demanded responsible government. In 1975, over \$50 million was spent by counties and local jurisdictions for fire and rescue services (Gov. Comm., 1975). To provide the most efficient and economical training for emergency services personnel, it was becoming evident that some form of statewide coordination was needed (Gov. Comm., 1975; MSFA, 1972).

### Demands

The demands which were inputted into the political system consisted of action by various emergency services organizations to affect the policy governing emergency services training. The foremost organization involved in such actions was the Maryland State Firemen's Association. This organization has long been a focus for political action by the state's firemen.

The MSFA has enjoyed a long history of cooperation with the executives of the state. A former governor, J. Millard Tawes, was president of the association in 1936. Almost yearly, the MSFA has approached the Governor for increased aid to fire departments and increased funding for training. The requests for increased training have usually been in the name of the Fire Service Extension.

During its course of development, the Fire Service Extension (FSE) of the University of Maryland grew and became nationally recognized. However, during the 1960's, reduced funding by the University and an increased demand for training overtaxed the FSE's staff. Continued requests for additional staff and funding by the MSFA to the University were rejected (MSFA, 1972). Concerned for the future of fire service training in Maryland, the MSFA took their case to then Governor Marvin Mandel. The governor was sympathetic, but as related by Mr. Smith and Mr. Glaubitz, the Governor suggested that the MSFA develop a plan rather than coming to him

each year wanting something. Following up on the Governor's suggestion, Mr. Glaubitz, then president of the MSFA, appointed a ten year plan committee co-chaired by Mr. Smith and Mr. C. Oscar Baker, chairman of the MSFA training committee.

Upon completion of the "Education and Training Ten Year Plan" in May of 1972, the MSFA provided copies to the Governor, all members of the Legislature, county firemen's associations, all libraries in the state, and the University of Maryland administration. The report, which called upon the University to increase the funding and resources of the FSE and establish regional training centers, was according to Mr. Smith essentially ignored by the University. Again frustrated, the MSFA approached Governor Mandel. As a result of this meeting, the Governor appointed the Governor's Commission on Fire Services, Senate Joint Resolution 7, in 1974. A major recommendation of the commission was the creation of the Maryland Fire-Rescue Education and Training Commission.

Concurrent with the activities of the MSFA to improve and increase funding for the FSE, another major force impacting upon training in the State of Maryland was the development of local jurisdictional training academies and community college fire science programs. With increased urbanization and a period of prosperity, coupled with the problems of staff and funding being experienced by the FSE, the local academies began to offer increased training programs for their volunteers, even to the point of competing with the FSE. Responding to the national thrust for professional certification, both Montgomery County in 1973 and Baltimore County in 1976 implemented county-wide certification systems based on the national standard (Porter, 1984). A more intrinsic reason for the growth of the academies was their desire to control their own training and requirements without interference from the state.

As the technology of fire fighting and emergency medical services expanded, the need for increased education became apparent. To meet this need, the community colleges developed curriculums in fire science. Associate degrees were being offered by Catonsville Community College and Montgomery College in the early 70's.

It can be seen that in the early 1970's, there were three major sources of training for emergency services personnel--the Fire Service Extension, the local academies, and the community colleges. Fire fighting is a dangerous occupation which requires extensive teamwork and coordination of resources. Without some form of coordinated training, the fire service in Maryland had the potential of becoming fragmented. Instead of following the national trend to universal certification, Maryland was moving in the opposite direction. The need for a statewide fire-rescue training commission became apparent.

### Support

In Easton's system theory approach, support occurs when individuals or groups agree to abide by policy decisions and follow the law. In the case under discussion, a policy decision was reached to form the MFRETC. This policy was legitimized by an act of the Legislature in the form of House Bill 784 which established MFRETC.

The idea, make-up, and charge of MFRETC was first put forth by the Governor's Commission on Fire Services in January of 1975. Commission members represented all areas of the fire service and emergency medical service as well as the public.

A review of the witness list for H.B. 784 and a summary of public hearing testimony for S.B. 771 provided by the Department of Legislative Reference of the Maryland General Assembly, give insight into the political support for the commission legislation. The witness list indicates that 13 witnesses testified and only two were against the bill.

A review of public hearing testimony for Senate Bill 771 (Senate version of H.B. 784) also shows a broad base of overwhelming support for the commission concept. The predominant theme throughout the testimony is the need to coordinate emergency services education and training efforts in the state. Secondary to this is the need for mobility between organizations and the issue of professional qualifications.

After amendments to restructure representation on the MFRETC, place it under the State Board for Higher Education, and clarification of necessary staff support and funding, H.B. 784 and S.B. 771 passed the Legislature in 1976.

Conclusion

The formation of public policy is a complex phenomenon. The case under study in this paper involved many organizations and agencies at the local, state, and federal level, each organization having its own cause and purpose. To summarize, the system inputs which were transformed by the political system into the Maryland Fire-Rescue Education and Training Commission are presented below within the framework of Easton's system model (Easton, 1965; Dye, 1972).

**ENVIRONMENTAL INFLUENCES**  
 Maryland fire loss, firefighter death and injury, USFA training standards, professional qualification, increased accountability.

**DEMANDS**  
 MSFA  
 Increased FSE funding  
 Increased FSE staff  
 Autonomy for FSE  
 Ten Year Plan  
 Local Academies  
 Community Colleges  
 Training Standards  
 Central Focus

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**THE  
 POLITICAL  
 SYSTEM**  
  
 H.B. 784  
 H.B. 771

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**SUPPORTS**  
 Gov. Comm.  
 DEMS  
 Md. Municipal League  
 MSFA  
 Dept. Pub. Safety & Corr. Ser.  
 A.A. Co. F.D.  
 Md. Fire Chiefs Assoc.  
 Governor's Office  
 MCFRA

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## References

- Dye, T.R. (1972). Understanding public policy. Englewood Cliffs, New Jersey: Prentice Hall.
- Easton, D. (1965). A framework for political analysis. Englewood Cliffs, New Jersey: Prentice Hall.
- Governor's Commission on Fire Services. (1975). Report to Governor Mandel and the Maryland General Assembly by the Governor's Commission on Fire Services. Unpublished manuscript.
- Maryland Association of Counties, Inc. (1981). Fire protection and emergency services in the Maryland counties. Annapolis, MD: Maryland Association of Counties, Inc.
- Maryland State Firemen's Association. (1972). Report of the president's special committee for the development of firefighting and rescue education, training and facilities program (Vol. 1). Annapolis, MD: Maryland State Firemen's Association.
- Maryland State Firemen's Association. (1982). Proceedings of 90th annual convention. Annapolis, MD: Maryland State Firemen's Association.
- National Commission on Fire Prevention and Control. (1973). America burning. Washington, D.C.: U.S. Government Printing Office.
- Porter, F.E. (1984). History of the issue of Maryland certification for fire service personnel in summary. Annapolis, MD: Maryland Fire-Rescue Education and Training Commission.
- Stiverson, G.A. (Ed.). (1981). Maryland manual 1981-1982. Annapolis, MD: Department of General Services.



## CLERICAL WOMEN AS RETURNING STUDENTS

Marylee Bomboy<sup>1</sup>

### Abstract

This paper describes a follow-up study of 73 women clerical workers who completed a special one year nine college credit program between 1978 and 1983. The study utilized the critical incident technique supplemented by a questionnaire. Results showed that 64.4% continued with college after completing the program. Being promoted and having a career and/or education goal were strongly related to continuation. Also related were being single, childless, black or having an annual family income under \$15,000. Barriers to continuation were situational and psychological; lack of time was the major single barrier. Few institutional barriers were found.

### INTRODUCTION

#### The Program

Public Service Women's Studies (PSWS) is a year long, nine college credit program developed by Cornell University-New York State School of Industrial and Labor Relations' Institute for Women and Work and offered to clerical workers employed by the State of New York. The program has been offered in Albany, New York since 1978 and as of June 1983, 275 women had completed it.

The program was specifically developed to assist these clerical workers gain the skills, knowledge and confidence that would enable them to succeed in college and gain upward mobility on the job. Because a college degree is usually required for promotion from the clerical to the professional grades in New York State Civil Service, the program places emphasis on assisting students in transferring to another college program upon completion of PSWS.

Students in the program are self-selected. Most receive 50% tuition reimbursement from their agencies. All attend classes on their own time. The program year is divided into three 12-week terms, September-December, January-March, and April-June. Students attend classes one evening each week, immediately after work at a site convenient to state employees.

They take two courses each term and spend a total of just over three hours in class. Approximately six hours outside of class is devoted to homework each week. They earn 1.5 credits per course, three each term, or nine credits for the year. A 1.5 credit format is used to ease the transition back to school and also to allow students to sample six subject areas during the year.

The curriculum is non-elective and the subject matter (written communication, oral communication, interpersonal behavior, mathematics and supervision) was chosen to provide the skills and knowledge most useful to women seeking job advancement and continuing college study. Seventy-two percent of those entering the program between 1978 and 1983 completed the full year.

#### Purpose of the Study

The major purposes of the study were: (1) to determine how many women who completed the

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program actually continued their college education afterward; (2) to learn which colleges and programs were most successful in retaining these women; (3) to determine how the variables of age, marital status, number and age of children, ethnicity, family income, previous education, job situation, and husband's education level correlated with continuation; (4) to determine if critical incidents which facilitated or impeded continuation could be identified; and (5) to identify barriers which remain for working women who wish to continue their education.

## METHODOLOGY

The study described here is primarily a qualitative field study which sought to uncover barriers which remained for clerical women in pursuing higher education as well as to identify factors which facilitated continuation with college for completers of PSWS. Continuation was defined as having taken at least one college credit course since completing PSWS.

The study utilized the critical incident technique developed by John C. Flanagan in the 1940s. The technique is "essentially a procedure for gathering important facts concerning behavior in defined situations" (Flanagan, 1954, p. 339). In the present study participants were asked to describe specific incidents which either facilitated their continuation with college after the completion of PSWS or impeded it. Incidents were self-reports based on recall which subjects, meeting with the researcher in small groups, wrote on cards provided. Subjects were asked to describe as best they could an actual incident which was critical in their decision of whether or not to continue with college.

Incidents collected were then sorted into abstract categories according to guidelines provided by Flanagan (1954). Separate categories were developed for impeding incidents and for facilitating incidents.

Because of the limited use of the critical incident technique in studies of this type and the exploratory nature of this study, a questionnaire was developed to provide background data on participants as well as to provide a context in which to analyze the incidents.

Study participants were 73 clerical women who had completed PSWS between 1978 and 1983. Forty-seven of these women had continued with college; 26 had not. Twenty-four were enrolled at the time of the study. The study population was drawn from a possible universe of 275 program completers. Participants were self-selected in that they responded voluntarily to a letter sent to all members of the completing group. As a result there is probably response bias in the sample.

## FINDINGS

### Critical Incidents

Analysis of usable responses collected from 70 participants revealed that many of them did not provide an anecdote describing an event which was "sufficiently complete in itself to permit references and predictions to be made" (Flanagan, 1954, p. 327). Many subjects wrote general descriptions of life circumstances and attitudes which either facilitated or impeded college continuation. These general statements were termed "reasons" and analyzed with the critical incident data.

In analyzing the facilitating incidents and reasons provided by participants, four major categories emerged: (1) change in self-concept, (2) job change or advancement, (3) support of others, and (4) logistics. The largest number of responses fell into the categories of change in self-concept (20) and job change or advancement (15). Together these categories account for 35 of 44 or 79.5% of the total facilitating incidents and reasons given. Support of others was mentioned but seven times, and logistics, twice.

Impeding incidents and reasons were provided both by the 26 women who had not continued their education and by many of the 20 others who had continued at one point but at the time of the study were not enrolled in a college credit course.

In analyzing the impeding incidents and reasons received, it became clear that they could be divided into the three major categories of barriers to education described in the literature: (1) situational, (2) psychological, and (3) institutional (Tittle and Denker, 1980; Charner, 1980; Benjamin 1979; Wertheimer and Nelson, 1977).

The largest number of incidents and reasons given mentioned situational barriers (33). These included such factors as lack of time, financial constraints, health and family responsibilities. Psychological barriers, barriers which are within the women themselves, were mentioned 20 times; among these were age, lack of goal clarity, uncertainty of reward and preference for other activities. Institutional barriers such as inability to gain admission, scheduling problems, curricula, appeared only three times. Overall situational barriers played the greatest part in keeping these women from continuing their education. Of the 56 barriers mentioned, 59% were situational. Time was the major single barrier.

Slightly less than half of the subjects (47.9%) were able to provide critical incidents. This result brings into question the feasibility of using the critical incident technique as the sole method of data collection in this type of study. Yet the number of incidents received (42) was sufficient for the researcher to discern patterns and develop categories into which the reasons provided also fit. Additionally, the incidents and reasons provided a richer, more varied data base than straight-forward questioning would have done.

### The Questionnaire

A four page questionnaire was completed by all participants at the same time incidents were collected. Questionnaire responses provided a demographic description of continuing and non-continuing women as well as information on previous college experience, job status, and promotion.

Significant findings from the questionnaire were related to age, marital status, presence of children, ethnicity, income, goals, and achieving a promotion. Overall 64.4% of respondents had taken at least one college credit course since completing PSWS. The largest percentage of continuers were women in their 20s; 85.7% of completers in this age group continued. However, the majority of study participants were in their 30s and 40s as are the majority of PSWS students. Nearly 74% of women not currently married (including divorced, separated, widowed and never married) continued while 56% of currently married women continued. Of the women without children, 74% continued, while 60% of women with children continued. Although the population of the study was predominantly white, black women continued at higher rates. Six of seven black women in the study (85.7%) continued while 41 of 64 (64.1%) white women did. Surprisingly, women with family incomes of \$15,000 or less annually were more likely to continue than women in any other income group. Ten of 12 (83.3%) continued.

The importance of goal clarity was shown by the questionnaire to be strongly related to continuation. Forty-four of 47 continuers had a career goal; 41 of 47 had an education goal. Non-continuers were divided almost equally between those having a goal or not having a goal. A strong connection between promotion and continuation was also found. Of those women who were promoted since completing PSWS, 26 of 31 (83.9%) continued. Fifty-five percent of all continuers were promoted.

Continuers were found to have transferred to nine other institutions in the Albany area. The largest number (15) participated in a non-traditional degree program offered by the state university. Three had received degrees from this program and it appeared to be a popular choice because of the flexibility it allowed in earning a degree. However, nine of the 15 had withdrawn from this program before completion. From additional interviews it appears that the high degree of flexibility and the large amount of independent study required in such a program can be a problem for some of these women.

Fifteen other continuers chose among three private liberal arts colleges in the area. Of these nine were still enrolled at the time of the study. The remaining continuers chose community colleges (six, with four still enrolled), the state university (five, with two still enrolled), and another Cornell extension program (three, all still enrolled).

## CONCLUSIONS AND IMPLICATIONS

Major conclusions of the study are that clerical women do want to continue their education and that a large number succeed in doing so after completing a special one-year bridge program. They are, however, hampered by conditions of women's lives: family responsibilities, job responsibilities, and resultant lack of time. Financial constraints also play a role, although they were not reported as frequently as one might expect.

Women in this group attended college for many reasons but the major reason which emerged was the perceived connection between college attendance and upward mobility on the job. Often upward mobility was tied to increased earnings. The role of college attendance in strengthening the self-concept of participants was also confirmed by the study.

Numerous findings of the study have implications for adult educators. First, it is important to note that institutional barriers (curriculum, registration procedures, etc.) were not significant barriers for these women. Only three of 56 (5.4%) barriers mentioned were institutional. On the contrary, institutions of higher education were perceived as welcoming by this group and no one reported a problem in being accepted into another college program.

Institutions should, however, expect an "in and out" pattern of attendance from this group. Some 62% of study participants had some college experience before PSWS, and only 33% of those who had continued afterward were enrolled at the time of the study. It seems likely that many will eventually continue and even receive degrees, but their credits are likely to come from three or more institutions.

The strong connection between continuation and job advancement implies that institutions should strengthen curricula in such areas as business administration, public administration and computing and work with local employers in developing links between the college and the workplace. Adult students want to see some payoff on the job from their educational efforts.

Utilizing available tuition reimbursement is also important. Study participants usually received 50% tuition reimbursement. This reimbursement is important in overcoming financial barriers and is frequently underutilized by employed adults. Studies of tuition reimbursement have shown that typically under 5% of eligible workers use it (Lusterman, 1977; Gold and Charner, 1982).

## References

- Benjamin, Esther. Review Article: Barriers to Academic Re-entry Women and How to Overcome Them. Evanston, Illinois: Northwestern University, 1979.
- Charner, Ivan. Patterns of Adult Participation in Learning Activities. Washington, D.C.: National Institute for Work and Learning, 1980.
- Flanagan, John C. "The Critical Incident Technique." Psychological Bulletin 51 (1954):327-358.
- Gold, Gerald R., and Charner, Ivan. "Another Piece of the Financial Aid Puzzle: Tuition Aid Offered by Companies and Unions." The Chronicle of Higher Education 25 (September 29, 1982):56.
- Lusterman, Seymour. Education in Industry. New York: The Conference Board, 1977.
- Tittle, Carol Kehr, and Denker, Elenor Rubin. Returning Women Students in Higher Education. New York: Praeger, 1980.
- Wertheimer, Barbara, and Nelson, Anne. "Into the Mainstream: Equal Educational Opportunity for Working Women." Journal of Research and Development in Education 10 (1977):61-76.

Graduate Adult Education as a Socio-Cultural Product:  
A Cross-Cultural Analysis of Professional Preparation in the U.S. & U.K.

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Stephen Brookfield

Abstract

Adult education curricula and practices reflect wider societal structures and prevailing political ideologies. Graduate adult education programs can be analysed as social facts; sui generis realities which perpetuate and support existing world views, values, stereotypes, behavioral norms and ideologies. These programs are socio-cultural products and must be understood in terms of their cultural context. Graduate adult education programs in America and Britain are compared in terms of four analytical categories. Their methods, curricula, evaluative criteria and intellectual terrain are reflective of prevailing cultural forms.

The habit of viewing adult education curricula and practices as reflective of wider social structures and prevailing political ideologies seems unfamiliar to adult educators. This is in marked contrast to the world of elementary education where critical analyses of school curricula frequently demonstrate how school curricula perpetuate prevailing world views, stereotypes, societal values, ideologies and behavioral norms. Curricula are regarded not as acts of individual program design perpetrated by individual teachers in specific contexts, but rather as socio-cultural products; sui generis realities which can be studied as objective realities in much the same way we examine economic systems or political arrangements. This mode of analysis allows us to demonstrate how curricula are designed to be reflective of, and sustaining to, prevailing political and economic ideologies. What comprises a school curriculum in terms of a body of public knowledge, accepted ideologies, approved values and appropriate content, becomes a politically significant issue. If schools function to perpetuate prevailing ideologies, and if they legitimize a majority culture by socializing individuals to accept that culture, then curricular alterations which challenge the values of that culture become politically contentious.

Adult Education in America and Britain

American adult education, as presented in historical analyses, is cast within a liberal-democratic framework. Adult education is viewed as an enhancement to the realisation of individualism. This tradition is evident in the early writings of Lindeman, Bryson and others, through the Great Books program, to the current popularity of the related ideas of andragogy and self-directed learning. It is no accident that research and theory focusing on self-directed learning should be the major growth area in adult education in the U.S. in the last 15 years, yet be relatively unexplored in Europe. The finding that adults repeatedly design, conduct and evaluate their own learning in an independent manner is a perfect enhancement to the American ethos of rugged individualism.

In Britain, on the other hand, there is much less consensual agreement on what comprises any kind of central tradition. To many, the adult education movement is inextricably tied to the development of the trade union movement, the Labour party, and workers' education. To others, adult education is an intellectually inclined, cognitive activity, closer to liberal education. In contrast to the largely consensual, liberal democratic tradition evident in American adult education, then, British adult education is characterised by a clear division between adult educators concerning the importance of the connection between adult education

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and political activity. A very real debate rages in British adult education between those who view adult education in terms of individual cultural enhancement and those who set adult education within the context of social and political movements. No such public debate between clearly articulated polarities is currently present in American adult education.

There is also a difference between the two countries concerning the amount and intensity of attention devoted by adult educators to the question of what should be a suitable program for those seeking to join the profession. In the U.S. a substantial body of literature exists outlining the areas of knowledge to which future adult educators should be exposed, and the skills they should develop. In Britain, very little literature is available on this. This difference reflects the broader differences in the scale of the graduate adult education enterprise in the two countries. According to a number of external indicators (the number of universities engaged in training adult educators, the numbers of students enrolled in such programs, the number of faculty engaged full time in this work, the amount of research undertaken, the opportunities for publishing research) graduate adult education in the U.S. is on a much larger scale than that in the U.K. Quantitative differences do not, of course, necessarily reflect qualitative dimensions; there may be a law of diminishing returns applying to the amount of institutional and personnel resources invested in the training effort, and British university adult educators could certainly make a claim that the intimacy of their world makes for more meaningful contact with students.

### The Argument

The argument of this paper is simple. It is that the pragmatic tenor, individualistic ethos and entrepreneurial spirit of American culture is directly apparent in programs of graduate adult education. Conversely, it is also maintained that the political self-consciousness and awareness of historicity evident in British graduate programs, is a function of the wider society's more politicised nature. The two cultures exhibit differences in ideology, political structure and economic arrangement, which are reflected in their respective graduate adult education programs.

The United States is a culture of pragmatism and political consensuality. There is a broad acceptance of the capitalist ethic as the unchallenged and 'natural' mode of economic arrangement, with ideas of free enterprise and entrepreneurial spirit accepted almost as unchallenged givens. Inter-party differences reflected in the Democratic party's advocacy of higher levels of spending on public welfare programs compared to the Republican party's, must be understood as occurring within this consensus framework. Both parties unhesitatingly accept the capitalist, free enterprise ethic to be the embodiment of the American approach to economic management, reflecting the ideas of individuality and freedom which lie at the core of the culture.

This consensuality was commented on by Lindeman (1926, 1944). He urged as a major task for adult education the prompting of adults to consider the suitability of different economic arrangements (socialism, free enterprise, and the mixed economy) for democratic societies. He condemned the infusion of capitalist ethics into the educational enterprise. To Lindeman, capitalism was a doubtful, competitive ethic designed to favor the crafty, strong and truculent. He warned that the entire American educational system was becoming determined by its responsiveness to profit production.

As well as the virtually unchallenged acceptance of the capitalist, free enterprise ethic, there also exists in the U.S. a consensus on the range of political (that is, ideological) debate which is permissible. America, alone among members of the Western Alliance, does not contain within its political culture clearly articulated ideological polarities of left and right wing persuasions. In European societies adults are used to considering ideas, policies, propaganda and party statements drawn from a wide philosophical spectrum. There are right wing, left wing and centrist groupings in every political system and, at different times, ruling groups which subscribe to socialist, social democratic, capitalist and fascist ideologies. In European cultures, therefore, individuals are used to witnessing intellectual battles between clearly articulated and opposing ideologies. Governments of different political hues rise and fall, but one enters adulthood with a perspective that there are viable alternatives available in the way in which political and economic structures might be managed and altered. Adults are used to viewing, and participating in, vigorous debates concerning the merits of contrasting ideologies. They are

open to discussing prescriptive questions about which of a number of ideologies are better, more human, or more efficient.

No such consideration of a range of contrasting, alternative ideologies exists for the great majority of adults in the United States. There are, of course, debates between Democratic and Republican party adherents concerning the degree to which adjustments might be made to the free enterprise system to ensure that it encourages production, economic growth, and individual enterprise. The basic system is rarely criticised, however, concerning its fundamental correctness, either in ethical or economic terms. In contrast to European cultures, it is possible to reach adulthood in the U.S. with little awareness of any viable alternative to the free enterprise system, and with no comprehension of alternative political philosophies. In particular, social democratic and socialist philosophies are rejected out of hand as appropriate only to totalitarian communist societies. Given the frequent membership of social democratic and socialist governments (including England, France and Germany) among the chief European allies of the U.S. since 1945, this apparent rejection of alternative political philosophies is often difficult for Europeans to understand.

Coming to view a society's operations, and perhaps one's own life, in terms of opposing and competing class interests, encourages a world view very different from the consensual perspective so typically American. One becomes used to viewing society not as a plurality of mutually complementary sub-cultures, in which individual initiative is rewarded with status and money, but as a perpetual arena of class and sub-cultural warfare. In such an arena education is frequently claimed by various antagonists to be an arm of the struggle for equality, efficiency, productivity or revolution. Hence, in Europe it is quite usual to view education as a tool of social reform or social engineering. It is assigned a pro-active role and seen as having the prime function of creating a certain social order, rather than simply being required to adapt to the requirements and demands of free market forces.

There are, of course, American educators who subscribe wholly to the view of society as composed of competing class, sub-cultural or ethnic interests, which I have characterised as 'European'. A number of adult educators have interpreted Freire's ideas in the context of the U.S. and have outlined a liberatory function for adult education as the prompting of adults to create more congenial, participatory, community structures. The connection between reflective learning and collective action has been at the heart of the Antigonish movement and the Highlander Folk School. On the whole, however, this perspective is severely under-valued in the intellectual mainstream of American adult education.

#### Graduate Adult Education as a Socio-Cultural Product: Analysis

A number of general propositions have been advanced regarding the contrasting natures of American and British cultures, respectively. It is now important to consider, through the use of 4 analytical categories, the manner in which graduate programs of adult education reflect the wider culture of which they are a part.

##### (1) Historicity

Historicity refers to the awareness of actions, social structures, and belief systems as historical products. Individuals possessing a sense of historicity view contemporary events not as a-historical, pragmatic adaptations to previously unforeseen eventualities, but as determined, at least in part, by previous events. Within British departments, faculty (at least to many Americans) appear to be preoccupied with the historical origins of British adult education. In graduate research and in the availability and prescription of courses on history in British departments, it is clear that in Britain it is impossible for diploma or master's degree students to complete their degrees without a thorough grounding in the history and traditions of the field.

In the United States, however, historical analyses of the development of adult education in America are rarely undertaken either as major scholarship efforts by faculty or for master's and doctoral dissertations. The emphasis of researchers is firmly on applied research. As the most recent synthesis of research observes, "the historical dimensions of adult education in the United States are impoverished" and "unusually weak" (Long, 1983, p.264). A study of graduate adult education students throughout 37 departments in American universities found students to be generally ignorant of historical works (Day and McDermott,

(1980). This is not surprising when the history of adult education is frequently compressed into a 'foundations' course along with sociology, psychology and philosophy of adult learning.

## (2) Political Context

In British departments of adult education faculty frequently require students to explore the place of adult education within movements for social and political change. Courses on the history, philosophy and sociology of the field discuss the connections between adult education and workers' education, the women's movement, the history of the Labour party, the trade union movement, and community action initiatives on behalf of the unemployed, ethnic minorities, and disenfranchised groups. This perspective generally does not inform graduate adult education in the United States. There is a dearth of courses on the community activist dimensions of adult educational work, and a noticeable absence of any attention to the history of the American labor movement.

## (3) Philosophical Orientation

The absence of a philosophical dimension from current discussion in American adult education is a socio-historical conundrum of considerable interest. The habit of engaging in vigorous debate on alternative prescriptive purposes for adult education is comparatively rare. The 1980 Adult Education Association of the United States Handbooks series, for example, contained no volume devoted to charting a philosophical mission for the field. Nowhere was there a sustained analysis of the philosophical purpose of adult education or a discussion of the criteria by which we might judge whether or not that purpose was being realised. This is in sharp contrast to the 1950's when a ferment of philosophical discourse bubbled within the pages of Adult Leadership and Adult Education. The AEA/USA committee on social philosophy and direction finding published seven principles to guide the American adult education movement (Pell, 1952) and Kallen, Bergevin and Powell all published major treatises on philosophical aspects of adult education. In the 1980's, however, such philosophical discussions run the risk of being perceived by professionals as immature and amateur meanderings, not conducive to the dignity of the profession. The current tenor of American adult education is pragmatic and technical, and debate on fundamental purposes or philosophical rationales is likely to be regarded as an indulgence and as peripheral to the task of creating a professional community.

In Britain, however, graduate students are typically exposed to a debate within the prescriptive realm concerning what should be the proper purposes of adult education. There are debates on the social role of adult education, calls to make explicit its political relevance, and injunctions to attack current policy priorities. Students are used to considering contrasting philosophical orientations within their academic studies, from the liberal educational viewpoint to social activism. Both analytic philosophers and social activists challenge the felt needs rationale whereby adult education is seen as equivalent to providing for the expressed demands of adult learners. To both groups adults are seen as not always being the best judge of their interests, and as being locked within narrowly constraining paradigms of thought and action which prevent them from ever imagining alternatives to their current ways of thinking and living. In American graduate programs, on the other hand, there is a broad acceptance of an academic orthodoxy which takes the following form; adults are innately self-directed as learners, therefore the task of the facilitator (not the teacher) is to assist adults achieve any learning goals they have defined. Such facilitation is felt to be democratic and student centered.

## (4) Competencies required of Professionals

Specifications of the armoury of adult education skills, knowledge and affective attributes deemed desirable for adult educators to possess are common in the American literature of the field. There is also a substantial body of work on how best to acquire the skills considered desirable in these analyses. Aspiring adult educators attending courses designed to improve their professional performance will become familiar with a formidable body of literature concerned with techniques of needs assessment, objectives setting, design of instruction, management of instruction, budgeting, marketing, advisement, counseling and evaluation. Courses concerned with the development of these programmatic, instructional and administrative skills are the staple diet of the American graduate adult education curriculum.



Students enrolled for a master's or doctoral degree in adult education will typically be required to take courses on Program Planning, Methods of Instruction, Organization and Administration of Adult Education, Evaluation, and Staff Development and Training. A course on the history, philosophy and sociology of adult education would most likely be viewed as an introductory, ground clearing exercise before beginning the 'real' business of improving technique. The consummate adult educator, according to this system, is the one who exhibits a mastery of the varied skills of needs assessments, setting objectives, designing and managing instruction, and evaluating adult education programs.

This is very different from the curriculum of graduate adult education found in British universities. It is not uncommon for students to take separate courses on the history, philosophy and sociology of adult education. Whereas in the U.S. these areas of inquiry are frequently integrated into one overview, foundations course, in Britain they are felt to be of such individual significance as to be deserving of separate courses. In British graduate programs, therefore, the professionally trained adult educator is seen in a very different way from that pertaining in the U.S. Instead of conceiving of a professional as one familiar with a battery of program developmental, instructional and evaluative skills, a professional is viewed as someone who can place the operations of adult education within a broader historical and sociological context. A professional will be aware of the historical antecedents to the current state of adult education, and will have considered the extent to which adult education structures enhance social mobility, further social transformation, or support existing economic and ideological structures. A professional will also be familiar with a range of contrasting ideological positions regarding the proper philosophical purposes of adult education. Courses, assignments, theses and literature concerning techniques of needs assessments, program planning models, approaches to setting objectives, budgeting and marketing procedures, and evaluative methods, are most emphatically not the staple diet of graduate adult education in British universities. Students are far more likely to spend a considerable amount of time writing assignments, taking courses, producing dissertations and reading books concerned with the history of adult education, with the philosophical divergences inherent in alternative interpretations of the field, and with the socio-political dimensions to adult education practice. A central concern becomes identifying what ought to be the central purpose of adult education, whether this be the development of discriminatory capacities appropriate to a liberally educated adult, or working in an adult educational capacity with political action movements.

### Conclusion

The foregoing comments do not presume to be definitive. They are intended as a contribution to debate, a prompt to encourage others to continue the work of building a body of comparative adult education literature. Individual instances can no doubt be cited which contradict the typologies or generalizations advanced within this paper. The central point is intact. The organization, curriculum, literature base, methods, evaluation and intellectual orientation of graduate adult education must be understood as reflective of the broader culture, not as a series of institution and person-specific actions or preferences. It is hoped that future investigations of adult education organization and practice - intra-cultural as well as inter-cultural - will place their analyses firmly within an appreciation of the manner in which adult education is a socio-cultural product, reflective of, and often sustaining to, wider structures and prevailing ideologies.

### References

- Day, M. & McDermott W. (1980). "Where has all the history gone in graduate programs of adult education?" Paper presented to National Adult Education Conference, St. Louis, November, 1980.
- Lindeman, E.C.L. (1926). The meaning of adult education. New York, New Republic.
- Lindeman, E.C.L. (1944). "New needs for adult education." Annals of the American Academy of Political and Social Sciences, No. 231
- Long, H.B. (1983). Adult Learning: Research and Practice. New York: Cambridge Books
- Pell, O.A.H. (1952). "Social philosophy at the grass roots" Adult Education, 2, (4), 123-32

# DETERRENENTS TO PUBLIC PARTICIPATION IN ADULT EDUCATION

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## Abstract

This study sought to identify the factors that deter the general public from participating in organized adult education. An instrument modeled on the Deterrents to Participation Scale (DPS) reported in an earlier study (Scanlan & Darkenwald, 1984) was developed and administered to 215 randomly selected members of the adult public. Principal components analysis yielded six orthogonal factors labelled Lack of Confidence, Lack of Course Relevance, Time Constraints, Low Personal Priority, Cost, and Personal Problems. These conceptually meaningful factors hold promise both for theory-building in the area of participation and for the development of practical strategies to increase the number of adults who engage in organized learning activities.

## PURPOSE OF STUDY

The present inquiry sought to extend Scanlan and Darkenwald's (1984) research on deterrents to participation in health-related continuing professional education in order to enhance its generalizability and thus its utility for contributing to a general theory of participation behavior. The two research objectives reported here were:

- (1) To construct a generic form of the Deterrents to Participation Scale (DPS-G) to measure deterrents among the general adult population; and
- (2) To identify the source variables or factors that deter the general adult public from participation in organized adult education activities.

Adult education was defined as any organized learning activity for adults, including courses, workshops, seminars, and training programs offered by schools, colleges, and other organizations or community groups. The definition of the general adult population was necessarily broad: all non-institutionalized persons, 16 or older, not enrolled full-time in a school, college, or other educational institution.

## METHODOLOGY

### Sampling & Data Collection

The research required a reasonably large and heterogeneous sample of the general adult public. To draw such a sample, a commercial mailing firm was engaged. The firm's specially programmed computer generated a random sample of 2,000 households from the total population of households in Somerset County, New Jersey. The DPS-G, in printed booklet form, and a business reply envelope were mailed to the 2,000 households in August, 1984. Usable questionnaires were returned by 215 individuals for an unadjusted response rate of 10.7%. The very low response rate (which was anticipated) was of little import for the purposes of this study. First, no inferences were to be made to the total population of the county. Second, and more to the point, no sample, except a random national one, can be truly representative of the general adult population. The external validity of the study's findings -- that is, their stability across time and place -- can only be established by replication. This is true for all factor-analytic research.

### Instrumentation

In developing the Deterrents to Participation Scale - Form G (DPS-G), it was judged necessary

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to begin the instrument construction process de novo rather than to merely revise or adapt the original DPS. The first step in constructing the DPS-G was to develop an interview schedule to obtain information on deterrents from diverse groups of adults (N=72) ranging in socioeconomic status from flea market vendors to members of a church choir in an upper middle class congregation. Next, a prototype DPS-G was developed by assembling, in random order, a list of deterrents to participation identified through the interviews, the original DPS instrument, and an exhaustive search of the literature. Following elimination of idiosyncratic and semantically equivalent statements, 58 items were retained for pretesting. Item clarity was assessed by soliciting criticism from a sample of 117 socioeconomically diverse members of the adult public, who in addition completed the prototype DPS-G. The prototype scale was subjected to standard item analysis procedures, including a measure of internal consistency. Despite high reliability ( $\alpha=.91$ ), analysis of respondent comments and item statistics indicated that the scale could be both improved and shortened by revising or deleting certain items. The primary statistical criteria for deleting items were very low mean importance scores, low item-to-total scale correlation and redundancy as manifested by extremely high inter-item correlations. As a result of the pre-test, several items were revised and 24 of the original 58 were deleted. The alpha reliability coefficient for the shortened, final version of the DPS-G was .86. Support for the scale's content validity is implicit in the elaborate procedures for item selection described above.

Respondents to the 34-item DPS-G were first provided with the definition of adult education given above, followed by the statement "However, adults sometimes find it hard to participate in these activities, even when they want to. Try to think of something -- anything at all -- that you wanted to learn in the past year or two, but never did. Then look at the reasons below and decide how important each one was in your decision not to participate in an educational activity. (please note: in the questions below the word 'course' refers to any type of educational activity including courses, workshops, seminars, etc.)." A sample item is given below:

<u>SAMPLE.</u> 1. Because I felt I	Not	Slightly	Somewhat	Quite	Very
couldn't compete	Important	Important	Important	Important	Important
with younger students	1	2	3	4	5

### Data Analysis

- Because no theoretical basis existed for predicting the factor structure of the DPS-G items, exploratory factor analytic procedures were utilized. A principal components analysis was employed to extract the initial factors. The numbers of factors retained for rotation was determined by the Kaiser criterion. To obtain uncorrelated factors with the simplest possible structure (maximization of the variance of the squared loadings in each column of the factor matrix), orthogonal rotation using the Varimax procedure was utilized to reach a final solution. An oblique rotation (Promax) was also computed in the event that it might yield a conceptually more meaningful solution. Interestingly, the oblique rotation generated factors that were identical to the orthogonal solution (i.e., the same items loaded .45 or higher on each factor).

## RESULTS

### Factor Analysis

- Although 9 of the factors initially extracted by principal components analysis met the criterion for retention (an eigenvalue of 1.0 or greater), a more parsimonious solution was pursued. Four terminal factor solutions representing 3, 4, 5 and 6 components were computed using the Varimax procedure. After inspection of the rotated factor matrices, the 6-factor solution was selected as the conceptually most meaningful representation of the data, accounting for 53% of the scale variance. Tables 1 through 6 present the DPS-G items, item ranks (1 - 34), item means, and factor loadings for each of the six factors. Only those variables loading at .45 or greater were used to define a given factor. Overall scale reliabilities (alphas) for the six factors were .87, .83, .72, .64, .75, and .40 respectively. None of the DPS-G items loaded on more than one factor and the majority of the loadings were substantial (.60 or higher). Thus the final solution, with a factorial complexity of zero, met the most rigorous criteria of simple structure. Only three items failed to load on any factor. These were items 12, 16, and 33: "Because I didn't know about courses available for adults," "Because of transportation problems," and "Because I prefer to learn on my own." Mean importance scores for these items were 1.82, 1.37, and 1.52 respectively. The overall mean importance score for the 34 items

scale was 1.82, roughly equivalent to the scale descriptor "slightly important." Thus, as was the case with the original DPS items (Scanlan & Darkenwald, 1984) and Boshier's (1971) Education Participation Scale items, individual item means were generally low.

### Interpretation of Factors

**Factor 1.** The variables loading on this factor tend to convey self-doubt, diffidence, and low academic self-esteem. The items concerning lack of encouragement from friends and family can be interpreted as indirect sources of self-doubt and diffidence reinforced or mediated by the influence of significant others. Consistent with prior research, these largely dispositional variables were ascribed relatively low magnitudes of importance by the respondents. "Lack of Confidence" seemed to be the most appropriate label for this factor, particularly since the "marker" items (those with the highest loadings) strongly conveyed this quality.

**Table 1 - Variable Loadings, Item Means, and Scale Ranks for Factor 1: Lack of Confidence**

Variable	Loading Value	Item Mean	Scale Rank
Because I was not confident of my learning ability	.83	1.62	18
Because I felt I couldn't compete with younger students	.81	1.47	24 (tie)
Because I felt I was too old to take the course	.77	1.42	26
Because I felt unprepared for the course	.75	1.46	25
Because I didn't think I would be able to finish the course	.61	1.63	17
Because my friends did not encourage my participation	.61	1.22	29
Because I didn't meet the requirements for the course	.60	1.41	28
Because my family did not encourage participation	.50	1.47	24 (tie)

**Factor 2.** The variables comprising this factor clearly convey a perceived lack of relevance, appropriateness or fit between available learning opportunities and respondents' perceived needs and interests. The "poor quality" item, while introducing a new dimension, is not inconsistent with the foregoing interpretation. These predominantly "institutional" variables were assigned moderate to high degrees of importance by the respondents. "Lack of Course Relevance" was selected as the label that best captured the meaning of Factor 2.

**Table 2 - Variable Loadings, Item Means, and Scale Ranks for Factor 2: Lack of Course Relevance**

Variable	Loading Value	Item Mean	Scale Rank
Because the available courses did not seem useful or practical	.82	1.98	9
Because I didn't think the course would meet my needs	.74	2.00	8
Because the courses available did not seem interesting	.70	1.94	11
Because the courses available were of poor quality	.70	1.57	20
Because I wanted to learn something specific, but the course was too general	.64	1.83	12
Because the course was not on the right level for me	.62	1.78	14

**Factor 3.** Initial inspection of the five variables loading on this factor suggests "lack of time" as the obvious factor label. However, the second, fourth and fifth highest loading items indicate a more subtle interpretation -- time constraints rather than an absolute lack of time. For this reason, and because "time constraints" subsumes simple lack of time, Factor 3 was labelled "Time Constraints." It is notable, as indicated by item means and scale ranks, that the respondents assigned greater importance to this factor than to any other.

**Table 3 - Variable Loadings, Item Means, and Scale Ranks for Factor 3: Time Constraints**

Variable	Loading Value	Item Mean	Scale Rank
Because of the amount of time required to finish the course	.77	2.40	6
Because I didn't think I could attend regularly	.65	2.54	4
Because I didn't have the time for the studying required	.64	2.93	3
Because the course was scheduled at an inconvenient time	.64	3.02	1
Because the course was offered at an inconvenient location	.52	3.00	2

**Factor 4.** Viewed as a whole, the items constituting Factor 4 are indicative of lack of motivation or interest with respect to engaging in adult education. However, the quality that comes through most strongly as best characterizing the majority of items is marginal or low priority. Factor 4, therefore, was labelled "Low Personal Priority." Three of the five items were assigned relatively low importance ratings; those dealing with infringement on leisure and family time, in contrast, were ranked near the top of the scale. So too, it might be recalled, were the Time Constraint items defining Factor 3.

**Table 4 - Variable Loadings, Item Means, and Scale Ranks for Factor 4: Low Personal Priority**

Variable	Loading Value	Item Mean	Scale Rank
Because I'm not that interested in taking courses	.65	1.56	21
Because I wasn't willing to give up my leisure time	.64	2.03	7
Because I don't enjoy studying	.56	1.64	16
Because participation would take away from time with my family	.52	2.47	5
Because education would not help me in my job	.52	1.49	23

**Factor 5.** This factor hardly needs interpretation. All three items pertain directly to cost and therefore Factor 5 was labelled "Cost." Mean importance scores varied from relatively high on the registration and course fees items to relatively low on others.

**Table 5 - Variable Loadings, Item Means, and Scale Ranks for Factor 5: Cost**

Variable	Loading Value	Item Mean	Scale Rank
Because I couldn't afford miscellaneous expenses like travel, books, etc.	.87	1.60	19
Because I couldn't afford the registration or course fees	.86	1.82	13
Because my employer would not provide financial assistance or reimbursement	.50	1.55	22

**Factor 6.** Four of the five items comprising this factor reflect situational difficulties related to child care, family problems, and personal health problems or handicaps. The fifth item, "the course was offered in an unsafe area" does not seem to fit the dominant pattern. It might, however, be viewed as a concomitant of personal health problems or handicaps. Mean importance scores ranged from comparatively high to comparatively low. Factor 6 was labelled "Personal Problems."

**Factor 6 - Variable Loadings, Item Means, and Scale Ranks for Factor 6: Personal Problems**

Variable	Loading Value	Item Mean	Scale Rank
Because I had trouble arranging for child care	.57	1.73	15
Because of family problems	.54	1.44	27
Because of personal health problem or handicap	.46	1.19	30
Because the course was offered in an unsafe area	.46	1.95	10

## CONCLUSIONS

The six factors identified in an analysis of the DPS-G represented well-defined and conceptually meaningful components of the deterrent construct. As expected, the factor structure of deterrents to participation among the general public differed substantially from that of the narrower, more homogeneous population studied by Scanlan and Darkenwald (1984) using the original DPS. Only one factor, Cost, was identical. It can be concluded from the differing findings of these two studies that modified or specially developed DPS instruments are needed to measure deterrents for distinctive sub-populations. Both studies provide support for the multidimensionality of the deterrents construct; in both studies, the underlying structure was found to differ substantially from an earlier intuitive conceptualization by Cross (1981). Specifically, with regard to the "situational" category of deterrents, three distinct source variables emerged: Time Constraints, Cost, and Personal Problems. With respect to intuitive conceptions of "institutional" deterrents, only one factor, Lack of Course Relevance, fits this category,

whereas Cross has enumerated several sub-categories, such as lack of information, inconvenient scheduling, and transportation problems. Finally, of the six factors identified in the present study, only one matched Cross' definition of "dispositional " barrier, namely Lack of Confidence. The Low Personal Priority Factor contained two dispositional-type items, but overall seemed to be unrelated to any of Cross' three inductively derived categories.

One final point merits mention. As expected, the majority of the importance ratings (item means) on the DPS-G were low, ranging between "Not Important" and "Slightly Important" (that is, between the scale values 1 and 2); as noted above, the overall mean importance rating was 1.82. The pattern of low item means also characterized the original DPS in the Scanlan and Darkenwald study. From this, it seems logical to conclude that an individual's decision not to participate in organized adult education is typically due to the combined or synergistic effects of multiple deterrents, rather than just one or two in isolation.

#### IMPLICATIONS FOR PRACTICE

Practitioners can utilize the DPS-G in its present form for the purposes of program planning and market analysis. The simplest procedure is to mail the instrument to a large and, if possible random sample of potential participants. Simply by calculating the item means, practitioners can identify which deterrents and, more broadly considered, which deterrent factors, are most negatively affecting participation among the target population, and thus identify problems to remedy in an attempt to increase participation. Some deterrents will be well within the control of program planners (e.g., course location or the provision of on-site child care); others will be beyond their control (e.g., lack of interest or employer reimbursement). Further, by simultaneously collecting sociodemographic data, practitioners can determine the differential impact of selected deterrents on sub-populations of interest (e.g., homemakers, the poor, minorities, etc.).

#### References

- Boshier, R.W. (1971) Motivational orientations of adult education participants: A factor analytic exploration of Houle's typology. Adult Education, 21, 3-26.
- Cross, K.P. (1981) Adults as learners. San Francisco: Jossey-Bass.
- Scanlan, C. & Darkenwald, G.G. (1984) Identifying deterrents to participation in continuing education Adult Education Quarterly, 34, 155-166.

MARKET RESEARCH: WHAT CONTINUING EDUCATORS CAN  
LEARN FROM CURRENT STUDENTS

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Abstract

The studies described represent consumer research within continuing higher education. Current students in continuing education credit courses were surveyed in summer and fall, 1984 regarding ways in which they learned about classes and decided to attend, scheduling preferences, satisfaction with aspects of their campus, and demographic information. Survey results provided a clear, systematic picture of the continuing education students being served currently and gave some feedback on advertising methods. The information has been useful in subsequent program planning and promotion efforts.

INTRODUCTION AND PURPOSE

Market research has become an increasingly important planning tool in continuing higher education. Much has been written about gathering data from potential students, but there has been less emphasis on current students; yet they can be an important source of information and feedback concerning an institution's current program and promotional methods.

Information about the students currently being served provides a picture of an institution's demand population, allowing the institution to reach this population more effectively. Likewise, research on current students reveals populations which are not being served, thus enabling an institution to consider strategies to attract new audiences.

Although current students may appear to be a captive audience, in fact they are an increasingly mobile group who can change colleges with greater ease than they once could. They also influence the image that an institution has, according to Fram (1982). He suggests that for these reasons it is important to monitor their perceptions of their college or university.

Continuing education administrators within The Pennsylvania State University's Commonwealth Educational System recognized the desirability of learning more about their own students. In particular, they were interested in those students taking credit courses through continuing education at Penn State's seventeen Commonwealth campuses. They asked Planning Studies, the system's applied research unit, to conduct major system-wide surveys in the summer and fall of 1984.

George (1984) has indicated that while gathering demographic information on current students provides market definition, it does not clarify why a student chooses a particular institution or the degree of satisfaction with that choice. The approach followed in the studies described here goes beyond collection of demographic data to determining reasons students enrolled in continuing education credit courses at a specific institution, sources of information about the courses, specific scheduling preferences, and satisfaction with various aspects of campus life.

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The summer program at Penn State's Commonwealth Campuses differs from the program offered during the regular academic year in that the entire program is administered through continuing education. Therefore, all summer students taking credit courses were surveyed. However, during the regular academic year continuing education offices administer primarily evening courses or daytime courses geared to nontraditional adult learners. This fall only those students enrolled in one or more continuing education credit courses were surveyed. It is important that the distinction between the summer and fall respondent groups be recognized.

#### METHODOLOGY

The surveys were undertaken as a collaborative project. For both the summer and fall surveys, survey coordinators were appointed at each campus. In most cases, the coordinators were the directors of continuing education. Survey coordinators provided input to Planning Studies during the questionnaire construction process. In addition an advisory committee representing student services, academic affairs, and continuing education worked with Planning Studies on the fall survey. Committee members were helpful in refining the questionnaire to be used in the fall survey and in planning data analysis and report preparation.

The questionnaires used in the summer and fall surveys were very similar. Versions of them had been used in two small pilot studies earlier. The following types of information were solicited from both groups of respondents.

1. demographic information, including age, sex, highest level of education completed, employment status, attendance and degree status, and length of time since last enrollment in college credit courses
2. sources of information about the credit course program
3. reasons for enrolling in course(s)
4. preferences regarding registration, scheduling, and class location
5. satisfaction with various campus services, facilities, and procedures

Some questions were included in only one of the questionnaires. Only summer students were asked if they were students during the regular academic year. In the fall survey, respondents were asked about previous enrollment in Penn State continuing education courses, reasons for choosing to attend Penn State, preferred length of academic session, future plans, and approximate round trip mileage to and from class.

In order to facilitate data entry, the questionnaires were printed on a two-sided electronic scanning form. Survey coordinators at each campus were responsible for actual data collection, following procedures outlined by Planning Studies. The coordinator at each campus arranged for the campus executive officer to write a memorandum to course instructors asking them to distribute the questionnaires in their classes the following week. Directions to be read aloud to students and a sufficient supply of questionnaires were given to each instructor. Each student was asked to complete only one questionnaire regardless of the number of courses being taken. The questionnaires were administered during the third week of the summer session and the fifth week of the fall semester. They subsequently were returned to Planning Studies for data analysis. Data from all students taking summer courses were analyzed. However, in an effort to focus further on nontraditional students, fall survey data were analyzed only for respondents who were at least twenty-three years old or who were taking no more than three credits of coursework during the daytime. This eliminated traditionally aged, full-time students filling out their schedules by taking an evening course.

For both the summer and fall surveys, each coordinator was asked to complete a questionnaire regarding their program. Details concerning program planning, marketing, scheduling, and operation were sought for later use in preparation of the survey reports. Reports that included survey results and recommendations for future program planning and marketing were prepared for each campus and the entire system.



## RESULTS

### Summer Survey

The typical summer survey respondent was a traditionally aged student who attended Penn State full-time during the year and wanted to complete one or two extra courses during the summer session. Forty-four percent of all respondents were enrolled for summer at the same campus they attended during the academic year. An additional 20 percent attended the main Penn State Campus at University Park during the academic year. Exactly half of the summer students were taking one to three credits of coursework.

Most respondents heard about the program through a brochure mailed to their home or through a special system-wide tabloid. Very few students learned about the summer program from their place of employment or the radio. Effectiveness of newspaper advertisements varied at different locations; overall, they were not a major source of information, but at a few locations they were important.

A majority of respondents enrolled in courses needed to meet degree or certificate requirements. Other frequently cited reasons for enrollment were to maintain schedule sequence and to take advantage of a location near home.

Among summer students, classes which met twice weekly in the evening were preferred. A substantial minority of students were interested in shorter, more intense classes. One caveat that must be considered, however, is that students who did not find a particular campus's schedule workable would not have enrolled at that location and thus were not included in the survey.

### Fall Survey

The fall survey included almost 5,000 students at the seventeen campuses. Using the previously cited definition, 3,152 of these were classified as nontraditional students. Unlike the summer survey respondents, a majority (57.8 percent) of the nontraditional students were female. Their ages were considerably older; two thirds were between the ages of twenty-three and forty. However, there was a sizeable group of students younger than twenty-three who were considered nontraditional because they were taking no more than three credits during the daytime.

The majority of nontraditional students were working full-time and taking courses on a part-time basis, although about half said that they were enrolled in a degree program. Almost 50 percent were taking one to three credits in the evening and an additional 30 percent were taking between four and six credits. The highest proportion of the students had one to three years of college and had been enrolled in credit courses within the past year. Sixty percent said that they had taken a continuing education course prior to the fall semester.

Major sources of information about the fall program were similar to those frequently cited by summer survey respondents with the exception of the system-wide tabloid, which is strictly a summer promotional piece. Brochures mailed to homes were mentioned by the largest proportion of nontraditional students. Information conveyed through employers appeared to be more effective for fall students than it had been in the summer session.

As in the summer, most students enrolled to take courses needed for a degree or certificate. Career-related reasons also appeared to be important; at least 30 percent of the nontraditional students enrolled to upgrade skills, change careers, and/or improve income. Personal enrichment was one reason for enrolling for 43 percent of the students. Students most often mentioned choosing a particular Penn State campus because of the convenience of its location.

The following scheduling preferences were revealed.

- Over 40 percent of the nontraditional students said that they ideally would like to take at least seven credits of coursework during an academic session if the scheduling were convenient and the courses they wanted were being offered.
- About three quarters of the nontraditional students preferred courses which meet in the evening. Vary few respondents were interested in weekend courses.
- Exactly half of the nontraditional students preferred classes which meet twice a week.

### IMPLICATIONS

Survey results hold numerous implications for continuing education administrators at Penn State's Commonwealth Campuses. On the basis of survey results and current practices at each campus, Planning Studies made specific recommendations for each location. Comparisons were made between available registration methods and student preferences, and actual class schedules and scheduling preferences. Areas which received relatively high dissatisfaction ratings were mentioned so that they could be examined in greater depth. Advertising methods used were compared with sources of information cited most frequently by respondents in order to provide an assessment of the relative effectiveness of different marketing strategies. Suggestions for reaching different market segments were given.

The survey methodology and results are also relevant for continuing educators in other settings. The rationale for the studies is valid in any institution. The methodology proved manageable in a large, dispersed educational system and should be workable in other places as well. The survey instrument could be modified to reflect the information needs of a specific institution, but the basic elements are easily transferable.

Although the results apply specifically to Penn State's Commonwealth Educational System, some findings may be generalizable to other institutions. For example, survey findings regarding marketing strategies paralleled those reported by Campbell and Spiro (1982). In a study of SUNY-Brockport's advertising methods, they found that radio advertisements captured the attention of only a small percentage of current students. Newspaper advertisements also were relatively ineffective, but direct mail was found to be an effective approach. Penn State's experience, which was similar to Brockport's, might well be common at other institutions. Although media advertising might be valuable in stimulating public awareness of courses, continuing education administrators probably should explore ways of increasing its effectiveness as a student recruitment method.

The surveys described yielded useful information which aided continuing education administrators during their planning for upcoming academic sessions. As colleges and universities continue to reach out to nontraditional learners, information about those students currently enrolled can guide them in their efforts.

### References

- Campbell, J.H. and Spiro, L.M. "Evaluation of the Impact of Media Marketing Strategies on Continuing Education Enrollments." Paper presented at the Annual Forum of the Association for Institutional Research, Denver, Colorado, 1982. ED 220 026.
- Fram, E.H. "Maintaining and Enhancing a College or University Image." Paper presented at Annual Forum of the Association of Institutional Research, Denver, Colorado, 1982. ED 220 044.
- George, R.J. Adult Versus Traditional Age Students: A Comparison of Their Self-Concepts. In W.M. Rivera and S.M. Walker (Eds.), Lifelong Learning Research Conference Proceedings, College Park, MD: The University of Maryland, 1984.

COMPETENCE AND CAREERS:  
A STUDY RELATING COMPETENCES ACQUIRED IN COLLEGE  
TO CAREER OPTIONS FOR LIBERAL ARTS GRADUATES

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Abstract

This study identifies abilities managers use and characteristics they perceive as necessary for their work, and relates them to basic competences taught for within the liberal arts curriculum, and to career options. The research question underlying the project was: "Can a marketable skills data base be created to link measurable generic competences acquired in college to specific career fields?" The purpose of the study was to assist liberal arts students to achieve more diverse employment and promotion opportunities by generating a data base of current information relating competences acquired in college to specific career fields and jobs.

PURPOSE

Liberal Arts students come to college in various stages of decision or indecision about career and life direction. Some are without specific career objectives; others seek educational opportunities to improve their career potential; still others can identify career options, but are uncertain about how to communicate their abilities to the employer. The purpose of this study was to assist the liberal arts student to link personal, measurable generic abilities to specific occupations by generating a data base of current information relating competences acquired in college to specific career fields and jobs.

METHODOLOGY

The procedures used in this study are patterned after the seminal research of Marcia Mentkowski and her colleagues (1982). Through 134 on-site interviews conducted by eighteen Alverno College faculty and staff, the performance and perceptions of seventy-three managers from sixty-six Milwaukee area organizations were collected. So that measurable data could be obtained, the interviews were structured following the "behavioral event interview" format introduced by McBer and Company (1978). This data was then analyzed using two models for describing competence: The Alverno College Competence-Based Learning Program (1972, rev. 1980); and the McBer and Company Coding Manual for Clusters and Skill Level Competencies (1978). Because the managers interviewed spoke from a specific job context (i.e., a particular job performed within a given career field and type of organization), we were able to establish direct relationships between competences acquired in the liberal arts curriculum and careers.

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The data gathered as a result of the present study are descriptive. Coming as we did from the perspective of career development, our purpose was not to validate previously stated hypotheses. Rather our intent was to gather information on the criteria for successful performance and upward mobility applied by employers in a variety of career fields. Our task was to relate that information to abilities acquired in college.

## RESULTS AND DISCUSSION

The primary outcome of this research is the establishment of the relationship between abilities the liberal arts undergraduate acquires in a competence-based learning program like Alverno's, and the competences employers use and perceive as critical for effective on-the-job performance. A study of this relationship shows that the ability-based dimensions taught for at Alverno:

- o Include within them all of the competences identified in the McBer model as examples of skills possessed in common by superior managers.
- o Are the skills managers use in today's work environment and perceive as necessary for effective work performance.
- o Can be directly linked to the skill requirements identified by managers for jobs in a wide variety of career fields.

The study further shows that Milwaukee-based employers see career possibilities for the effective liberal arts graduate in all eleven job functions studied, in both goods and service organizations, and ranging from entry level to management level.

### The Manager's Performance

Which abilities do managers use on the job? First, a substantial majority of the managers in the study demonstrated abilities in all four McBer Competence Clusters. This led us to conclude that a wide range of abilities seem to be necessary for effective performance on the job, rather than a narrow emphasis on one or two competence clusters.

Table 1 shows the proportion of McBer Competence Clusters coded in relation to situations (n = 377) and the proportion of managers (n = 73) performing the competences.

Competence Clusters	Proportion of Situations	Proportion of Managers
Interpersonal Abilities	.71	1.00
Entrepreneurial Abilities	.64	.97
Intellectual Abilities	.32	.68
Socio-Emotional Maturity	.30	.67

Alverno College has integrated this demonstrated need for a wide range of interrelated, generic abilities into its outcome centered, ability-based curriculum. The curriculum requires the student to develop and demonstrate eight competences which were identified and agreed upon by the faculty, and which are recognized (as we believe this research shows) as essential in work situations, as well as in civic, family and personal life.

Second, two ability clusters that managers used with the greatest frequency are the Interpersonal Abilities Cluster and the Entrepreneurial Abilities Cluster. We also note that Intellectual Abilities and Socio-Emotional Maturity are demonstrated, but significantly less frequently, and by fewer managers.

### Competences Managers Demonstrate

Which competences do managers demonstrate most often? Table 2 ranks the competences that make up each McBer cluster by frequency of occurrence (highest to lowest) in the 337 situations volunteered during the interview and ranks the competences based on the number of managers who demonstrated them.

The competences managers demonstrated most often were Proactivity, (n = 166) followed by Efficiency Orientation, (n = 134) and Expressed Concern with Impact, (n = 88). The two most frequently demonstrated competences (P and EO) make up the Entrepreneurial Abilities Cluster.

It may surprise some persons that Entrepreneurial Abilities rank high across all job functions. So often entrepreneur is used to refer to a person who starts a small business. This study suggests that all successful professionals need Entrepreneurial Abilities whether working in a small or large organization, or running one's own business.

A comparison was made of competences used by male and female managers to determine whether the same competences are used for effective performance. The comparison shows that all managers, female and male, used the Interpersonal Cluster and all except one male and one female demonstrated Entrepreneurial abilities.

However, there are some differences in the use of individual competences within the two clusters. First, the variance in the style of dealing with groups is noteworthy. More than one-half the males demonstrated Management of Groups (tells need for cooperation, uses affiliation, etc.) as compared to one-third of the women. On the other hand, one-half of the women, as contrasted to one-third of the men, made use of Socialized Power (building political coalitions, influencing networks, etc.). Could this difference in managing groups of people stem from the different socialization process experienced by females and males from their earliest years of development?

Second, about twice as many female managers demonstrated Self-Control as did male managers, which seems to refute the commonly held notion that women are more emotionally unstable and less able to maintain a professional presence in time of stress.

When comparing managers in goods and services there are some noteworthy differences that seem related to organizational outcomes. Conceptualization ranked higher in goods-producing organizations than it did for the service sector ( $p = .33$  as compared to  $p = .20$ ). Emphasis on Conceptualization in the goods sector suggests that these managers need to identify patterns and to interpret interrelated events in order to resolve recurrent problems and to meet production demands (the "bottom line").

In the service sector, Diagnostic Use of Concepts ranked higher than it did in the goods-producing area ( $p = .47$  as compared to  $p = .38$ ). Managers in services are asked to focus on human development and organizational effectiveness, through a diagnostic, prescriptive approach to achieving outcomes. The need for Managers in Services to use Diagnostic Use of Concepts is supported by the 1978 Pinto and Walker competence study (1978, p 62) and the recent Mc Lagen competence study completed for ASTD (1983).

TABLE 2

Ranking of McBer Competences Based on Number of Managers Coded in Relation to Number of Managers Who Demonstrated Them

Ranking of Competences Based on Number of Times Coded	Ranking of Competences Based on Number of Managers Who Demonstrated Them
Proactivity	Proactivity
Efficiency Orientation	Efficiency Orientation
Expressed Concern with Impact	Expressed Concern with Impact
Development of Others	Development of Others
Management of Groups	Management of Groups
Diagnostic Use of Concepts	Logical Thought
Perceptual Objectivity	Diagnostic Use of Concepts
Accurate Self-Assessment	Perceptual Objectivity
Concern with Affiliation	Concern with Affiliation
Logical Thought	Use of Socialized Power
Use of Socialized Power	Accurate Self-Assessment
Conceptualization	Positive Regard
Positive Regard	Active Listening
Active Listening	Use of Unilateral Power
Specialized Knowledge	Conceptualization
Use of Unilateral Power	Specialized Knowledge
Stamina and Adaptability	Self-Control
Self-Control	Stamina and Adaptability
Spontaneity	Spontaneity

## Relationship to Alverno's Ability-Based Dimensions

Our comparison with Alverno's abilities found that there is strong emphasis on interpersonal and entrepreneurial abilities in seven of the eight Alverno competences (Loacker et al, 1984, p 5): Communicating, Analyzing, Problem Solving, Valuing, Interacting, Making Decisions within Environmental Systems, and Assuming Civic Responsibility for Contemporary Issues (Alverno College Faculty, 1976, p 4). All of the Alverno abilities are included within the four competence clusters of the McBer model.

Of the eight competences from the Alverno model against which the results of the interviews were coded, Social Interaction was the most often cited as necessary to the job ( $p = .79$ ) followed closely by Problem Solving ( $p = .77$ ) (see Table 3). Results also indicated that managers recognize that not just one competence is needed for effective work performance, but several in combination (Social Interaction, Problem Solving, Communications, and Analysis, in this study). Social Interaction, in general terms, describes effective social behavior in a variety of situations including both public and private situations. The advanced level within this competence describes the person who is able to "facilitate effective interpersonal and intergroup relationships in one's professional situation". (Alverno College Faculty, 1973, rev 1980)

TABLE 3  
Ranking of Alverno Competences Based on Number of  
Managers Perceiving Them as Important for Their Jobs

COMBINED SAMPLE

Competence	Number of Managers Perceiving Competence As Important	Proportion of Managers Perceiving Competence as Important in Relation to Total Number of Managers
Social Interaction	55	.79
Problem Solving	54	.77
Communications	50	.73
Analysis	46	.68
Valuing	30	.42

Some interesting differences in cited skills among job functions can be noted. Social Interaction is perceived as necessary by proportionately fewer Production and Engineering Managers. This may be a byproduct of training programs for engineers which emphasize technical knowledge more than "people skills".

Computer Systems, Data Processing and Word Processing Managers ranked Communications as their highest competence. When relating competence to job function, it is logical that effective communications is critical for accuracy, attention to detail and for interpretation of the users' needs in the Computer Systems, Data and Word Processing areas.

In the Goods-Producing area it is interesting to note that more managers in the Goods: High Technology category mentioned Valuing as important ( $p = .67$ ) compared to managers from Service Organizations ( $p = .48$ ) and other Goods-Producing Firms ( $p = .36$ ). Alverno teaches Valuing because it recognizes this basic ability as an intrinsic and universal human activity applicable to all situations, including professional contexts.

Peters and Waterman in their work In Search of Excellence (1982, p 280) noted that the excellent companies they studied had a well defined set of guiding beliefs and emphasized the making of value commitments: "Every excellent company we studied is clear on what it stands for, and takes the process of value shaping seriously".

## CONCLUSIONS

The project demonstrates that generic competences acquired in college and career fields can be directly linked, to enable liberal arts students to become more aware of their marketable skills and gain confidence in communicating them to employers. Its results provide a catalog of abilities that were identified by managers as critical to success in a variety of career paths, and relates them to abilities taught for in a competence-based learning curriculum.

The knowledge base acquired through this research (behavioral examples of skills required and perceived as important from the perspective of employers in a variety of fields) will help

liberal arts students learn how to convince employers of their potential, using specific examples of abilities demonstrated throughout their educational experience. This information, in our opinion, confirms the value of a competence-based education in the job market because it shows for all--employers, students, educators--the direct link between abilities employers view as important and use in their work, and abilities taught within a competence-based liberal arts curriculum.

In learning to use the language of the employer by relating her skills to the job environment as she applies the results of this study to her job campaign, an Alverno graduate can feel more at ease in the hiring process, and be better able to present herself in a positive and effective way.

The cross-referencing of Alverno Competences with McBer competences made possible a comparison of managers' perceptions and their performances. These results suggest that what employers say they need (perceived competences) meshes with what the jobs require (demonstrated competences). The fact that there seems to be a correlation between perceptions and demonstration in this study reinforces the usefulness of the data for the student, and suggests why management in excellent companies is performance-oriented.

#### References

- Alverno College Faculty. (1973). Alverno College Competence-Based Learning Program (rev. ed.). Milwaukee: Alverno College Productions.
- Alverno College Faculty. (1976). Liberal Learning at Alverno College. Milwaukee: Alverno College Productions, p. 4.
- Coding Manual for Clusters and Skill Level Competences. (1978). Boston: McBer and Co.
- Loacker, G., et al., (1984). Analysis and Communication at Alverno: An Approach to Critical Thinking. Milwaukee: Alverno College Productions, p. 5. For example, communications at Alverno has a strong emphasis on interpersonal and entrepreneurial abilities. Communicating requires "sustained activity on the part of an individual with conscious intent to be a sender or receiver of a message". A successful communicator organizes work, clarifies one's own thinking, seeks alternatives and works toward solutions to problems. In McBer's Entrepreneurial Abilities, active involvement, resourcefulness, stating a personal standard of excellence, and being organized are signs of an "entrepreneurial" manager.
- McLagen, P. (Ed.). (1983). Models for Excellence. Washington: ASTD, p. 99.
- Mentkowski, M., et al., (1982). Developing a Professional Competence Model for Management Education. Milwaukee: Alverno College Productions.
- Schall, C., et al., (1985). Competence and Careers: A Study Relating Competences Acquired In College to Career Options For the Liberal Arts Graduate. Milwaukee: Alverno College Productions. Copies may be purchased by writing to Alverno Productions, 3401 South 39th Street, Milwaukee, WI 53215

## HOW MANDATORY IS MANDATORY CONTINUING EDUCATION?

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### Abstract

The major purpose of this study was to determine the extent to which there is variability in the participatory behavior of professionals affected by mandatory continuing education requirements. Data were obtained from two sources: 1) Existing records from the State Board of Nursing and 2) a random sample of 500 nurses who had approximately equal access to diverse types and forms of professional continuing nursing education. A substantial increase was found in the number of continuing education providers following enactment of mandatory legislation. In addition, considerable variability was found in the participatory behavior of nurses in available continuing education offerings.

### INTRODUCTION

The existence of mandatory professional continuing education has created much controversy in the field of adult education. Proponents generally view it as a necessary evil (Allison, 1973; Kubat, 1975; Lowenthal, 1981; Mattran, 1981; Smith, 1981). While it is recognized that participation does not guarantee competency, lack of participation is viewed as an invitation to obsolescence (Allison, 1973; Kubat, 1975). Further, mandatory continuing education is seen as a vehicle for assuring the public of continuing professional competence (Frandsen, 1980).

Antagonists have decried the move toward regulation and the prospect of professional regimentation. Many express concern about such hinderances as program costs and accessibility, time constraints and the like whereas others point out the variability in quality of program offerings among diverse providers and the lack of assurance that educational participation will result in improved individual competence and professional services. Still others express concern about who shall control licensure and relicensure and the continuing education requirements for their attainment (Frandsen, 1980). The most vocal antagonists against mandatory continuing education see any mandatory compulsion as antithetical to the essence of professional functioning. Emphasis is placed on the importance of professional responsibility for competence through voluntary participation in learning opportunities (Cooper, 1973; Ohliger, 1974; Rockhill, 1981; Frandsen, 1980). It is argued that such voluntary involvement strengthens the intrinsic motivation and natural learning inclination of adults. As a consequence, learning is increased. The specter feared by many is the mass homogenization of participants with its incumbent diminution of self-initiated responsibility for professional growth.

The general concern which this study addressed was the extent to which mandatory requirements may be fostering mass homogeneity among the professionals affected by the regulatory requirements. More specifically, the objectives of this study were 1) to determine the number and types of professional continuing education providers available to nurses in

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Florida, 2) to determine the extent to which variability may exist in meeting mandated continuing education requirements, and 3) to determine factors associated with observed variability in participation.

#### BACKGROUND AND METHODOLOGY

Nursing in Florida was the professional area selected for specific attention in this study. A statewide study conducted in 1973 revealed few continuing education offerings and general lack of interest in continuing education activities. A majority of existing programs were one hour in duration, most were sponsored by hospitals and 46% related to medical/surgical nursing (Florida State Board of Nursing, 1982). While efforts were made to encourage voluntary professional continuing education, legislation was passed and rules promulgated for implementation of mandatory continuing education to begin in 1979. Standards were established for continuing education offerings and providers, and also required nurses to complete 24 hours of approved continuing education per biennium.

For purposes of this study, two sources of data were utilized. The first included available existing records on continuing education providers approved by the State Board of Nursing. The second source of data was a mailed questionnaire sent to 500 licensed nurses residing in Dade County, Florida. This metropolitan area was selected since it would contain both a large number of practicing nurses and a large variety of approved continuing education providers. Data were obtained in 1982 which included information on personal and professional characteristics, and on participation in continuing professional education. In addition, Boshier's Educational Participation Scale was utilized to assess motivational orientations of respondents (Boshier, 1971). Data were analyzed using descriptive statistical routines.

#### ASSUMPTIONS AND LIMITATIONS

It was assumed that through selection of a study population residing in a large metropolitan area there would be substantially equitable access to diverse types and forms of professional continuing education for nurses. With a large available professional population, there is likely an urban bias in the number and types of continuing education providers available to nurses, a situation which may be quite different in areas with fewer licensed professionals. This limits the extent to which the study findings can be generalized to other areas, even within the State of Florida. A second limitation is that no accurate existing records could be located enumerating the continuing education offerings and providers existing prior to the promulgation of legislation and Board rules in 1979. A third limitation is that existing state records on offerings and providers do not follow the conceptual models existing in the literature, consequently no direct parallels could be drawn from data in the existing records and those obtained through the survey of nurses.

#### FINDINGS

When mandatory continuing education became effective in January 1979, 200 providers had been approved by the Florida State Board of Nursing. As of June 1982, there were 673 approved providers, more than triple the number existing at the inception of state mandatory requirements. In 1979, hospitals accounted for 63% of the approved providers, educational institutions (universities, colleges and vocational schools) 13%, independent organizations 11.5%, and nursing associations 5%. In June 1982, hospitals accounted for 33% of the approved providers, independent organizations 21%, paramedical organizations 15%, nursing associations 11% and educational institutions 8.5%. From these data, one can observe a substantial increase in the number of approved continuing education providers. While hospitals are still the single largest provider group, educational institutions have become proportionately less numerous and other types of providers have become relatively more numerous.

Data obtained from the sample of nurses indicated considerable variability in the total number of hours of continuing nursing education undertaken even through the mandate requires 24 hours each biennium. Nearly 15% reported taking fewer than 24 hours, 46% reported between 24-34 hours, 18% reported 35-54 hours and 21% reported 55 or more hours. The primary provider of continuing education was the individual's employer, identified by 68.1% of the respondents. Other providers identified by respondents included private providers (30.8%), educational institutions (28.4%), professional associations (24.2%), public hospitals (18.1%) and other

(8.1%). Forty-one percent of the respondents reported utilizing only one provider type, 33% reported utilizing 2, and 16% reported utilizing 3 or more. The predominant content areas undertaken were nursing practice (70.2%), special health problems (50.7%), legal aspects of nursing (35.8%), advanced nursing practice (25.9%), sciences (33%), management/administration (33.3%), teaching/learning (27.3%) and other (11%). Over 21% reported activities in one content area only, 23% reported activities in two content areas, 24% in three areas, and 32% in four or more areas.

Two dimensions of variability were further analyzed to determine if associations existed with other personal and participational variables. The first dimension of variability that was analyzed was the number of continuing education hours reported by respondents. Through chi-square analysis, significant associations were found between number of hours of continuing education and marital status, years worked since basic nursing preparation, years worked since attainment of highest educational degree, current position, number of hours applicable toward a college degree, number of different providers utilized, the number of different content areas in which educational activities were undertaken, the motivational orientation of cognitive interest, and whether continuing education offerings related to current job or to personal development.

The second dimension of variability that was analyzed was the sponsorship of the continuing education activities undertaken by nurses. For purposes of this analysis, sponsorship was categorized as employer only, non-employer only, or a combination. Through chi-square analysis significant associations were found between sponsorship and age, marital status, years of work in nursing, current job, and the motivational orientation of professional advancement and of cognitive interest.

Finally, data were subjected to a principal components factor analysis followed by varimax rotation. This analysis revealed five independent factors which undergirded reported participation in mandatory professional continuing education. These were motivational orientation, external influences, professional experience, professional preparation, and influence of current employer.

#### SUMMARY AND CONCLUSION

Analysis of the findings from this study indicate that there has been a considerable increase in the number of continuing education providers available to nurses since the inception of mandatory educational requirements. While hospitals continue to be the largest single provider type, there have emerged a large number of providers whose prior involvement was minimal or non-existent. Educational institutions account for a smaller proportion of the approved providers than they did in the past.

The study findings also indicate considerable variability in the participation of nurses in professional continuing education even under the circumstances of mandated requirements. This variability exists in the total number of continuing education hours undertaken, the content areas studied, and the educational providers utilized. Further analysis revealed a number of personal and situational variables associated with the number of hours undertaken and the sponsors from which educational offerings were taken. It further revealed that variation in participation is a phenomenon involving the simultaneous influence of a variety of forces.

Given these data, one can conclude that the large increase in the number of continuing education providers has greatly expanded the opportunities available for the continuing professional development of nurses. Since these professionals now have increased options from which to choose in fulfilling mandated educational requirements, a situation has been developed that is likely more conducive to voluntary professional development than may be acknowledged by many.

## References

- Allison, E. Should continuing education be mandatory? (Yes). American Journal of Nursing. 1973, 73, 443.
- Boshier, R. Motivational orientations of adult education participants: a factor analytic exploration of Houle's typology. Adult Education. 1971, 21, 3-26.
- Cooper, S. Should continuing education be mandatory? (No). American Journal of Nursing. 1973, 73, 442.
- Florida State Board of Nursing, A report on the implementation of mandatory continuing education for nurses in Florida. Jacksonville, Florida: Florida State Board of Nursing, 1982.
- Frandsen, P. Continuing education for the professions. In E. Boone, et al., Serving personal and community needs through adult education. San Francisco: Jossey-Bass Publishers, 1980 61-81.
- Kubat, J. Correlates of professional obsolescence (Part 1). Journal of Continuing Education in Nursing. 1975, 6, 22-29.
- Mattran, K. Mandatory education increases professional competence. In B. Krietlow (Ed.) Examining controversies in adult education. San Francisco: Jossey-Bass Publishers, 1981, 46-51.
- Ohliger, J. Is lifelong adult education a guarantee of permanent inadequacy? Convergence. 1974, 7, 47-58.
- Rockhill, K. Professional education should not be mandatory. In B. Krietlow (Ed.) Examining controversies in adult education. San Francisco: Jossey-Bass Publishers, 1981, 52-70.
- Smith, R. Quality in continuing pharmaceutical education. Lifelong Learning: The Adult Years. 1981, 10, 4,6,24.

AN APPLICATION OF SOCIAL NETWORK ANALYSIS TO THE PLANNING  
OF CONTINUING PROFESSIONAL EDUCATION PROGRAMS

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Abstract

Social network analysis provides a set of analytical techniques that can assist continuing professional educators in mapping client groups. In this study, twenty-five faculty members in a School of Nursing completed a Survey of Social Networks. The ALSCAL multidimensional scaling program was used to scale interpersonal linkages into a four-dimensional spatial representation. Three techniques were used to interpret the configuration, which revealed a lack of involvement of several subgroups in the network. Four overlapping cliques were identified, along with network liaisons and isolates. The implications for planning professional development programs are discussed.

A consistent theme underlying current approaches to program development in continuing professional education centers on the importance of understanding the formal and informal structure of the client group for whom the educational program is intended. Such a cognitive mapping process aids the continuing professional educator in actively involving representative clients in the planning process. Client involvement represents one of the basic strategies for program development found in the adult education literature (Long, 1983). According to Boone, Dolan and Snearon (1971), a critical phase in the programming process involves linking the institution to its publics through leader involvement and need analysis. The identification and mapping of target audiences is considered essential if program planners are to successfully interface with client group leadership, assemble representative sounding boards and design programs that are based on the perceived needs of professionals within the client system. In his "fundamental system", Houle (1976) asserts that "education is a cooperative, rather than an operative art" (p. 34), and suggests that often it is desirable to involve clients in the planning in an effort to foster collaboration. Implicit in this suggestion is the requirement that the educator clearly understand the client group. Knowles (1980) maintains that advisory committees are most effective when they include representatives from "various points of view, special interests and friendship circles (or cliques) within the membership". The client group must be thoroughly understood before such a representative group can be assembled.

Philip Kotler (1982) describes the process of breaking down a client group into smaller subgroupings as market segmentation. Each segment may possess a different set of characteristics that will influence its affinity for specific educational programs. Segmentation allows the educational planner to develop such a detailed view of a total client system. Of particular importance is the ability to assess the nature of interactions between subgroupings within the total group. These social networks represent the "circulatory system" through which information and resources are disseminated. Understanding the informal communication structure allows planners to identify persons who occupy specific communication roles. Individuals can then be targeted who will assist in the assessment of subgroup needs and the development of responsive continuing professional education programs.

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There have been few attempts in the adult education literature to suggest a procedure through which informal communication linkages can be assessed and included in such a map. Beder, Darkenwald and Valentine (1983) developed sociograms in examining the self-planned learning networks of public school adult education directors and concluded that these directors did use social networks in gaining professional learning information and resources. The researchers found that professional clique formation was related to geographical proximity and sociocultural commonalty in program environments. Fingeret (1983) recently used unstructured interviews and participant observation in examining the social networks of illiterate adults and provided a rich description of the ways in which these adults utilize their own personal networks. The purpose of this study was to identify and analyze the informal structure existing within a professional group and to assess the effectiveness of social network analysis techniques as a means of developing a map of this group to be used in planning continuing professional education programs.

## METHODS

During the Fall semester, 1983, all twenty-nine full-time faculty members in the Department of Baccalaureate Degree (BD) Nursing and Department of Associate Degree (AD) Nursing at East Tennessee State University were asked to participate in the study. Twenty-five faculty members did agree to participate and constituted the population on which the analysis was based. The mean age of the respondents was 38.4 years, with ages ranging from 24 to 56 years. The average respondent had a Master's Degree and had been employed at East Tennessee State University for 4.6 years. Twenty-three of the respondents were female. The responding group consisted of sixteen members of the BD department and nine members of the AD department.

All faculty members who agreed to participate were asked to complete the Survey of Social Networks, a self-report instrument that asked faculty members to identify colleagues from whom they sought advice during the preceding six months, regarding their role as researcher. Respondents were also asked to estimate the number of contacts initiated each month. Individuals also provided information about their own academic background, professional activities and demographic characteristics. The sociometric choices of individual faculty members were entered into a symmetric adjacency matrix in which rows represented the twenty-five faculty members and the columns represented those same faculty members in the identical sequence (Knoke and Kuklinski, 1982). The elements in the matrix specified the nature of the linkage, according to the following format: 1) a zero (0) represented the absence of a contact, 2) a one (1) represented a one-way connection; i.e. only one of the faculty members specified the linkage and 3) a two (2) was entered into the matrix if both faculty members specified the linkage. The symmetric matrix containing the proximities (linkage distances) was analyzed using the multidimensional scaling program, ALSCAL (Reinhardt, 1980). ALSCAL provided a picture or spatial representation of the relationships existing between the members of the School of Nursing faculty members based on the measures of similarity or interaction strength (values 0, 1 or 2).

Three separate techniques were used to interpret the obtained configuration. A subjective interpretation was obtained by sharing the configuration with several members of the School of Nursing, who provided insight as to what characteristics may have led to proximity on the map. Cluster analysis was used to group the twenty-five respondents in the initial configuration into homogenous subsets using the ADCLUS program (Sarle, 1981). The appropriate number of clusters was determined by plotting  $R^2$  values by the number of clusters in the solution and identifying discontinuities in the obtained curve. The ADCLUS procedure identified individuals who were isolated in the research development network and those who served as liaisons by linking two or more clusters of faculty members. Finally, correlations were calculated between individual positions on dimensional coordinates and background factors thought to be associated with position within the research development network. These coefficients were used in further interpreting or naming each of the respective dimensions.

## RESULTS

The initial two-dimensional configuration obtained through the nonmetric multidimensional scaling procedure provided an inadequate fit between the original proximities and the transformed interpersonal distances. The stress value for the initial two-dimensional solution was

.38 and the  $R^2$  was .20. The configuration was examined in three, four and five dimensions to select the most appropriate solution. The skree plot of stress values by dimensionality indicated that a four dimensional solution would yield the most interpretable results. The solution produced a stress of .22 and an  $R^2$  of .38.

Subjective Interpretation of the Solution

A visual inspection of the two dimensional plot of the research development network revealed the existence of several subgroupings of faculty members (see Figure 1). Perhaps the

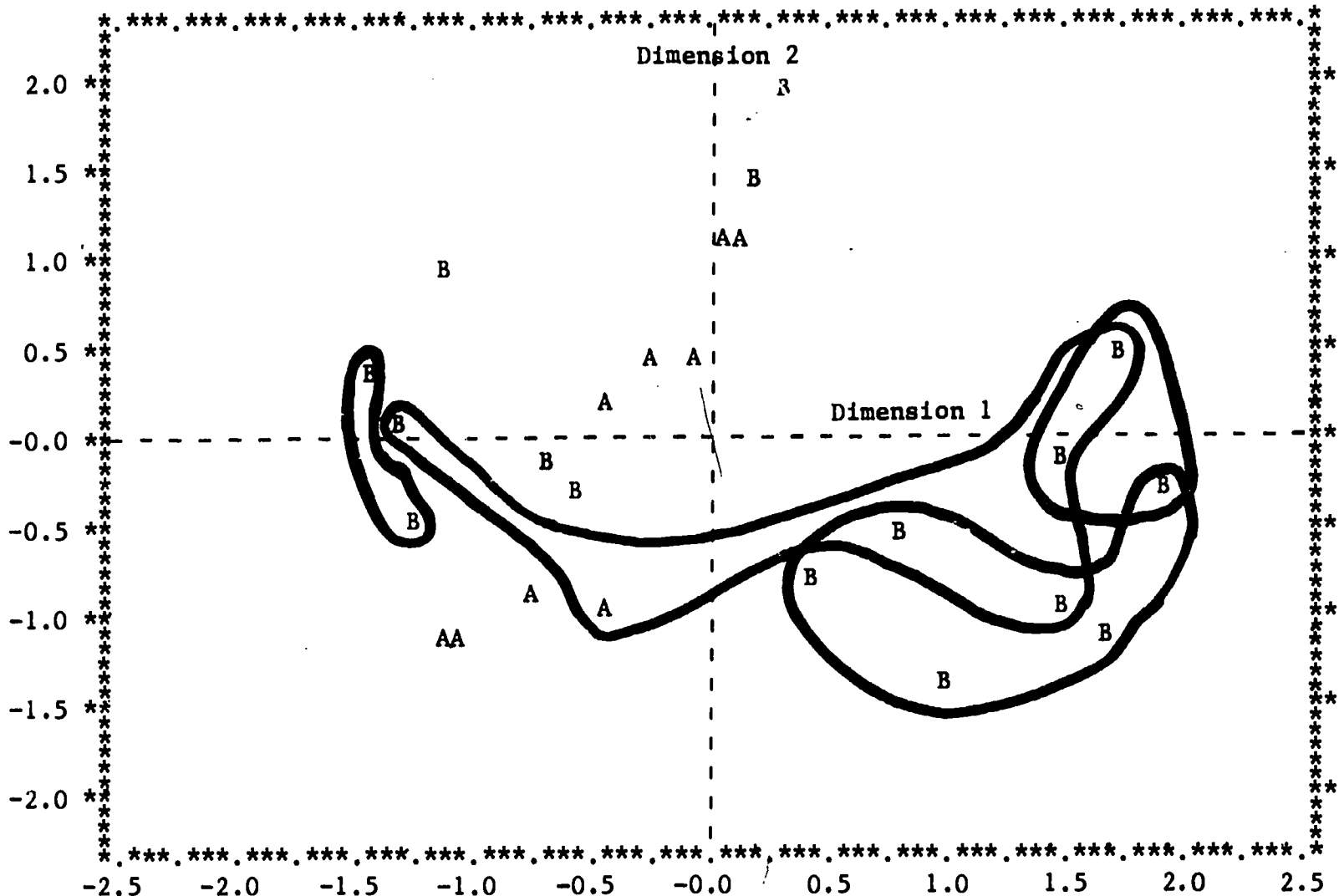


Figure 1. Two-Dimensional Configuration of the Research Development Network in the School of Nursing (A=Associate Degree Nursing and B=Baccalaureate Degree Nursing)

most obvious finding was the lack of interaction between members of the BD and AD programs. Members of the BD and AD departments tended to cluster with others in the same department. The group at the very top of the diagram represented members of the medical surgery teaching team. This cluster included several divergent thinkers described as opinionated and very independent. They were clearly apart from the center of the network.

The large subgroup in the lower right-hand quadrant consisted almost exclusively of members of a specific clinical teaching team in the BD program. Three of the 5 members clustering near the center of Figure 1 were either newly-hired or part-time faculty members. The individual in the upper left-hand quadrant, was a faculty member who had recently taken an administrative position within the university and appeared somewhat isolated. The subjective interpretation suggested that linkages tend to form within more formalized or prescribed boundaries within the School of Nursing. Departmental boundaries, teaching team membership and clinical specialty appeared to represent barriers to the development of linkages.

## Cluster Analysis

Four empirically derived clusters were identified through the ADCLUS program. Those clusters did overlap slightly and are shown as darkened circles superimposed on the two-dimensional plot of Figure 1. Clearly, little interaction existed between members of the BD and AD programs. Only one member of the AD program (the chairperson) was identified as being a member of the empirical clusters. Most of the isolates in the network were members of the AD department. Four BD faculty members were affiliated with more than one cluster and served as linking agents. One of these linking agents was the chairperson of the BD program who has a doctoral degree and an active on-going research program. A second linking agent was working on a doctoral degree during the time of the study and was very active in Sigma Theta Tau, the national nursing research society. The two other linking agents were more experienced members of the faculty. One of these individuals was engaged in doctoral study. Part-time clinical members of both departments and newer faculty members did not belong to the empirically derived clusters.

## External Analysis

The external analysis indicated that placement along Dimension One was most closely related to the number of monographs and reports published ( $r=.36$ ), the percent of time devoted to research ( $r=.29$ ), the number of books published ( $r=.26$ ), the number of research hours taken for course credit ( $r=.26$ ) and the number of university committee memberships ( $r=.26$ ). Dimension One appeared to represent what might be considered a "research commitment" continuum. Placement along Dimension Two was most closely related to age ( $r=-.26$ ) and years on the faculty at East Tennessee State University ( $r=.20$ ). Although the correlations were not strong, it appeared that individuals clustered along this dimension according to "age and tenure at the institution."

Position along Dimension Three was most closely associated with the number of research courses taken ( $r=-.25$ ), the number of out-of-state meetings attended ( $r=-.22$ ), the percent of time spent in service activities ( $r=-.21$ ), years since the highest degree was granted ( $r=-.20$ ) and the number of university committee memberships ( $r=-.20$ ). Dimension Three appeared to be related to the level of "experience and professional integration." Those with connections outside the School of Nursing clustered together as did those without such connections. Dimension Four was most closely associated with professional rank ( $r=-.56$ ), number of research courses taken ( $r=-.49$ ), the number of university committees served on ( $r=-.46$ ), the highest degree held ( $r=-.41$ ) and the percent of time spent in administration ( $r=-.40$ ). Those who held higher degrees were connected to the rest of the university and a wider professional community. Faculty members who served in some administrative capacity tended to cluster together, as did those without such characteristics.

## Synthesis and Summary

The three separate analyses supplemented one another and provided information about the existing School of Nursing research development network. Formal or prescribed boundaries appeared to be inhibiting the formation of linkages within the School of Nursing. There was little information flow between members of the BD and AD programs. In addition, AD faculty members appeared to have rather loose connections with each other, suggesting that very little research-related information was being shared. Those individuals with greater training in research methodology appeared to interact with each other (and with those outside the School of Nursing) about research matters, to the exclusion of those without extensive training in research. Part-time and newly-hired faculty members had few research-related connections and appeared isolated from others in the network. There was some overlapping of membership within the BD research development cliques; suggesting that liaisons play a very important linking role in this process.

## CONCLUSIONS

Several recommendations have been made to the School of Nursing for designing professional development programs that will improve faculty research skills. First, "cross-fertiliza-

tion" of research related information should be encouraged through the formation of a single School of Nursing research development committee. Membership on such a committee should include representatives from the clinical specialty areas, new and part-time faculty, and faculty who have more experience with the research process. Such a committee could more successfully design professional development programs that are of interest to the various subgroups and bridge the research communication gap between BD and AD faculty members.

The School of Nursing should consider initiating a "mentorship" program for new faculty members. By linking new faculty to more established researchers (such as those identified as liaisons) for a given length of time, experience may be exchanged for new ideas, resulting in a more connected network with greater vitality. An orientation program should be developed for new faculty that introduces them to research expectations, current research projects being undertaken and resources available to them within the university. Attempts should be made to open up the rather homophilus cliques that have developed and foster the formation of weak ties between such cliques. Those members who have taken a great deal of research coursework should be encouraged to work cooperatively with those without such an academic background. Joint projects should be encouraged. All faculty should be encouraged to travel to meetings and participate equally in committee work. Younger faculty members or those with less experience should be encouraged to work with older or more experienced members. Finally, a research forum should be initiated that involves all faculty members in conducting and reporting of research.

These results have shown how social network analysis techniques can be used to identify interpersonal linkages among nursing professionals, allowing those responsible for planning continuing professional education programs to develop a more complete "cognitive map" of the professional group. Closeness on the spatial configuration approximates actual social distance and allows the planner to identify subgroups or cliques. Network liaisons and isolates can also be identified through an inspection of the spatial configuration. The correlations between position on the configuration and external variables allows the program planner to understand the characteristics of the subgroups or cliques that exist within the overall network. Such an understanding can lead to increased client involvement in planning and ultimately facilitate the development of programs that are sensitive to the needs and interests of the total client group.

#### References

- Beder, H., Darkenwald, G. G. and Valentine, T. "Self Planned Professional Learning Among Public School Adult Education Directors: A Social Network Analysis." Proceedings: Adult Education Research Conference, Montreal, April, 1983.
- Boone, E. J., Dolan, R. J. and Shearon, R. W. Programming in the Cooperative Extension Service: A Conceptual Scheme. Publication 72. Raleigh: North Carolina Agricultural Extension Service, 1971.
- Fingeret, A. "Social Network: A New Perspective on Independence and Illiterate Adults." Adult Education Quarterly. 33:133-146.
- Houle, C. O. The Design of Education. San Francisco: Jossey-Bass, 1976.
- Knoke, D. and Kuklinski, J. H. Network Analysis. Sage University Paper Series on Quantitative Applications in the Social Sciences, Series No. 07-028. Beverly Hills and London: Sage Publications, 1982.
- Knowles, M. S. The Modern Practice of Adult Education. Chicago: Follett, 1980.
- Kotler, P. Marketing for Nonprofit Organizations. Englewood Cliffs: Prentice-Hall, 1982.
- Long, H. B. Adult Learning: Research and Practice. New York: Cambridge, 1983.
- Reinhardt, P. S. SAS Supplemental Library User's Guide. Raleigh: SAS Institute, 1980.
- Sarle, W. S. "The ADCLUS Procedure." SAS Technical Report S-124. Cary: SAS Institute, 1981.



## USING MICROCOMPUTERS TO FACILITATE QUALITATIVE DATA MANAGEMENT

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### Abstract

This paper describes some ways in which microcomputers can facilitate the management of large textual data sets generated by qualitative research projects. In this process, interviews are transcribed directly onto disks, code markers are inserted and the computer's search and save capabilities are used to categorize each coded piece of data into an appropriate category file. The mechanical labor of cutting apart and sorting coded pieces of data is minimized and the costs of recopying data for double coding and final report writing are eliminated.

### INTRODUCTION

Computers have been used to assist manipulation of large numerical data sets in quantitative research projects for a number of years now. In qualitative research, however, since there is no "formula" for analyzing data, the potential applications of computers have gone largely unnoticed. The form of data in qualitative research is text, and word processing or text editing computer programs are most applicable for qualitative research computer applications. Microcomputers have become increasingly affordable and accessible in the last five years, and they are well-equipped with sophisticated word processing programs. Microcomputers do not require expensive mainframe time; they permit immediate access to data and printouts; they can be learned easily; and, after the initial hardware investment, they are relatively inexpensive to maintain and support. Although the researcher still must personally analyze and code data, microcomputers can facilitate the complex data management tasks of qualitative researchers.

For the past two years I have been developing and testing a system for using microcomputers to assist with the recording, retrieval, and management of data for qualitative research projects. The use of the computer has significantly decreased the time spent by researchers engaged in the mechanical and fairly tedious tasks of tracking, sorting and manipulating "chunks" of data from initial data collection through the final report preparation. In this paper I will outline the system I developed; although we used an Apple IIe computer, the system is equally applicable to any microcomputer which has the characteristics described in the following section. I suggest you experiment first with a relatively small research project.

### SYSTEM REQUIREMENTS

#### Hardware

Any microcomputer with a good word processing program, a minimum of 64K memory, and external floppy disk storage will meet your needs. An inexpensive dot matrix printer also is important for generating quick printouts, or "hard copies" of transcripts and

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fieldnotes. Two disk drives facilitate creation of back up disks, but one disk drive will be sufficient for small projects. Your choice of computer also depends upon compatibility with other computers to which you may have access since there may be times when you want to be able to have two or three persons working simultaneously transcribing data onto disks. Since you will want to have constant access to a computer for the duration of your project, an existing computer lab which is accessible to you four hours a day can meet your needs for supplemental computers but will frustrate your regular daily efforts.

### Word Processing

It is not necessary to be a computer expert in order to use most microcomputers on the market today; for the purposes outlined here, it is only necessary to be able to use a word processing application program available for your particular computer. Word processing programs allow you to manipulate text; the program's manual should provide an explanation of the commands recognized by your computer. In order to use a microcomputer for qualitative research data management, your word processing program should have the following common features.

1. Simple editing commands to delete and insert text so that you can correct errors in the original transcriptions and can insert researcher's memos and observer's comments.
2. A "search and replace" or "find" command. The computer can be provided with a string of characters which it will locate anywhere in a specific file.
3. A command to "save" or "store" additional data onto the end of a file that already has been created.
4. Some way to print out the "catalog" or "table of contents" of a specific disk. You will have many data diskettes; the catalog of a diskette lists the files that are stored on each disk. You will find it easier to locate specific files if you create a notebook containing your data disk catalogs.

### Data Base Management -- An Option

A data base management program is a useful addition, but is not absolutely necessary. A data base management program provides, or lets you create, a "form" that you can fill in for each study participant, creating "records." In a large data base, you might want to keep track of the demographic characteristics of your sample, for example, or a schedule of observations. Data base programs then allow you to "sort" for specific entries into your records. For example, you could ask for the records of all subjects between the ages of 22 and 30, or all subjects with whom you have scheduled observations on March 2.

When purchasing a data base program or setting up your records, you must carefully think through your requirements for the system. Data base programs vary from simple, quickly learned pre-existing templates to complex, powerful programs with many levels of flexibility. The simpler programs often are quite adequate. You may want to find a data base program that is compatible with your word processing program, allowing you to move data between the two programs.

### DATA COLLECTION

Increased efficiency is the main purpose for using a microcomputer to facilitate data management, so it is important to plan the system carefully from the beginning. In order to make sure you have the appropriate computer and programs, you have to structure the flow of data through a series of steps. For the project used as an example here, data was collected by four teams of research assistants. They tape recorded interviews and kept hand-written observation journals in the field. Their interview tapes were given to a secretary for transcription directly onto diskette and the researchers were personally responsible for entering their fieldnotes onto diskettes. Since transcribing

and watching a computer screen are stressful, we employed additional temporary personnel to assist with tape transcription during "crunch" times, limiting each individual secretary to four hours per day transcribing on the computer.

Once the interview was transcribed, it was printed out and the hard copy and tape were returned to the researcher for "editing," or correcting mistakes made by the transcriber. The researcher listened to the tape with a red pen in hand and made corrections and inserted observer's comments onto the printout. The hard copy was returned to the secretary and the corrections were made on the disk. A new printout was made and one copy went into the project files while the other went to the researcher. The tape then could be reused.

Each diskette containing data files was numbered consecutively; two identical copies of each diskette were made (labeled primary and back-up); and the disks were stored in two sets of file boxes kept in a locked filing cabinet drawer. As each disk reached its recording capacity, its catalog was printed and kept in a three-ring notebook, allowing quick perusal of which files were on individual disks. In addition, each researcher completed a "cover sheet" containing data on each subject to be entered into the data base program by the secretary.

In order to keep track of the entire process, a "Tape Control Book" was created with a column for each step in the process which was dated and initialed as each step was completed. Thus, the status of data at different stages in this process could be determined quickly. The subject's last name was used as the file name for interview data. Some interviews required multiple files because of their length and the memory limitations of the Apple. These were simply given numerical suffixes. For example, an interview with Bill Jones would be named "JONES1." If the interview required three files, they would be named "JONES2" and "JONES3."

It was important to be able to identify whether each individual file on disk had been edited yet, and, at times, who had been responsible for the various steps of the work. Therefore, a uniform heading was developed for each file which included the names of the interviewee, researcher, transcriber and editor as well as the date of the interview, transcription and editing on disk.

#### DATA ANALYSIS

Data analysis is an ongoing process in qualitative research. At any time in the project, you may want to examine the records in the data base program. More commonly, you will want to code and categorize your data for analysis. The computer will not do the researcher's work for you -- identification of appropriate coding categories and of pieces of data appropriate for each category still must be done by the researcher. Depending upon the researcher's facility with the computer, this can be done directly on the computer screen or from the hard copy. The computer can do the mechanical work of breaking the data apart and filing each piece in the category file corresponding to its code number.

The process of deciding upon a list of coding categories will be no different from that used in all other qualitative research projects. The list of categories should be numbered and used to create a set of category files on a blank disk. One file is set up for each category, containing only the number and name of the category. It may be necessary to set up files on a number of disks if there are numerous coding categories or if extensive data will be included in each category file.

Once the category files are created you must decide upon a set of "markers" that indicate the beginning and end of each chunk of data that will be included within a specific code. We used angle brackets --  $\langle$  and  $\rangle$  -- to indicate the beginning of a piece of data and s-brackets --  $\{$  and  $\}$  -- to indicate the end of the piece of data. The code number is placed within the brackets and a space is inserted before and after the brackets.

For example, the following paragraph has been coded with beginning and ending markers:

<1> I heard about the program from my mother a few years back, and <4> she was really on my case to get into it, {4} but I really wasn't going to go back to school after all I'd been through. Then, about six months ago, I saw an ad on TV and, I don't know why, but I guess I was ready. {1}.

After the data is coded, save your coded data files on disks that are different from your original uncoded data files so that you maintain an intact set of original data. Then you are ready to begin categorizing. First save the name of the data source, or interviewee, as an addition to each of your category files so that you can identify the interview from which the data was taken. It is possible to save the data from numerous interviews into the same set of category files as long as you save the name of the subject as an addition to each file each time you begin categorizing a new subject's interview.

When your category files are ready to use, load the coded data file, start at the beginning of the file and have the computer "find" or "search" for a specific beginning marker, such as 1 . Then command the computer to "save" or "store" or "enter" (depending upon your computer's command structure) that data from the beginning marker to the ending marker. It is saved as an addition to the file corresponding to the code number. You progress through each file in this way. You may want to save each coded chunk of data to its appropriate file as you encounter it, or you may want to go through and save everything coded 1 followed by everything coded 2, etc. The command structure of your specific computer system will determine the most efficient process.

It may be possible to automate this process using EXEC files on some computers; a computer programmer should be able to tell you if a simple program could be written for your system to enable computer to do the categorizing automatically. Applewriter has a language that allows you to automate anything you could do sitting at a keyboard; it is called the Word Processing Language, or WPL. For this process, I created a WPL program named Textual Data Categorizing, or TDC, which directs the computer to take coded data files and categorize the data pieces into their appropriate separate category files with only minimal assistance from the researcher.

#### DISCUSSION

This may seem like a complicated and confusing way of doing a simple task; indeed, if you are new to microcomputers it will take you some time to learn the word processing program and to become comfortable with the computer. At first it will take more time than doing this process by hand, but the time soon will begin to decrease. This process of managing and categorizing data is applicable to any textual data set, such as notes for a literature review or observation analysis.

Data can be recoded and recategorized with much more ease than is possible when categorizing manually. The "find" command facilitates placing a piece of data back into the context of the original interview and the use of a simple data base program assists in keeping track of the salient characteristics of your sample. When the categorizing process is automated, the researcher's time spent doing tedious, mechanical tasks is almost eliminated, but even categorizing by sitting at a keyboard cuts down on the mechanical labor and the proliferation of small slips of paper. In addition, since the same piece of data can be saved to numerous category files, extensive copying for multiple coding is eliminated. Final report writing on the word processor is facilitated also when the data already is on disk. Once you identify the quotes you will use in the final report, you simply transfer them into the text from their disk files at the appropriate time, eliminating the need for extensive recopying.

Clearly, we have only begun to understand and exploit the capabilities of microcomputers for qualitative data management and writing. The ease and power of word processing programs for microcomputers challenges us to redefine computer research applications, moving beyond simply using computers to manipulate numbers. An expanded version of this paper and details of TDC are available from the author.

## Development of a Model for Designing and Evaluating Microcomputer Courses

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### Abstract

The purpose of this research project was the development of an educational model for the design and evaluation of microcomputer courses for adults in the work place. The need for a specific model became apparent to researchers as a search of related literature revealed only data which identified either global planning models or specific planning tips which had limited program design value. This model employed a seven step process and is generally based on Kemp's model for instructional design. The "Hockaday" model was successfully used on 40 entry level participants as taught by the author. This model has been adapted by the Customer Service Division of the Washington State Data Processing Service Center for use in entry level computer training for all its employees.

### INTRODUCTION

Personal microcomputers are generally considered by the business sector to be a productivity tool. The tool is readily apparent in terms of the computer hardware and software. What is not so apparent is the substantial hidden cost of making the tool productive through the appropriate education of office personnel. It becomes incumbent that educational planners design a model to deal with the need for quality, efficient, flexible and relevant programming to meet the numerous training needs of their clientele.

#### Problem Statement

The Washington State Department of Personnel's Employee Development and Training Division currently offers a course titled "introduction to microcomputers." This course is designed to provide an overview of personal computers with demonstrations of commonly used word processing and spreadsheet software packages. The target audience consists of state employees with no previous knowledge of microcomputers.

Demand for a course of this nature has been substantial. This agency trains over 1500 individuals in beginning computer instruction each year. The sponsoring agency, Washington State Data Processing Service Center One, has requested the cooperation of Washington State Data Processing Service Center Three in teaching additional class sessions.

This course however, has continued to evolve based on available instructors and in response to individual audiences. This has affected quality, effectiveness and relevancy of the training. Additionally, there was a need to develop a program model which would offer consistent, quality and timely information with a format flexible enough to address curriculum changes without major rewrite commitments in time and effort.

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## Background Of The Problem

The background of this problem is a combination of social perceptions and technical advancements. It is commonly perceived by society that the computer has the capacity to make work happen more quickly. The limitation of that value is the technical and social adjustments that must be made by individuals to achieve that end.

Currently, the State of Washington is investing substantial sums of money to place microcomputers into the workplace. Individuals and entire office groups are convincing management and administrators to make the shift to high level office automation. Within the context of making that shift, there appears to be only limited regard for technical planning to make the computer system work and even less educational planning to adequately train the large numbers of individuals who must make this new "system" work in a productive manner.

The technical aspects of the microcomputer, for the first, second or etc. time user can be many things; interesting, frightening, threatening, fun or challenging. While we know the computer can do things fast, the client is now faced with a new pragmatic problem. The computer is not fast nor productive as we firmly believe, but a real live major issue that most people are left to cope with on their own.

The user is confronted by a new machine about which little is known or apparent. A large measure of initial success in operation depends directly on who may happen to be in your office. The user is expected to learn this new and sophisticated system following directions from poorly written user manuals during their work time which is already crowded with a full schedule.

There is substantial need for quality instruction which meets the needs of the user. The acknowledged cost of training will far out weigh the cost of the computer and software. With quality educational programs, an office can automate and with this change, improve the productivity of its workers.

## Need For The Study

This study for the development of a model for a microcomputer course has resulted from specific needs of the State Data Processing Service Center One. An initial course, "introduction to microcomputers," designed by Service Center One, was offered in 1983. The response was immediate. However, the demand was too large for the current training capacity. In addition, Service Center One made the decision to provide only a four hour class session and to eliminate any hands-on practice for word processing and electronic spreadsheet software packages. This design was the result of limitations of time, availability of instructors and a conscientious effort by the instructors to enhance the overview which stressed elements of computer literacy.

While this overview class addressed one type of training need, the author, who is Customer Training Coordinator for Service Center One, and other training specialists perceived other training needs. These individuals had continuing requests for additional advanced and in-depth training which would address office worker needs for education in basic word processing and spreadsheet programming. This course would provide workers with initial success on the computer and applications which could be carried directly back into the work place.

Based on this information, the author developed a curriculum model which addressed these needs. Since the development of this model and subsequent course offering, there have been over 900 requests to date for the course.

## Purpose Of The Study

The purpose of the study was to develop a model for designing and evaluating microcomputer courses. Inherent in the study was the development of an efficient and effective curriculum model which could be altered by the instructor to accommodate changes in course structure.

## ANALYSIS AND DISCUSSION

Using Kemp's model and incorporating ideas from data processing experts and others, the author developed a specific program planning tool called the "Hockaday Model." This model, in part, parallels the Kemp model in some aspects but utilized unique planning approaches in other aspects of the design.

The following is a detailed narrative of the Hockaday model. The adaptation of the Kemp model, the refinements required after the pilot course, and the interpretation comprise a new and innovative model for consideration.

### 1. Topics and General Purposes:

Like the Kemp model, the Hockaday Model focuses on the responsibility of the design group to recognize and establish goals. This design group may consist of curriculum designers, instructors and interested students. Once the goals are selected, the topics are selected. The emphasis remains focused on the directions of learning outcomes desired.

### 2. Student Characteristics:

The Hockaday model carefully considered student characteristics. Several of the design elements are affected: selection of objectives, level of difficulty, learning activities and depth of topic. The model also places attention on learning styles and learning conditions which must begin in the planning stage. These characteristics may be determined by a pre-test which is specific to the selected topics.

### 3. Learning Objectives:

Quality learning objectives include performance standards, conditions and indicate what the student is expected to learn. Most importantly, the objectives give students a clear picture of requirements and provide the instructor with a specific focus on what should be taught.

The Hockaday model increases the emphasis on task analysis and incorporates the method of task analysis recommended by Fine and Wiley (1971).

### 4. Subject Matter Content:

The subject content must support the learning objectives. The content includes facts, information, skills, procedures, conditions and attitudinal factors of the topic. One order of content is from the simple to the complex. This is generally a reasonable method for microcomputer instruction as abstract concepts tend to be difficult to explain and demonstrate on microcomputers during a beginning level class.

### 5. Pre-test:

The pre-test assessed the current levels of knowledge, skill and competency. By applying a pre-test, the instructor assures coordination of learning objectives and audience preceptions. Current proficiency is analyzed. This background research indicates whether the student can nominally deal with the intended level of difficulty or has already accomplished a number of intended objectives in the course. This pre-test may also provide information which may require the instructor to adjust the course pace or complexity.

### 6. Teaching/learning activities and resources:

With the previous steps completed, the determination of instructional methods must be assessed. There is limited information in the literature which addresses the need for methodologies which function well in this environment. The author had the opportunity to review a number of classes in the community and observe how they were taught. Kemp also suggested, and the author discovered that each instructional activity was related to one of several patterns. They were: group presentation, individual teacher student interaction and individual student to student interaction (peer teaching).

### 7. Evaluation:

Evaluation is the final analysis of the design. The learning outcomes are compared to the original learning objectives by a specific predetermined assessment tool. Evaluation responses demonstrated the degree to which the students had learned the subject and allowed the

The objectives of the study were:

- A. to identify problems in the present microcomputer training program.
- B. to identify appropriate curriculum development models for designing and evaluating microcomputer courses.
- C. to develop and test a specific curriculum model for microcomputer courses.
- D. to evaluate and revise the selected model.
- E. to develop recommendations for future directions.

#### REVIEW OF LITERATURE

The literature review for this special project was accomplished by reviewing three major categories of information. They were: a. principles of adult education, b. industry training programs and related information and c. a review of instructional design models.

The author reviewed information from a number of authors in regard to adult education principles but examined in some detail the writing of two of the best known; Knowles and Houle.

Knowles examination of androgogy versus pedagogy is a critical issue in the overall concept of educational design. He suggests that "most teachers of adults only know how to teach adults as if they were children (Knowles, 1970)." This is a severe limitation when qualified instructors are not readily available for adult teaching.

Knowles and Houle both suggest that the adult learners life experience and the need to involve the adult learner in most aspects of the overall planning process is incumbent if the program is to succeed.

The review of literature regarding the industry data processing training programs was interesting but of limited value in the development of a planning model. While there are a number of helpful articles published about training, the popular journals do not seriously address this issue. Most information addresses helpful hints or suggestions in regard to specific aspects of employee training.

In order to provide an appropriate framework for developing a teaching program, it was necessary to review literature in the field of instructional design. Two models were judged to be appropriate for in-depth review. They were Kemp's Model and Tyler's model for instructional design. Kemp's Model was selected as most appropriate and directly applicable to the design needs of the project.

The seven steps to Kemp's model are: 1. topics and general purposes, 2. student characteristics, 3. learning objectives, 4. subject content, 5. student pre-test, 6. teaching and learning activities and resources and 7. evaluation (Kemp 1977).

#### METHODOLOGY OF THE STUDY

The methodology of this study was based on findings from the review of literature. Kemp's model provided the basis for the first pilot project course. The procedure for this project is: 1. review of literature, 2. oral survey of community microcomputer trainers, 3. evaluation of student pre-test questionnaire, 4. development of a new curriculum, 5. design of a model, 6. testing of the model, 7. evaluation of the model, post-testing and 8. development of the author's model.

Kemp's model was used at all stages of the pilot project class. This class was a cross section of clients from within the Washington State Data Processing Service. The evaluation and feedback from this class provided the framework for the development of the author's model for the instruction of microcomputer classes at Washington State Data Processing Service Center Three. This course included an eight hour classroom and hands on application of beginning computer skills, word processing and development of electronic spreadsheets.



instructors and course designers to re-evaluate the instructional plan. The Hockaday model contrasted with the Kemp model demonstrates some important differences. The first major shift of emphasis was in the learning objectives. The author, faced with rapid and continuous changes in the microcomputer field and constrained by the State's financial and time commitments, had to be prepared to optimize the use of training modules already developed and be able to assure management that any new modules would have enough reusability to offset their development costs.

In the subject content area, the author again focused on the use of selected learning modules. The task analysis techniques, in this case, developed the needed precision to define and select the modules that best met the needs of the subject matter requirements.

Evaluation, particularly the direct feedback of the students, provides the final key to the orderly and effective management of the course modules. When used in concert with the pre-test, it provides an organizational tool to manage the subject matter content and modules utilized. Whenever indicated the changes were introduced incrementally, permitting individual modules to be refined to correct errors in content, style, or integration with the overall course objectives.

#### SUMMARY AND CONCLUSIONS

The intent of this project was to develop an instructional design model for use in the teaching of microcomputer classes. The need for a specific model became apparent to the author through a search of the literature. No model of instructional design in current use proved specific and relevant to the technology of microcomputers.

The need for a model arose when the author was asked to design a course for students and clients in state agencies. The course was for employees who were beginning to use microcomputers.

Based on the initial use of Kemp's model, a pilot class was developed and taught. Information from the evaluation was used to further develop a new model for instructional design which would assist the Washington State Data Processing Service Center Three in the instruction of beginning microcomputer classes.

#### Conclusions

Based on the pilot testing completed at the Washington State Data Processing Service Center Three, the model has had initial success both in terms of excellent student feedback and the substantial number of individuals who have requested access to the course.

The Hockaday model is flexible enough to use for many microcomputer courses. The principles are designed to fit the many and varied courses necessary for future needs in microcomputer education programs.

This model, with limited adaptations, could also be used for a number of types of training programs. Specifically appropriate would be those types of training programs that would benefit from a logical and detailed functional task analysis.

#### References

Fine, Sidney A and Wiley, Wretha W., An Introduction to Functional Job Analysis: A Scaling of Selected Tasks From the Social Welfare Field. Michigan: W. E. Upjohn Institute for Employment Research, September 1971.

Kemp, Jerrold. Instructional Design. Fearon-Pittman Publishers, Inc. Belmont, Ca, 1977. pp. 162

Knowles, Malcolm S., The Modern Practice of Adult Education: Andragogy Versus Pedagogy. New York: Association Press, 1970.

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