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ABSTRACT
        These proceedings consist of 18 papers from a conference to
provide researchers and practitioners with a forum for sharing research
findings that focus on the link between research and practice in adult,
continuing, and community education. The five invited papers are as follows:
"Towards a Pedagogy of Ethical Coercion" (Ian Baptiste); "Circuit of Culture:
A Critical Look at Dilbert and Workplace Learning" (Vicki K. Carter, Sharon
L. Howell); "Adult Education as Building Community: The Parameters and
Realities of Enterprise Identity in North America (1945-70)" (Andre P.
Grace); "From Motherhood to Sister-Solidarity: Home-making as a
Counterdiscourse to Corporate Environmental Polluting" (Robert J. Hill); and
"How Adult Learners Change in Higher Education" (Kathleen P. King). The 13
refereed papers include the following: "Evaluation Research in Workplace
Literacy Programs" (Eunice N. Askov, Andree Rose Catalfamo); "'It's Not Like
Normal School': Adult Learners' Perspectives on a Nontraditional GED [General
Educational Development] Program" (Alisa Belzer); "Linguistic, Cultural, and
Educational Adjustments of Adult ESL [English as a Second Language] Female
Students in New York" (Lucia Buttaro); "Learning While Working with 'The
Opposition': A Study of Meaning in a Cross Boundary Work Group" (Marjorie H.
Carkhuff); "African American Women in a Predominantly Caucasian Female
Profession: Learning Paths to Positions of Prominence" (Janet V. DeLany);
"Selecting Communications Technology for Continuing Professional Education
(CPE) Program Delivery" (Peter J. Graybash, Jr.); "Factors that Influence
Persistence among Students in Middle Adulthood at the Community College"
(Scott B. Greenberg); "Technical Nontraditional Student College Attrition:
The Student's Perspective" (Harvey F. Hoffman, John L. Elias); "Complexity
Theory as a Framework for Adult Education Research Design" (Larry J. Krafft,
Kathy Brill, T. J. Titcomb); "Cohort Group Effectiveness in Accelerated
Programming" (Alan R. Lisk, Colleen A. DiRaddo); "Cooperative Learning:
Test-Taking in a Nontraditional Manner in the College Classroom" (David L.

Tucker); "The Applicability of Classical and Metaphorical Organizational
Models to the Virtual University: A Case Study" (Joseph J. Zerby, Jr.); and
"Describing RN-BSN [Registered Nurse-Bachelor of Science in Nursing]
Education from the Learner's Perspective: A Focus Group Study" (Patti Rager
Zuzelo). (YLB)

Proceedings

of the

Pennsylvania Adult and Continuing Education Research Conference

March 20, 1999

Edited by
Kathleen P. King, Ed.D. and Trenton R. Ferro, Ed.D.

Co-Sponsored by
Pennsylvania Association for Adult Continuing Education
Temple University
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Held at
Temple University
Harrisburg, Pennsylvania

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Introduction

Welcome to the 1999 Pennsylvania Adult and Continuing Education Research Conference! Today you are participating in the only conference in the Commonwealth of Pennsylvania dedicated to research in the field of adult education--and, to the best of our knowledge, the only statewide conference of its kind in the United States. Its purpose is to provide participants a forum for sharing research findings that focus on the link between practice and research in adult, continuing, and community education.

The first conference, held in the fall of 1994, was conceived as a way for students who were unable to travel to the Adult Education Research Conference (AERC) to hear adult educators from Pennsylvania who had made presentations at AERC. As the planning progressed, the decision was made to also invite proposals, especially from students and practitioners, to flesh out a full-day conference. In addition to concurrent sessions for the presentations, the planners also included a keynote speaker, a symposium, and poster sessions.

This fifth conference (three statewide conferences and one regional conference have preceded today's gathering) continues with this familiar format. The new feature is our host: Temple University at Harrisburg. Previous conferences have been held at Penn State-Monroeville, Indiana University of Pennsylvania, Penn State (University Park), and Widener University.

Good practice both informs, and is informed by, good and relevant research. It is the hope of the planners of this conference that you, the participant, will develop as a practitioner and researcher by learning from, and contributing to, an expanding knowledge and research base, represented in part by the efforts of the contributors included in this volume.

Kathleen P. King, Fordham University
Trenton R. Ferro, Indiana University of Pennsylvania
Proceedings Editors

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Pennsylvania Adult and Continuing Education Research Conference

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Pennsylvania Adult and Continuing Education Research Conference

March 20, 1999

Program

8:30 am – 9:00 am	**Registration & Coffee**
9:00 am – 10:15 am	**Welcome & Keynote Address**

Dr. Cheryl M. Boyer, Acting Dean,
    Temple University Ambler and Harrisburg
Dr. Kathleen Taylor
    Associate Professor and Chair
    Department of Portfolio Development
    Saint Mary's College of California and
    Faculty Mentor, Walden University

10:15 am – 10:30 am	**Break**
10:30 am – 11:30 am	**Concurrent Sessions I**

Tucker, David L. "Cooperative Learning: Test-Taking in a
    Non-Traditional Manner in the College Classroom"

DeLany, Janet Voss "African American Women in a
    Predominantly Caucasian Female Profession:
    Learning Paths to Positions of Prominence"

Lisk, Alan R. and DiRaddo, Colleen B. "Cohort Group
    Effectiveness in Accelerated Degree Programming"

Krafft, Larry J., Brill, Kathy and Titcomb, T.J. "Complexity
    Theory as a Framework for Adult Education Research
    Design"

Grace, Andre P. "Adult Education as Building Community:
    The Parameters and Realities of Enterprise Identity in
    North America (1945-70)"

King, Kathleen P. "How Adult Learners Change in Higher
    Education"

11:40 am – 12:40 pm	**Concurrent Sessions II**

Zuzelo, Patti R. "Describing RN-BSN Education from the Learner's Perspective: A Focus Group Study"

Greenberg, Scott B. "Factors That Influence Persistence Among Students in Middle Adulthood at the Community College"

Carkhuff, Marjorie "Learning while Working with the "Opposition": A Study of Meaning in a Cross Boundary Work Group"

Hoffman, Harvey and Elias, John L. "Technical Nontraditional Student College Attrition: The Student's Perspective"

Graybash, Peter J., Jr. "Selecting Communications Technology for Continuing Professional Education (CPE) Program Delivery"

Carter, Vicki K. and Howell, Sharon L. "Circuit of Culture: A Critical Look at Dilbert and Workplace Learning"

12:45 pm – 1:45 pm	**Lunch**
2:00 pm – 3:00 pm	**Concurrent Sessions III**

Askov, Eunice N. and Catalfamo, Andree Rose "Evaluation Research in Workplace Literacy Programs"

Buttaro, Lucia "Linguistic, Cultural, and Educational Adjustments of Adult ESL Female Students in New York"

Belzer, Alisa "'It's Not Like Normal School': Adult Learners' Perspectives on a Non-Traditional GED Program"

Zerby, Joseph J. "The Applicability of Classical and Metaphorical Organizational Models to the Virtual University: A Case Study"

Hill, Robert J. "From Motherhood to Sister-Solidarity: Home-Making as a Counterdiscourse to Corporate Environmental Polluting"

Baptiste, Ian "Towards a Pedagogy of Ethical Coercion"

3:00 pm – 3:15 pm	**Break**
3:15 pm – 4:15 pm	**Concluding Session and Address**

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Proceedings of the
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March 20, 1999

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Pennsylvania Adult and Continuing Education Research Conference

March 20, 1999

1999 Pennsylvania Adult & Continuing Education Research Conference

Invited Papers

TOWARDS A PEDAGOGY OF ETHICAL COERCION

Ian Baptiste

ABSTRACT

Adult educators seem hesitant to coerce anyone, including their enemies. This is because our humanist moorings constrain us to act as if all forms of coercion is evil. Proposed are rudiments of a pedagogy of ethical coercion, which I contend we desperately need.

INTRODUCTION

Most adult educators care about people. However, how, and to whom, we direct our caring varies considerably. Some of us focus entirely on individuals. Others prefer to address the concerns of individuals within the context of groups to which they belong. Some educators focus primarily on the material well-being of persons while others dwell on their psychological, socio-cultural, or spiritual well-being. But whatever our ethic of caring, and whatever the ends to which we direct our efforts, most of us seem to believe that caring could be actualize *wholly* through non-coercive means.

Our pedagogies differ with our ethics of caring, but it appears that most of us are united by a humanist posture which treats coercion as an *ipso facto* evil. Quite often, we delude ourselves by acting as if, in our practice, we encounter no real enemies--only allies and misguided foes. If that were the case, non-coercive pedagogies would suffice. However, we often encounter real enemies--people who intentionally frustrate our causes. In such cases, I argue, caring demands, a pedagogy that would decisively neutralize our enemies.

ETHICS OF CARING IN ADULT EDUCATION: DIFFERENT BUT THE SAME

Below, I examine three dominant ethics of caring in adult education and conclude that all are wedded to a naive romanticism which regards all forms of coercion as evil. They are: a) caring as human capital formation, b) caring as self-improvement and c) caring as humanizing our enemies. These are not distinct categories. Quite often, people practice them in combination. For instance, some educators emphasize human capital formation as a means to self-improvement. Others employ an overt self-improvement curriculum in tandem with a covert curriculum intended to humanize their enemies. These groupings are merely areas of emphasis, not exclusive domains. The reader is advised to remember this while reading this section.

Caring as Human Capital Formation

The term human capital refers to those skills, attitudes, behaviors, knowledge, etc., which are developed primarily for their economic (material) value. In economic jargon, it is "the present value of past investments in the skills of people" (Blaug, 1970, p. 19). Human capital takes many forms--improvement in our education, health, social networking; relocation to areas with better job prospects, and so on. Human capital formation is the name given to the process by which such capital is deliberately developed; and the expenditure (in time, money, etc.) is called human capital investment (Becker, 1962, p. 9).

Many adult educators express their caring through a focus on human capital formation. For these educators, the primary concern is to improve and/or increase the marketability of individuals. Advocates of this view populate such areas as workforce education, human resource development, learning organization, traditional approaches to adult literacy, and so on (Camevale et. al., 1988; Harris, 1997; Kirsch et. al., 1993; Niemi, 1992; Watkins & Marsick, 1993). Most of these educators treat persons as autonomous, dis-interested[1] individuals,

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[1] A self-interested person is one who allows her/his personal wants, desires, needs, etc. to influence his or her decisions and actions. I and others contend that all human endeavors are self-interested because it is humanly impossible to prevent our

rather than as interdependent, self-interested members of groups. They also generally imply[2] that we live in an economic meritocracy--meaning that our earnings are based primarily on merit, not favor. This dis-interested, and meritocratic stance allows them to presume a one-to-one causal relationship between the amount of human capital one possesses and one's personal and social well-being. They assume that the more human capital one possesses, the better would be his or her personal and social well-being. Caring is therefore naturally equated with human capital formation. For a thorough presentation and critique of human capital theory, see Baptiste, 1994; Becker, 1993; Blaug, 1972; Maglen, 1990;Schultz, 1961.

Advocates of human capital formation do not possess a pedagogy of coercion. Why should they? Most of them seem to live in a world where true conflicts and real enemies do not exist. Some deny scarcity, acting as if there is always an infinite supply of every good thing. In such a world there is no need to directly address human conflict. "Market forces" will take care of that. Others deny greed and evil. "Illiteracy" is presumed to be the cause of all our social maladies. People are poor, sick, homeless, etc., because they lack the necessary marketable skills--a situation that is easily corrected through provision of the requisite human capital (Carnevale, 1991). Irreconcilable differences do not exist among human beings. Conflict will eventual vanish through enlightened discourse. Every human transaction can be a "win/win" situation, because our differences are due to ignorance, not vice. In this romantic world there is certainly no need to disempower or coerce anyone.

Caring as Self-Improvement

Some adult educators express their caring by seeking to fundamentally alter the state of individuals--be it physical, psychological, spiritual, etc. These are the concerns typically addressed in adult development and learning literature (Cranton, 1994; Merriam & Caffarella, 1991; Mezirow, 1991). I call members of this group self-improvement advocates. I distinguish them from the first group, because it is possible to increase one's marketability without caring much about fundamentally altering his or her state of being. As the literature on adult development and learning shows, important differences exist among self-improvement advocates. For instances, they differ on what state of the individual they choose to alter. Some focus on the physical, others on the cognitive, psycho-social, emotional, spiritual, and so on. Transformational theory (Mezirow, 1985, 1991) typifies the self-improvement ethic in adult education. Its primary function is to alter in fundamental ways the perspective of the individual (hopefully for better). Mezirow vacillates on this point. But I agree with his critics, that although positive social change might be a serendipitous outcome of transformational theory, it is not a requirement (Collard & Law, 1989).

Self-improvement proponents do not possess a pedagogy of coercion. Theirs is what Newman (1994) calls introspective activism--we can change the world, presumably, by changing ourselves. Newman depicts this view with these words:

> The revolution starts with us.
> We can begin by cleaning up our own back yard.
> We need to achieve an inner peace if we are to strive for world peace.
> We must educate ourselves before we can educate other (p. 103).

He goes on to caution that "these are seductive and comforting phrases, but they can deflect us from laying blame where blame is due, and from taking effective, coordinated action to oppose those who do us and others harm" (Newman, 1994, p. 103). It seems to me that the entire cadre of self-improvement advocates

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desires, interests, wants, etc., from influencing our conscious decisions and actions. Furthermore we believe that many social interactions are conflict-ridden, that is to say, the interactants have opposing, and sometimes irreconcilable, interests. Self-interestedness should not be confused with selfishness or greed. A selfish person seeks his or her own interests, without considering the interests of others. It is possible, however, for the self-interested person to incorporate his or her interests into a larger public interest. There are those who believe that people could be dis-interested. Such persons assume that we could totally obliterate our interests and engage in social transactions completely neutral and interest-free.

[2]In general, these assumptions are implied by actions but seldom ever stated.

is plagued by this deflection.

Caring as Humanizing Our Enemies

Some adult educators express their caring by striving to humanize their enemies through empowering their allies. I belong to this camp. We vary widely. Firstly, we differ in our alliances. Some of us are allied along lines of race/ethnicity, others along lines of by socio-economic status, gender, sexual orientation, political ideology, and so on. We also differ in how we attempt to empower our allies. Some of us use human capital formation approaches; others rely on self-improvement tactics and strategies; some of us employ the methods of critical pedagogy and conscientization; and so on. Among our ranks are liberals, conservatives, feminists, critical pedagogists, marxist, and a host of others. (Baptiste, 1994; Freire, 1973; Johnson-Bailey, 1995; Ross-Gordon, 1991; Shor, 1992; Tisdell, 1993). What unites us is a commitment to humanizing our enemies through increasing the power, influence and status of our allies. We know we have enemies. Usually our allies are defined in opposition to them--afrocentrism against eurocentrism, feminism against patriarchy, the Right verses the Left, and so on. But invariably, we attempt to rehabilitate our enemies through critical discourse and non-coercive collective action.

Paulo Freire epitomizes this approach. He is very cognizant of enemies. In all of his writings, Freire painstakingly points out the faces of oppression: custodians of banking education, corporate capitalism, European imperialism and colonialism, scientism, racism, the Right, and so on (Freire, 1970, 1973). Nonetheless, no where in Freire can one find a coercive pedagogy aimed at disarming and neutralizing the enemy. Like most educators within this group, Freire concentrates primarily on empowering his allies—usually the oppressed. In fact, Freire seems to believe that empowered, critically conscious allies will eventually transform their enemies into friends. In Freire's world, ultimately, there are no losers. Everyone wins in the end. In this utopian, humanist vision, who needs a pedagogy of coercion? Newman (1994) sums it up well:

> [Freire's reference to] the Right must refer, in part at least, to people who maintain their positions, property and privilege through terror. Yet somehow Freire appears to believe that these oppressors, too, are trapped, and that *it is up to the oppressed* to release them. . . .

> Freire, then, appears to maintain a faith in the potential goodness of all people, and he envisages a utopia in which revolutionary leaders, the people, and presumably, some at least of the former oppressors, are liberated and, through a process of cultural synthesis, create a conscientized, post-revolutionary culture. (pp. 35, 36; emphasis in original)

With apocalyptic fervor, but lacking the harsh day of judgement, Freire announces his utopian vision.

> Yet it is--paradoxical though it may seem– precisely in the response of the oppressed to the violence of their oppressors that the gesture of love may be found ... As the oppressed, fighting to be human, take away the oppressors' power to dominate and suppress, they restore to the oppressors the humanity they had lost in the exercise of their oppression. It is therefore essential that the oppressed wage the struggle to resolve the contradiction in which they are caught.... The contradiction will be resolved by the appearance of the new man who is neither oppressor nor oppressed--man in the process of liberation (Freire, 1972, pp. 32-33, cited in Newman, 1994, pp. 33-36).

For Freire, then, the collective, critical, and non-coercive action of the oppressed would eventually restore the humanity of the oppressor. Through this collective, non-coercive action the scales which blind the oppressors to their harmful deeds magically fall off, and new men and women emerge--men and women with hearts to do good.

How then does Freire construe evil? He construes it as ignorance or mistakes. For him, the violence of the oppressor and the resultant mob reaction of the oppressed (massification) are finally all attributable to uncriticality--naivete, intransivity, and semi-transivity (Freire, 1973, p. 19). With Freire, as with most adult educators, free, enlightened humans are accorded absolute goodness. Evil, it would seem, is either the product of ignorance, or social coercion. It's as if those who really know the good will always do it. Accordingly, it is assumed that if we are not doing the good, it is either because we do not really know it, or

are not <u>really</u> free to pursue it. On the basis of such reasoning, the ethical responsibility of the educator is to foster enlightened freedom. People, it is assumed, will act right once they are free, critical thinkers. Vice is recast as ignorance and mistakes, and the ethical responsibility of educators recast in epistemic terms, ie., the development of critical consciousness.

No doubt there are people who do us wrong out of ignorance, for whom conscientization is a fitting remedy. But I suspect that there are people who hurt and harm others knowingly and willfully. Such individuals must be disempowered, neutralized, silenced. And we fool ourselves if we believe that we will neutralize our enemies simply by equipping our allies to enlighten and humanize them. Freire's experiences in Guinea Bissau stand as a shining illustration of this folly (Freire, 1983). What his experience teaches us is that, in order to neutralize those who will do us harm, we must do more than engage in rational discourse and non-coercive collective action. We must equip ourselves to take decisive, coercive action against the perpetrators of evil. In other words, we need a pedagogy of ethical coercion.

By pedagogy of ethical coercion I am referring to more than theories of resistance (Giroux, 1983; Williams, 1961). Theories of resistance, it seems to me, are merely coping mechanisms. They simply explain the survival strategies employed by our allies. In some cases, those same strategies leave our allies more disenfranchised and powerless. In short, resistance theories offer very little by way of neutralizing or immobilizing our enemies.

CONCLUSION: TOWARDS A PEDAGOGY OF ETHICAL COERCION

I believe that it is ethical to disempower our enemies--those who, wittingly, do us and others harm. I no longer share the humanist conviction that it is always possible to rehabilitate our oppressors. Where oppression is due to ignorance, rehabilitation may suffice. But where oppression is due to vice we have no ethical recourse but to stop, disempower, silence the perpetrators. Social activists have always understood this. Asks unionists struggling to squelch the insatiable appetite of power-hungry capitalists; ask environmentalists who are working on the front line to save our rain forests from greedy predators; ask women activists who see every day the ravages done to women by tyrannizing men. These and countless other activists know that the enemy is real, dangerous, and beyond rehabilitation.

Newman (1994) has provided an important first step toward building a pedagogy of ethical coercion. He has dispelled the myth that we don't really have enemies, and has begun to define them for us. Standing on his shoulders, we must now articulate this pedagogy. This articulation, I believe, should begin by shifting our pedagogical lenses from the classroom to social movements. People in formal classrooms are usually too nice and politically correct to engage in ethical coercion. On the contrary, coercive attempts to disempower the enemy occurs daily in social movements, therefore it is to those movements we must turn. Given their busy schedule, and action orientation, however, most social activists do not have the time nor inclination to synthesize and articulate their pedagogies in use. But I believe that reflection and articulation lend greater potency to our actions--the result is usually improved practice.

It will serve us well to conduct critical examinations of the works of social activists. I say critical, because I do not assume that activists are ethical in all of their dealings; nor do I assume that all of their pedagogical practices are sound or efficacious. A critical assessment of their practices will allow us to identify those elements that are ethical and sound. A good place to begin might be with popular educators (working with disenfranchised groups) who are also self-identified adult educators. These educators are most likely to appreciate, not only the value of neutralizing the enemy, but also of *articulating* a pedagogy for doing so. Our examination should occur in diverse settings and contexts--workplaces, communities, schools (not classrooms), etc. We should not assume that yesterday's solutions will work today. We should not assume that what works for unionists in South Africa will suffice in Spain. We should not presume that what works for environmentalists in Brazil, will work for environmentalists in the US; we should not presume that what works for women activists will work for activists fighting racial discrimination; and so on.

Secondly, a pedagogy of ethical coercion requires a radical re-conceptualization of our practice. This re-conceptualization demands a shift away from curriculum and program planning models rooted in sterile, a-political theories of organizational behavior--models so prevalent in industrial psychology, business

management and human resource development (Boyle, 1981; Gerloff, 1985; Galbraith et. al., 1997). I contend that though we may have discarded the jargon of scientific management, adult educators continue to practice it. We need, therefore, to cast off the shackles of Taylorism and all its technicist trappings, and embrace theories and planning models which emphasize political mobilization--theories which construe practice, not as discrete sets of technical and psychological competencies, but as deeply complex political acts, involving arduous negotiation of interests (Cervero & Wilson, 1994; Fisher & Kling, 1993; Kretzmann & McKnight, 1993; Kriesi, 1993).

I have only scratched the surface of this issue. Being a victim, myself, of the utopian, humanist vision I here criticize, I have only just begun to shake off its mantle. Much is left to be done. I solicit the aid of those of you who have gone beyond me in this journey. Together, I am confident that we can succeed in articulating and implementing a pedagogy of ethical coercion. Our world badly needs one!

REFERENCES

Baptiste, I. (1994). *Educating politically: In pursuit of social equality.* Unpublished Doctoral Dissertation, Northern Illinois University, DeKalb.

Becker, G. (1962). Investment in human capital: A theoretical analysis. *Journal of Political Economy* (Supplement), 70(5), 9-49.

Becker, G. (1993). *Human capital: A theoretical and empirical analysis with special reference to education* (3rd ed.). Chicago: University of Chicago Press.

Blaug, M. (1970). *An introduction to the economics of education.* London: Penguin.

Blaug, M. (1972). The correlation between education and earnings: What does it signify. *Higher Education,* 1(1), 53-76.

Boyle, P. (1981). *Planning better programs.* New York: McGraw-Hill.

Carnevale, A. P. (1991). *America and the new economy.* Washington, DC: U.S. Department of Labor and American Society for Training and Development.

Carnevale, A. P., Gainer, L. J., Meltzer, A. S., & Holland, S. (1988, October). Workplace basics: The skills employers want. *Training and Development Journal,* 20-30.

Cervero, R. M., & Wilson, A. L. (1994). *Planning responsibly for adult education: A guide to negotiating power and interests.* San Francisco, CA: Jossey-Bass.

Collard, S., & Law, M. (1989). The limits of perspective transformation: a critique of Mezirow's theory. *Adult Education Quarterly, 39*(2), 99-107.

Cranton, P. (1994). *Understanding and promoting transformative learning: A guide for educators of adult.* San Francisco, CA: Jossey-Bass.

Fisher, R., & Kling, J. (Eds.). (1993). *Mobilizing the community: Local politics in the era of the global city.* Newbury Park, CA: Sage Publications.

Freire, P. (1983). *Pedagogy in process: The letters to Guinea Bissau* (C. St. John Hunter, Trans.). New York: Continuum.

Freire, P. (1970). *Pedagogy of the oppressed.* New York: Continuum.

Freire, P. (1972). *Cultural action for freedom.* Harmomdsworth, UK: Penguin.

Freire, P. (1973). *Education for critical consciousness.* New York: Continuum

Galbraith, M., Sisco, B., & Guglielmino, L (1997). *Administering successful programs for adults: Promoting excellence in adult, community, & continuing education.* Malabar, FL: Krieger

Gerloff, E. A. (1985). *Organizational theory and design, a strategic approach for management.* New York: McGraw-Hill.

Giroux, H. (1983). *Theory and resistance in education: A pedagogy for the opposition.* South Hadley, MA: Bergin & Garvey.

Harris, G. (1997). Identification of the workplace basic necessary for effective job performance in small businesses in Oklahoma. *Proceedings of the 38th Annual Adult Education Research Conference,* Stillwater, OK: Oklahoma State University.

Johnson-Bailey, J. (1995). Making a way out of no way: an examination of the educational narratives of reentry black women with emphasis on issues of race, gender, class, and color. *Proceedings of the 36th Annual Adult Education Research Conference,* Edmonton, Alberta, Canada: University of Alberta,

Kirsch, I., Jungebult, L., Jenkins, L., & Kolstad, A. (1993). *Adult literacy in America.* Washington, DC: U.S. Department of Education.

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Kretzmann P., & McKnight, J. (1993). *Building communities from the inside out: a path toward finding and mobilizing a community's assets.* Evanston, IL: Northwestern University, Center for Urban Affairs and Policy Research.

Kriesi, H. (1993). *Political mobilization and social change: The Dutch case in comparative perspective.* Brookfield, VT: Ashgate Publishing Co.

Maglen, L. R. (1990). Challenging the human capital orthodoxy: The education-productivity link re-examined. *The Economic Record, 66,* 281-294.

Merriam, S., & Caffarella, R. (1991). *Learning in adulthood: A comprehensive guide.* San Francisco, CA: Jossey-Bass.

Mezirow, J. (1985). A critical theory of self-directed learning. In S. Brookfield (Ed.), *Self-directed learning: From theory to practice* (pp. 17-30). San Francisco: Jossey-Bass. (New Directions for Adult and Continuing Education, No. 25).

Mezirow, J. (1991). *Transformative dimensions of adult learning.* San Francisco, CA: Jossey-Bass.

Newman, M. (1994). *Defining the enemy: Adult education in social context.* Sydney, Australia: Stewart Victor.

Niemi, J. A. (1992). Human resource development: Definitions, scope, issues and research needs. *Thresholds in Education, 18*(2 & 3), 2-5.

Ross-Gordon, J. (1991). Needed: a multicultural perspective for adult education research. *Adult Education Quarterly, 42*(1), 1-16

Schultz, T.W. (1961). Investment in human capital. *American Economic Review, 51*(1), 1-17.

Shor, I. (1992). *Empowering Education: Critical teaching for social change.* Chicago: University of Chicago Press.

Tisdell, E. (1993). Feminism and adult learning: power, pedagogy, and praxis. In S. B. Merriam (Ed.), *Anupdate on adult learning theory* (pp.91-103). San Francisco: Jossey-Bass. (New Directions for Adult and Continuing Education, No. 57).

New Directions for Adult and Continuing Education, 57, 91-103.

Watkins, K. E., & Marsick, V. J. (1993). *Sculpting the learning organization: Lessons in the art and science of systemic change.* San Francisco, CA: Jossey-Bass.

Williams, R. (1961). *The long revolution.* New York: Columbia University Press.

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Invited Papers

Circuit of Culture: A Critical Look at Dilbert and Workplace Learning

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ABSTRACT

As a cultural artifact, the Dilbert comic strip has generated both amusement and consternation, particularly for corporate trainers. This paper summarizes a year of research on Dilbert and its surrounding discourse in order to extend the critique of corporate education and Human Resource Development (HRD) into the cultural realm.

> *Captive Wage Slave. . . Work Fodder. . . Can You Feel the Love in this Place. . . Way-too-cynical The TQM Nazis Won't Take Me Alive. . . Faceless Minion. . . . This is your Brain at Training. . . Company Property* (Dilbert Zone List of the Day entries; March, 1997 - November, 1997).

INTRODUCTION

These signature lines from postings to the Dilbert web site's List of the Day (LOTD) tell a succinct story about one group of white collar workers' feelings about work. The LOTD posts a daily question about work such as what did you learn at your last HRD class? Or, what is your favorite meeting topic? People contribute responses to the list and vote for their favorites. These entries, and the Dilbert collection of comic strips and other materials, have much to say to adult educators because they are related directly to HRD and learning at work.

Nadler and Nadler (1989) define Human Resource Development as learning experiences, specifically training, education, and development, organized and provided by employers during certain periods of time in order to encourage improvement of performance and/or personal growth of employees. Education in the workplace is typically paid for, constructed, and delivered under the auspices of an employer raising questions about learning for whom, for what purpose, and for whose benefit. Moreover, beliefs of trainers about power, practice, and the nature of work require constant examination because HRD has not explored in depth its own historical and socio-economic basis, nor the endemic conflict of priorities and values between employed and employer (Schied, 1995). Therein lies a profound contradiction for HRD practice and theory, for HRD does provide management significant measures of worker control in contradiction to, or concurrent with HRD's claims to be assisting in development of a productive and empowered workforce.

RESEARCH OVERVIEW

Cultural studies research was one of many lenses available to help understand and interpret issues of workplace learning. For this study, Dilbert served as an interpretative frame of reference and resource for taking the socio-attitudinal pulse in relation to learning at work. Space limitations necessitate a sketchy discussion of a much more complex research process. In this case, Dilbert was a cultural artifact that spoke directly to HRD practice. This study incorporated narrative and semiotic readings of the comic strip, books, and materials published by and about Dilbert's creator Scott Adams. Hermeneutic and interpellative analyses were used in order to uncover dimensions of belief structures and assumptions about learning at work. Comments posted by workers to the Dilbert web site were gathered for a ten-month period and were subsequently coded and thematically categorized. Workers who contributed comments to the web site were in jobs classified as knowledge or information work and most were male. Electronic interviews were conducted based on a purposeful sampling of web-site contributors who had written comments directly speaking to their experiences with training and development.

The study was based upon a critical approach to integrating academic knowledge into the lived context of work and workers. In the tradition of cultural studies research, several frameworks and methods were incorporated but were constantly undergirded by critical cultural studies theory (Agger, 1992). Specifically, the study   was structured by the circuit of culture model (du Gay, Hall, Janes, Mackay & Negus; 1997) and examined the major processes of representation, identity, regulation, consumption and production as means to articulate the distinct interconnections and convergences that form an artifact, object, or work of popular culture. These five linked components were used to organize the research findings and facilitate exploration of Dilbert in terms of "how it is represented, what social identities are associated with it, how it is produced and consumed, and what mechanisms regulate its distribution and use" (du Gay et al, 1997, p. 3).

Production: Du Gay et al (1997) consider production not only in terms of how an artifact was created technically, but also how it was encoded with specific meanings during the process. It would appear that Dilbert's producers are pro-worker and anti-management and yet many executives view Dilbert as a tacit ally (Solomon, 1997). Although providing an extensive portrayal of serious workplace issues, Dilbert is superficial, never confronting fundamental workplace problems, or societal problems of any type, even for the white-collar (and white) technical professional it supposedly represents. The deeper inscriptions of cultural meanings stemming from an artifact such as Dilbert are easy to overlook. Dilbert's world is decontextualized with no basis for articulating social and cultural issues. The lack of context nullifies opportunities to explore gaps in social justice and equality. For example, one of its messages is that business is good and it pays the rent, therefore workers must take the bad along with it. Dilbertian humor does not ask questions about why work is like it is nor explicitly point out how a business practice is stupid. Instead, it promotes and reinforces existing hierarchies and power structures by legitimizing corporate ideology and integrating workers within established discourses and orders. These are some of the strong ideological components in the production of Dilbert.

Regulation: Cultural artifacts are frequently regulated because certain groups or factions see them as inherently dangerous or damaging to their point of view. Dilbert cartoons have been banned from many workplaces because what some workers see as comic relief does not amuse their management (Dilbert, Defender of the Downsized, 1996). But Dilbert may also be read in support of the status quo (Kellner, 1990). Many CEOs believe Dilbert can act as a safe way to blow off disgruntled-worker steam (The Anti-Management Guru, 1997). As a cultural text, Dilbert's regulatory messages act as a template for appropriate and desirable social relations. In doing so, the comic also provides justification for power and social inequities, presenting hierarchical structures as somehow naturally occurring and immutable. One reason Dilbert can be adapted for corporate benefit is due, in part, to late capitalism's assertion that workers are empowered and trusted by management. Knowledge work requires a transformation of obvious control to cultural control, the "culture" of work becoming like a technology within commitment (versus control) driven enterprises. Management practice is still highly regulatory, but within a context that values learning organizations, flexibility, risk-taking, and self-directed workers (Butler, 1997). The comic strip never interrogates corporate authority, nor the controlling nature of business. Through these regulatory processes, subjectivity is produced not simply by reflecting society, but also by actively creating and producing the model working subject required by capitalism in its current near-millennium state. Dilbert, as a cultural artifact, helps to inscribe workers through culture, discourse, and signifying systems (Giroux, 1992; Solomon, 1997).

Consumption: According to study participants, workers find Dilbert hilariously funny in a painful kind of way. Zemke (1996), senior editor of Training Magazine and one of several HRD professionals expressing consternation about Dilbert, questioned why white collar workers were whining. Were employees ready to pass out from working in air-conditioned sweatshops? Could Dilbert truly be "a serious symbol of the downtrodden knowledge worker and are those the words of the prophet we see inscribed in the multitude of three-paneled theses that the wronged have nailed to the cubicle walls of the oppressors" (p. 2)? Other critiques suggest that it is really the corporate canon being deployed by Dilbert because the construction of subjectivity is wholly opposite the concept of voice. On the surface, the strip seems to allow individual expression, seen by management as resistance and workers as a semblance of power. But it is imaginary power, an image of power that is being manipulated. Real power belongs to those who can enforce their interpretation of what is going on in the workplace while keeping aggression and anger under control. Dilbert

functions subtly to deflect genuine resistance to corporate control and can easily be seen as schizoid, representing "a cherished mascot of oppressed workers and a valued marketing tool for companies oppressing them" (Solomon, 1997, p. 10).

Representation: Popular media, Dilbert included, are teaching machines creating meaning and aiding in the construction of knowledge (Giroux, 1992; Kellner, 1990). Dilbert products sell incredibly well because workers see strong connections to their own experience. HRD departments incorporate Dilbert into training plans. Videos and Dilbert-centered classes are popping up as opportunities to explore workplace problems and reinforce corporate values. Lockheed Martin, Xerox, and Honda all use Dilbert for training in ethics awareness, empowerment, and quality programs (Whitaker, 1997). Cohen/Gebler Associates, Inc. produces a Dilbert communications program with the objective of making sure the "message gets through to your target audience" (Cohen/Gebler web site, 1997). The many educational uses of Dilbert clearly contradict Newsweek's assessment that Dilbert is "the worst PR for corporate America since The Exxon Valdez" (Levy, 1996). With Dilbert inscribed as an educator, could he really be threatening a white collar overthrow of corporate America, when much of corporate America views Dilbert as a way to deflect cynicism, speak to work issues, and at the same time erode "inclinations to fight for better working conditions" (Solomon, 1997, p. 30)?

Identity: Dilbert avoids tough identity issues that involve solidarity, humanity, dignity and justice. In relation to worker identity, Dilbert is an effective double-agent. Though the comic strip and other materials are classified as humor, and knowledge workers have adopted Dilbert as their champion, the fundamental messages in Dilbert are frightening. Dilbert characters consistently malign and denigrate their peers, effectively undermining a sense of strength and solidarity among workers. Dilbert materials are a huge indictment of workers who are portrayed as unwitting slackers. Adams refers to workers as mindless, irrational, easily-manipulated dolts. Humorous or not, this is a dangerous and debilitating message for workers who deal daily with management and training techniques designed subtly and overtly to help them internalize corporate values. Gee, Hull and Lankshear (1996) pointed out their growing concern with socio-technical practices designed to "facilitate productivity and commitment, sometimes in highly 'indoctrinating' ways" (p. 6). Contemporary work practices demand reconceptualization because workers are asked to invest more than their bodies. Fast-capitalism requires workers' hearts and minds, amounting "to a form of mind control and high-tech, but indirect coercion" (p. 7). However, this re-forming of identities may conflict with identities already established. As one LOTD contributor admitted: "Every day, in every way, I am internalizing corporate values."

IMPLICATIONS FOR ADULT EDUCATION

The complexities of analyzing a cultural artifact are obvious. This study of Dilbert found that the comic strip was often viewed by its readers as disconcertingly similar to their own day-to-day work lives. Fear of job loss and existing power relationships created a culture of adjustment in which workers felt the necessity to continually act in appropriate and sanctioned manners so as not to disrupt the status quo. The study showed underlying misogyny, racial bigotry, classism, and elitism in both the strip and in data from web site commentaries. Dilbert materials and Dilbert readers had little understanding of, or concern for, inclusivity for marginalized and silenced voices. Not surprisingly, labor unions and the employees they represent have not jumped on the Dilbert band wagon. Workers' desire for inner comfort and predictability fit in with the rational side of fast-capitalism's corporate thinking. The role of HRD in this scenario was to teach solely to the needs of business, buttressing bureaucratic strangulation and reinforcing employment practices where workers not only have to have specific job knowledge and skills, but also have to present themselves as certain kinds of people. All of these things combined with continued economic decline for workers creates a betrayal of a wider vision of democracy and a democratic workplace.

Dilbert has much to say about education simply by virtue of the many instances words and concepts related to learning are found in Dilbert materials (Ohliger, 1996). A critical reading of Dilbert uncovers profoundly complex issues about the goals and consequences of workplace learning. Cultural artifacts provide social rules and explain behavior. In this sense, cultural artifacts are didactic. Big business training videos aside, Dilbert can be a powerful pedagogical tool. In spite of the lack of social awareness in Dilbert, it is possible to critically engage workplace issues, disrupting the deep structures and nuanced meanings found in the comic strip. This is where critical workplace learning comes into play. There are good things that come out of HRD; most training and development professionals do not have agendas intended to oppress or suppress the voices

of workers. However, when workers such as the subjects in this study acknowledge they are internalizing corporate values that conflict with their own personal values, HRD becomes part of a problem that extends beyond work. Training supports institutional expectations that end up with workers who feign interest, communicate insincerely, and cope with dehumanizing management fads. These practices are conflated with record profits while re-engineering and downsizing run rampant. The combination perpetuates a pedagogy allied with reproducing a capitalist ideology and maintaining the status quo so that business and industry continues to maximize shareholder value (Butler, 1997; Gee et al, 1996). The goals of fast-capitalism are why popular media texts such as Dilbert demand serious reading and scrutiny because they become part of the workplace culture, a source of contestation and identity formation as well as laughter and fun. As HRD courses are taught, as Dilbert-based curricula take over some facets of workplace education, as critical educators continue to ask who benefits from training, education, and development at work, then the meanings produced by cultural texts such as Dilbert can help uncover which values and roles are legitimated and how work is defined.

Dilbert is being used to help create and sustain certain points of view. HRD has used Dilbert training materials even though its characters are apparent management dissidents. Although organizations may be transforming and/or restricting, liberatory and/or dominating, informed analyses are important for democratic educational practice. HRD, by failing to acknowledge and/or understand its complicity in deploying corporate rhetoric, and by leaving power under-theorized, cannot really uncover and integrate satisfactorily into its practice a contradictory situatedness between human agency and organizational dominance (Fiske, 1993). It is sobering to think of the comic - a "rocket fueled by worker bile" - as the model for white collar workers, Dilbert the hero who helps them maintain their sanity (McNichol, 1995, p. 4), and Scott Adams as our nations "unofficial secretary of human resources" (Brown, 1997, p. 12).

SUMMARY

Fundamentally, Dilbert's message never probes the underlying motivations or assumptions behind corporate America's approach to workplace learning and workplace management. But important epistemological questions come from decoding the values associated with Dilbert. Kellner (1996) sums up the importance of this kind of research for critical adult educators when he discussed co-optation of even radical and subversive impulses which may also "serve as effective ways of absorbing individuals into the established society" (p. 10). A critical pedagogy that develops media literacy and politicizes culture allows educators and workers to pull apart messages encoded in the production process and examine their complexities, as business continues to operate beyond most people's power to effect it and control more and more of what workers think and do. Kellner asserted the importance of being "able to perceive the various ideological voices and codes in the artifacts of our common culture" (p. 11). This is where critical adult educators in workplace settings and workers themselves who hope for democratic spaces must become cultural critics and researchers.

A critical interrogation by workers and educators of the relationship among work, life, and learning would help to reframe training issues. Rather than a pedagogy of assimilation, a critical interpretation of this relationship invites possibilities for liberatory learning. Heaney (1995) expressed concern about training that aimed for control and benefited the corporation because it disenfranchised workers on the periphery. He described adult education at work as needing to be transformative and critically reflective, problematizing work experience and context in relation to a variety of other communities of practice. Workplace adult education focused on enhancing participation and voices of workers was one step toward this kind of learning, expanding "workers' otherwise narrow sphere of influence and concern" was the next (p. 150).

Cunningham (1993) described HRD as education that is framed by profit making concerns and education that does not question how work connects to the interests of society. In a system of unequal power, schools, including workplace learning, guarantee the reproduction of asymmetric power relationships and social injustice. The challenge for professional trainers will be to confront these issues instead of continuing to reproduce socially constructed inequities and celebrating the culture of the corporation. The goal will be to see knowledge production in a democratized form, engaging issues of power and exposing whose knowledge is really valued. The hope for democracy is the value of bringing a critical pedagogy to the workplace. A critical reading of Dilbert supports the hope that power inequities can be exposed, confronted and that possibilities

still exist for corporations to accept responsibility for socially unacceptable actions.

REFERENCES

Agger, B. (1992). *Cultural studies as critical theory.* London: Falmer Press.

The anti-management guru. (1997, April 5). *Economist, 343*(8011), 64.

Brown, T. (1997). What does Dilbert mean to HR? *HR Focus, 74*(2), 12-13.

Butler, E. (1997). Persuasive discourses: Learning and the production of working subjects in a post industrial era. *Proceedings of the Lifelong Learning: Reality, Rhetoric & Public Policy Conference* (pp. 62-69). Guilford, England: University of Surrey.

Cohen/Gebler web site. [On-line]. Available Internet: http://www.cohengebler.com

Cunningham, P. (1993). Let's get real: A critical look at the practice of adult education. *Journal of Adult Education, 22*(1), 3-15.

Dilbert, defender of the downsized. (1996, May 20). [On-line]. Available Internet: http://www.cnnfn.com/news/9605/20/adams_dilbert/index.htm

du Gay, P., Hall, S., Janes, L., Mackay, H., & Negus, K. (1997). *Doing cultural studies.* London: Sage.

Fiske, J. (1993). *Power plays, power works.* New York: Verso.

Gee, J. P., Hull, G., & Lankshear, C. (1996). *The new work order: Behind the language of the new capitalism.* Boulder, CO: Westview Press.

Giroux, H. (1992). *Border crossings: Cultural workers and the politics of education.* New York: Routledge.

Heaney, T. (1995). Learning to control democratically: Ethical questions in situated adult education. *Proceedings of the 36th Annual Adult Education Research Conference* (pp. 147-152). Edmonton, Alberta: University of Alberta.

Kellner, D. (1990). *Television and the crisis of democracy.* Boulder, CO: Westview Press.

Kellner, D. (1996). Communications vs. cultural studies: Overcoming the divide. [On-line]. Available Internet: http://www.uta.edu/numa/illuminations/kell4.htm

Levy, Steven. (1996, August 12).Working in Dilbert's world. *Newsweek.* [On-line]. Available Internet: http://www.unitedmedia.com/comics/dilbert/inthenews/html/newsweek.html

McNichol, T. (1995, October 5). The stuff dweebs are made of. [On-line]. Available Internet: http://www.washingtonpost.com/wp-sr/stories/adams95.htm

Nadler, L., & Nadler, Z. (1989). *Developing human resources* (3rd ed.). San Francisco: Jossey-Bass.

Ohliger, J. (1996, July 5). Dilbert and adult education. E-mail message to CPAE-L (Commission of Professors of Adult Education) listserv.

Schied, F. M. (1995). "How did humans become resources anyway?" HRD and the politics of learning in the workplace. *Proceedings of the 36th Annual Adult Education Research Conference* (pp. 287-292). Edmonton, Alberta: University of Alberta.

Solomon, N. (1997). *The trouble with Dilbert: How corporate culture gets the last laugh.* Monroe, ME: Common Courage Press.

Whitaker, B. (1997, June 19). Earning it: If you can't beat Dilbert, Hire him. *The New York Times,* Late Edition Section 3, p. 12.

Zemke, R. (1996). Attention K-Mart shoppers! It's just a cartoon! *Training, 33*(10), 8.

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Invited Papers

ADULT EDUCATION AS BUILDING COMMUNITY: THE PARAMETERS AND REALITIES OF ENTERPRISE IDENTITY IN NORTH AMERICA (1945-70)

André P. Grace

ABSTRACT

This paper takes up aspects of building community in North American adult education (1945-70). It looks at adult education's efforts to build community in itself and explores the degree to which the enterprise built community in education and society.

INTRODUCTION

In my historical work investigating the emergence of North American adult education (1945-70) I argue that, despite widespread social and cultural change forces permeating life, learning, and work after World War II, scientific, technological and economic change forces were ascendant, predominantly shaping mainstream adult education as a techno-scientized enterprise. In this paper I consider how the demand for different forms of adult education, coupled with the impact of the discourse of democracy that developed in reaction to the fear and mystique of totalitarianism, shaped the answer to the question, "What is adult education (1945-70)?" I look at adult education's efforts to build community during this time of enterprise expansion. I take up three questions to explore the notion of adult education as a community in itself and as a community within other sociocultural communities: What sort of community did adult education comprise? If we imagine the broader discipline of education as a community, then what space (a recognized and useful presence) and place (a respected and valued position) did adult education have in it from the perspectives of those involved in public and higher education? If we envision postwar North American society as a community, then what space and place did adult education have in the larger scheme of things? As part of this investigation, I use a critical postmodern perspective to consider how lifelong learning had become an expression of adult education's hope for the future and how instrumental, social and cultural forms of adult education vied for space and place in an increasingly techno-scientized mainstream practice. I conclude my paper by reflecting on issues and problems in postwar community development pertinent to the construction of community in adult education.

THE DISCOURSE OF DEMOCRACY AND THE DRIVE TO TECHNO-SCIENTIZE ADULT EDUCATION

In the era of modern practice the answer to the question "What is adult education?" has been inextricably linked to adult education's search for space and place in North America's dominant culture and its institutions. After World War II, the response was shaped by a multiplicity of social and cultural change forces reconfiguring everyday life in postindustrial society. This society spawned a burgeoning knowledge and service economy and ushered in an era of pervasive government involvement that deeply affected education as a sociocultural enterprise. In the 1960s Canadian and US federal governments, treading water in a sea of social unrest, poured moneys into education as part of a makeshift solution to address poverty, undereducation and unemployment. Mainstream adult education became a vehicle serving dominant cultural interests in this period in at least two key ways: (a) It acted as a cultural messenger preaching the discourse of democracy to ordinary citizens, and (b) it delivered instrumental forms of education that prepared the citizen workers needed to advance North American techno-scientific and economic interests. In effect, adult education provided programs whose design and longevity were generally determined by government and other institutions with vested interests in using the enterprise to support the local and growing global primacy of North America's dominant culture and its values. Understanding the North American system of enterprise and government was grouped with technical competence, community development and adjustment, and personal growth and development when listing key concerns of adult education in the emerging postindustrial society (Butz, 1958).

THE PARAMETERS OF BUILDING COMMUNITY WITHIN ADULT EDUCATION

In the early 1960s Thomas (1961) claimed that adult educators had taken the enterprise "from an idealistic, determined, intermittent, fringe enterprise to a central, practical, everyday--*if little understood* [italics added]-- concern of many individuals and organizations" (p. 405). What were the parameters of this "little understood" entity as it emerged in postindustrial society? Can adult education (1945-70) be constructed and defined as a community in itself? Were there common goals and objectives, a common ideology, a common knowledge base, and a distinct membership? To some degree, a community was emerging exhibiting these common elements. The efforts of adult educators to build community were exemplified by the postwar growth and development of graduate adult education, the increasing professionalization of the field, the promotion of lifelong learning, and the development of a growing body of knowledge and research specific to adult education (Liveright, 1968). The preoccupation with change also provided a rallying point for adult educators in the postwar decades. Period literature is replete with references to rapid-change culture and social change forces complicating the lives of citizen workers and learners, and exacerbating the plight of Blacks, the poor and other forgotten people. The social and the economic became interwoven concerns for adult educators called upon to muster resources to assist adult learners faced with technological change, worker obsolescence, complex domestic problems, and civic and political unrest (Liveright, 1968). The need for a concerted community effort, for a focus on the social, was clear. However, the ability of adult education to deliver convincingly on a social level - indeed on any level - remained questionable. Descriptions by key adult educators, including Liveright (1968), suggested that the task to build a learning community addressing social and other concerns was still an onerous one. In his 1965-66 field study he reported that adult education was working to meet diverse needs, but it did so "on an unplanned, disorganized, and uneven basis" (p. 1). He listed these roadblocks to building community: (a) the lack of financial support, (b) the lack of trained personnel, (c) the lack of space and place in institutions, (d) the lack of leadership and direction in a rapidly expanding field, and (e) the lack of societal commitment to adult education Sheats, Jayne, and Spence (1953) listed other roadblocks: (a) the lack of agreed-upon ethical principles to guide the emergence of the enterprise, (b) the lack of adequately trained adult educators and the absence of professional standards of behavior, and (c) the general failure to monitor and evaluate the extent to which goals and objectives had been accomplished in the enterprise.

These roadblocks hooked into the larger issue of enterprise fragmentation that worked against building community in adult education. Institutionalization was a key determinant in this regard. While field history showed the persistence of the concept of "adult education" (Verner, 1964a), adult education usually remained a secondary and not clearly defined activity in many institutions (Liveright, 1968). In his history of US adult education, Knowles (1977), suggesting that the enterprise had never been a united movement or common endeavor, called adult education "a patternless mosaic of unrelated activities" (p. viii). In many respects this "patternless mosaic" was a product of the institutionalization of adult education. Institutionalization meant that adult educators had different allegiances and responsibilities. This contributed to the enterprise's diffuse nature, making it difficult to coordinate the field. It complicated building community in the Deweyian sense of sharing things in common (Dewey, 1916). The problems of a diffuse nature were compounded by the problems of the episodic nature of the enterprise's growth and development. Axford (1969) described adult education as a fragmented and sporadic venture that responded to specific needs as they arose. Liveright (1968) related that the diffuse and episodic nature of adult education had made it difficult to create a national umbrella organization that would represent the entire field and create a strong public image for the enterprise. This nature also stood in the way of generating a widely accepted enterprise definition. It was often difficult to name something "adult education." Naming—the clear delineation of particular institutions and programs as adult educational-- as an important part of building community and countering the enterprise's peripheral educational status (Liveright, 1968). It was necessary to clarify adult education's identity and demonstrate its pervasiveness as a community in North American culture.

The pronounced drive to professionalize adult education after World War II can also be understood as an attempt to build community, albeit within particular purposes and parameters that would redesign the field. Since professional adult educators wanted the enterprise to have space and place in the emerging postindustrial society, they promoted techno-scientization of the field and developed programs to produce the workers needed to advance the national and global interests of the dominant culture. Professional adult

educators built community as the cult of the expert. They incorporated knowledge, practices and a disposition designed to locate adult education not merely as a subset of the dominant culture but as one of its most valuable commodities. However, building this professional community was a very difficult task. The field lacked the rudiments of a professionalized practice (Thomas, 1958). Despite this problem, professionalism gained ground, with some adult educators seeing professionalization as a counter force to institutionalization. Griffith (1970) felt that professionalization of the enterprise could help break down the barriers to growth and development that the institutions themselves presented. He believed that a professionally prepared adult educator would be more inclined to think in terms of the totality of the field. Speaking to the issue of field fragmentation in the United States, he contended that professionalism could induce a spirit of cooperation and lead to the development of a national agenda for adult education.

ADULT EDUCATION'S SPACE AND PLACE IN THE
FIELD OF EDUCATION AND IN NORTH AMERICAN SOCIETY

Adult education's rejection of the formal structure of public education as too narrowly focused on the education of children and youth is a repeated theme in postwar field literature. Darkenwald and Merriam (1982) conclude "the general momentum [in the era of modern practice] seems to have been toward separatism, toward dissociation from the broader field of education" (p. 230). Adult education's incongruity with the culture of academe can also be mentioned as problematic to adult education's space and place in the field of education. The enterprise's attempt to build community within the university was influenced by the changing nature of the university as well as by the federal incursion into higher education. The increasing emphasis on organized, techno-scientific research deeply changed academe, accelerating professionalization of academics and diminishing the value of their educational role (Kerr, 1995; Touraine, 1974). Adult education sought space and place in this complex, fluid community where professionalism meant valuing research over education. This placed adult education at a disadvantage because the enterprise had traditionally been more about practice than research, and it could not boast a significant research base. To have space and place, adult education appeared reduced to intensifying its operations in the realm of the techno-scientific. Here training in techniques became training in the ideology, values and interests of the dominant culture (Miliband, 1974). However, despite its efforts to conform to the values of the university, adult education remained the "stepchild of the [North] American university" (Riesman, 1981, p. 113).

Adult education also had a lesser space and place in North American society. In their 1953 report on the status of US adult education, Sheats, Jayne and Spence indicated that adult education had not established a valued cultural presence despite a discernable cultural impact. Some years later, the public relations report for the 1969 Galaxy Conference of US Adult Education Organizations indicated that there had been little change in the enterprise's cultural status. Adult education was not viewed as a pervasive and proactive cultural force. It had an image as a middle-class venture and the enterprise was viewed as a commodity least useful to those who could benefit most from using it. Adult education was still not available (relevant and affordable) to every citizen (Liveright, 1968). Liveright (1968) called for "new institutional forms providing flexibility, visibility, relevance, and accessibility . . . [to] be developed to overcome past aversions, reluctance, and opposition to continuing education" (p. 16). His call supported Rauch's (1969) contention that the enterprise remained the least developed part of the North American educational system.

LIFELONG LEARNING AND FIELD DIRECTIONS

From a critical postmodern perspective, hope is viewed as a precondition for action within a pedagogy of adult learning community. As the modern practice of adult education emerged after World War II, the enterprise's hope for the future found expression in the discourse of lifelong learning. In its postwar form, Stubblefield and Keane (1989) contend that lifelong learning "reflected an attempt to make adult education an object of public policy" (p. 35). In adult education the discourse of lifelong learning became intermeshed with the discourse of democracy. Sheats, Jayne, and Spence (1953) declared, "Lifelong learning becomes essential for the survival of the American system of government. The vitality of that system depends upon the quantity and quality of participation in what we call community life" (p. 486). From this perspective, it appeared that lifelong learning was meant to shape community life in dominant cultural terms. Its discourse putting productivity and politics before people became a real concern to those adult educators working to develop an inclusionary enterprise addressing instrumental, social and cultural concerns. Charters (1970) was among those sounding a discordant note in the hymn to lifelong learning. Acknowledging that "this concept has often been stated by

adult educators as a belief and with the vehemence of a fact" (p. 488), he spoke to the reality of lifelong learning beyond such internal devotion. If there was a wider interest in lifelong learning, it was affected by a slow-changing cultural disposition valuing adult education as a cultural commodity.

FORMS OF ADULT EDUCATION IN THE POST-WORLD WAR II ENTERPRISE

Instrumental, social and cultural forms of adult education are all valued in a critical postmodern pedagogy of adult learning community. Giving space and place to them is considered critical to building an inclusionary practice. While there is evidence of all three educational forms in postwar mainstream practice, their co-presence failed to support inclusion education when they were reduced to advancing dominant cultural interests and values. During the emergence of North American adult education (1945-70), instrumental forms figured prominently in the design of adult education. The instrumentalization of modern practice was an important part of adult education's attempt to gain space and place. This dynamic deterred the building of an encompassing adult education community. Building community was reduced to a subscription to the tenets of techno-scientization. The enterprise joined the service of the credential society and often resorted to continuing education of the "'gimmick' variety" (Thompson, 1971, p. 18). Some mainstream forms of social and cultural adult education were also caught up in the advancement of dominant cultural interests and the discourse of democracy supporting those interests. This is evident, for example, in the publication of adult education principles by the Committee on Social Philosophy of the AEA in 1952. This committee took the position that adult education should mirror the ideology and aims of US cultural democracy and guide action promoting social change deemed important to the advancement of American society (Brookfield, 1987). This pronouncement belied the fact that the discourse of democracy forgot whole groups of US citizens. Many forgotten people outside the domain of White middle-class America were not included in the techno-scientific learning circle that supported the status quo. In effect, the discourse of democracy advanced an exclusionary practice where citizen learners were encouraged to work within the system to enhance their technical competencies and its technological advancement.

LESSONS IN BUILDING COMMUNITY FROM POST-WORLD WAR II COMMUNITY DEVELOPMENT

Adult education's turn to community development as a way to vitalize and focus its own efforts in postwar North America highlights issues and concerns in the construction of adult education as community. In his consideration of community organization for adult education, Burch (1948) saw enterprise community as a loose configuration. He pointed out certain advantages to the diverse and diffuse nature of adult education: (a) It contributed to the vast growth of the movement, and (b) it built a field marked by flexibility, variety and experimentation in terms of subject areas and adult-learner interest groups. While these advantages raise questions about the degree to which adult educators should seek commonality in the enterprise, Burch also listed disadvantages that indicated a requirement for at least some sort of unifying structure and common ground. His list included: (a) The diverse and diffuse nature of adult education mitigated against cooperative planning and action; (b) It kept many adult learning activities marginal to the main work of community organizations; (c) It meant that the enterprise served only part of a community's adults, making participation in adult education an issue; and (d) It made it difficult to balance adult education resources against community needs. Burch's disadvantages point to problems that the enterprise has historically encountered in building community. They help us to understand why adult education and its community have been indeterminate cultural constructions.

Such analysis of adult education's venture into community development speaks to the importance of focusing on the "big picture." Overstreet and Overstreet (1941) believed in surveying the overall community situation before moving to planning and action. They spoke to the value of investigating the history, culture, needs, resources and constituting forces of a community. They saw each community as whole and different from other communities. This big-picture approach is useful to adult educators working to set parameters, explore possibilities and determine limits as they construct community. It requires analysis of the degree to which adult education's identity is caught up in the identities of other communities. Adult educators need to investigate how different communities affect adult education's supports and resources as well as its priorities, participation and performativity. These lessons in community development point to the intricacies of building community. In the 1945-70 period building community in adult education proved to be a demonstration of the difficulties of finding common ground. It has been intimately connected to the quest for a recognized, fostered and valued identity in the field of education and the wider culture.

REFERENCES

Axford, R. W. (1969). *Adult education: The open door.* Scranton, PA: International Textbook Company.

Brookfield, S. (1987). *Learning democracy: Eduard Lindeman on adult education and social change.* London: Croom Helm.

Burch, G. (1948). Community organization for adult education. In M. L. Ely (Ed.), *Handbook of adult education in the United States* (pp. 281-288). New York: Bureau of Publications, Teachers College, Columbia University.

Butz, E. L. (1958). Democracy depends on an informed citizenry. In H. C. Hunsaker & R. Pierce (Eds.), *Creating a climate for adult learning* (pp. 31-37). Purdue University: The Division of Adult Education.

Charters, A. N. (1970). Continuing education for the professions. In R. M. Smith, G. F. Aker, & J. R. Kidd (Eds.), *Handbook of adult education* (pp. 487-498). New York: Macmillan.

Darkenwald, G. G., & Merriam, S. B. (1982). *Adult education: Foundations of practice.* New York: Harper & Row.

Dewey, J. (1916). *Democracy and education.* New York: The Free Press.

Griffith, W. S. (1970). Adult education institutions. In R. M. Smith, G. F. Aker, & J. R. Kidd (Eds.), *Handbook of adult education* (pp. 171-189). New York: Macmillan.

Kerr, C. (1995). *The uses of the university* (4th ed.). Cambridge, MA: Harvard University Press.

Knowles, M. S. (1977). *A history of the adult education movement in the United States* (Rev. ed.). Malabar, FL: Krieger.

Liveright, A. A. (1968). *A study of adult education in the United States.* Boston, MA: Center for the Study of Liberal Education for Adults.

Miliband, R. (1974). Higher education and capitalist society. In E. L. Useem & M. Useem (Eds.), *The education establishment* (pp. 163-175). Englewood Cliffs, NJ: Prentice-Hall.

Overstreet, H. A., & Overstreet, B. W. (1941). *Leaders for adult education.* New York: American Association for Adult Education.

Rauch, D. B. (1969). Community relations, promotion, and publicity. In. N. C. Shaw (Ed.), *Administration of continuing education* (pp. 200-215). Washington, DC: National Association for Public School Adult Education.

Riesman, D. (1981). *On higher education.* San Francisco: Jossey-Bass.

Sheats, P. H., Jayne, C. D., & Spence, R. B. (1953). *Adult education: The community approach.* New York: The Dryden Press.

Stubblefield, H. W., & Keane, P. (1989). The history of adult and continuing education. In S. B. Merriam & P. M. Cunningham (Eds.), *Handbook of adult and continuing education* (pp. 26-36). San Francisco: Jossey-Bass.

Thomas, A. (1958). The making of a professional. In J. R. Kidd (Ed.), *Learning and society* (pp. 336-344). Toronto: Canadian Association for Adult Education.

Thomas, A. (1961). The learning society. In. J. R. Kidd (Ed.), *Learning and society* (pp. 405-412). Toronto: Canadian Association for Adult Education.

Thompson, W. (1971). Report on public relations for the Galaxy conference on adult education. In A. N. Charters (Ed.), *Report on the 1969 Galaxy conference of adult education organizations* (pp. 15-23). New York: Macmillan.

Touraine, A. (1974). *The academic system in American society.* New York: McGraw-Hill.

Verner, C. (1964). Definition of terms. In G. Jensen, A. A. Liveright, & W. Hallenbeck (Eds.), *Adult education: Outlines of an emerging field of study* (pp. 27-39). Washington, DC: Adult Education Association of the U.S.A.

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Temple University, Harrisburg, PA, March 20, 1999.

1999 Pennsylvania Adult & Continuing Education Research Conference

Invited Papers

From Motherhood to Sister-Solidarity: Home-making as a
Counterdiscourse to Corporate Environmental Polluting

Robert J. Hill, D. Ed.

ABSTRACT
This presentation examines the conjunction between women-homemakers and contaminated spaces, both public and private. Learning for the women was embedded in concerns about motherhood and domesticity. Although the women never expressed their solidarity in terms of sisterhood or feminist language, they functioned as a cohesive group consciously aware of their marginalized status as women. But the "girls solidarity" was not the source of political action, rather it was the context for it. Domesticity and motherhood was a substantially stronger antecedent for action that enabled the women to build the notion that they could challenge power relations, values and beliefs of the dominant culture in the community.

INTRODUCTION
It is well recognized that labor is a genderized phenomenon, and that "work" performed by women in the home is undervalued. Adrienne Rich has pointed to the domestic labors that reproduce, maintain, and sustain life-- the million tiny stitches, the friction of the scrubbing brush, the cleaning up of the soil and waste left behind by men and children--as the unrewarded (and socially constructed) domain of women. In a world increasingly driven by commodity capitalism--often at the expense of the environment--little value is placed on the labor of maintenance. The labor of commerce is privileged labor, engaged in by men and some upper class women who pursue profit in the market place, in the world of industry, finance, and government. As such, the health and safety of families is often fabricated as predominantly women's responsibility.

This study is one portion of a larger four year investigation (Hill, 1997) that examined how a grassroots, self-organized, action-oriented group--comprised largely of housewives--engaged in the contest for cultural authority at a heavy-metal contaminated Superfund site. Their northern Appalachian town was shaped by a corporate discourse that deflected responsibility for the pollution and allowed for both on-going and historical contamination of thousands of acres of forest lands, residential homes and yards and public spaces. In 1990, six women gathered to raise the first public voice that spoke "otherwise" to the normative (industrial) discourse in the town. Within one year they had organized a grassroots group to promote clean up; their goals included environmental reform and relief from toxic exposure.

PURPOSE OF STUDY
This presentation examines person-place relationships, specifically, the conjunction between women-homemakers and contaminated spaces, both public and private. The women in the study presented themselves as caretakers of their families and guardians of healthy life-spaces. The purpose of the present study was to investigate the relationship between women's labor of maintenance (acts aimed to reproduce, maintain, and sustain life), and the politics of toxic exposure (life in a poisoned place). A goal was to examine the processes of cultural production, sense- and meaning-making, learning to transgress, opening of descriptive spaces, and the dynamics of the contest for cultural authority in the polluted community.

THEORETICAL PERSPECTIVE
This qualitative study is shaped by the environmental work conducted at Highlander Research and Education Center which marks the exception to the silence of adult educators in regard to environmental adult education and the struggle of local communities to control the meaning of environmental hazards that they experience. It is premised on the belief that contemporary adult education should inform a society to become eco-literate, and integrate environmental issues with education for social change. Members, often largely women, of toxic-

contaminated communities are engaged in resistance to the particular ends, direction and interests of dominant social groups' sense-making--especially when such meaning-making is dominated by corporate interests. Like Lewin's work (1946), this study was intended to assist people in improving their living conditions, in democratic decision-making, and in the commitment to a more equitable distribution of power.

RESEARCH DESIGN

The reviewed literature included adult education and citizen (environmental) activism, and the sociology of education. I was interested in employing a methodology that provided rich, descriptive data about contexts, activities, and beliefs of the participants. Depth interviews (deliberate sampling) within an interpretive framework, as a part of critical ethnographic methodologies, were deemed appropriate for this purpose (LeCompte & Goetz, 1982). A key aspect of the research was to continually return to the participants "with the tentative results, and [to refine] them in light of the subject's reactions" (Reason & Rowan, 1981, p. 248)--a process known as "member checks." A collaborative approach was employed in an effort to empower the researched, and to ascertain credible data, validly collected and analyzed. Friere's "problem-posing" framework (Freire & Faundez, 1989) was used as a reference for data analysis. The responses of six key informants are reported here, with additional corroborative voices of women members of the grassroots anti-toxics group.

FINDINGS AND DISCUSSION

The women reported that from private locations (kitchens and other domestic sites) and borrowed public spaces (such as the public swimming pool), they engaged in a process of transformation from isolated individuals to collective agents contesting the community script by simply "telling our stories" and "asking menacing questions." Learning for the women--organic intellectuals in the community--was most often embedded in concerns about motherhood and domesticity which became "generative themes" for community development and community education. Asking menacing questions--initially an unconscious pedagogical activity--brought about "problem-posing dialogue" for critical learning. The women's questions probed social behaviors and experiences in everyday life in a way that allowed critical-democratic dialogue to materialize; isolated home-makers became civic leaders.

Although the women never expressed their solidarity in terms of sisterhood or feminist language, they functioned as a cohesive group consciously aware of their marginalized status as women. Yet, they constructed a space where hope was possible. One respondent put it this way, "the women envisioned the future." This women-vision included environmental reform which resulted in protective environmental policies and regulations as well as agency enforcement of existing laws. Their women-vision desired an industry that operated safely and a landscape--both constructed (lawns, play areas, streets and homes) as well as natural (the mountain, valley, and neighboring creek) that was free from contamination. Talking about this vision, another informant spoke that the emergence of the women placed the community at a "crossroads, because it was the first time that there was an organized effort to question the industry and the officials . . . in [this town]. And that basically . . . was the turning point . . . . It wasn't just one speaking - it was organized."

For some, the grassroots group was an important women-space where identities could be reconstructed and personal feelings expressed in a secure climate. The women freely referred to the group as "the girls." One of the women reported that her involvement was both a transient estrangement on her relationship with her husband, as well as an opportunity to exercise independence and freedom from assuming his identity. She spoke that her "husband was aghast [when I talked publicly]. [He saw it as] terrible, [saying], 'Did you really think this through?' and 'I'm not sure I want you to do that. You should have talked with me first and I would have told you how to handle it,' sort of things--the control issue. [He indirectly was saying], 'You're doing something and I'm not controlling you,' and 'it looks bad on me.'" By assuming the role of leadership, she opened up new areas for both personal growth and for a fuller development of her married life. She reported that leadership in the group resulted in a renewed commitment to dialog with her husband to "work things out." However, she emphasized that she remained firm in her dedication to the other women and the goals of the group.

For another interviewee, the group was a welcomed opportunity, as well as painful one, to become involved in what was happening. Taking up a defiant voice was distressing for her in that it moved her out of her

"comfort zone." However, it was a desirable chance to do what she always enjoyed most--"reading, and researching and meeting with people." She disdained what she characterized as, "from a women's perspective, [sitting] all day long and watch[ing] the [TV] 'soaps' . . . and talk shows [like so many women in the town do]."

One individual remarked that in the early stages of involvement in environmental issues in the community her marriage was affected, saying "it's difficult when you're going to one or two meetings a week and it's time away from your children...but now that I'm sitting past the emotional upheavals that I've experienced, it all seems, oh, so wonderful [knowing I'm doing what's right]."

After one group meeting, during which I presented some of my preliminary research results, a founding leader said as she was donning her winter coat, "Amazing! I am (her emphasis) important! I'm going home and tell [husband's name] that I'm not just a housewife cleaning toilets and scrubbing floors--I'm important!" At times the women even impressed themselves with what they accomplished. One marveled, "it's amazing [that] six women can get around the entire town [when they had to distribute fliers]." Such increased self-perception within women who participate in adult education has been noted elsewhere (Luttrell, 1989, p. 34). Changes in a "sense of self" accompany transformation of a meaning perspective (Mezirow, 1991, p. 167).

One woman, not a founding principal of the group, told me that she seldom consciously thought about being a women or about being from the town until "[the group] formed and I saw the stand some of these women took . . . over great protest locally by a lot of industry supporters--[despite] personal attacks, [I] realized how proud I was to be not just a woman, but a woman from [here]! That's a real proud thing to be . . . . I think these gals, who didn't expect to be in that kind of limelight--to stand up and make a statement, just made me really proud to be affiliated with them." But sisterhood and the "girls solidarity" were not the source of political action, rather they were the context for it. Domesticity was a substantially stronger antecedent for action that enabled the women to build the notion that they could challenge power relations, values and beliefs of the dominant culture in the community.

During a conversation in one of the feedback sessions with which she was involved, a respondent suggested I had mischaracterized her motivation to become involved in social change. She reminded me that she did not set out "to raise a defiant voice"--a behavioral portrait I had painted of her and other group members. Any transgressive acts by her were secondary to the real purpose of involvement, which was the protection of her (and all of the community's) children. She was primarily concerned with family safety, not conduct resistant to hegemonic discourses. Opening a narrative space for the articulation of new knowledges was a motivating factor. She said that she entered into what amounted to defiant behavior very subtly, "it wasn't even a conscious effort, like when I read your piece about transgression--[my involvement] had nothing even to do with that. It was just my kids. I'm raising my kids here [and] we're bringing hazardous waste in, we need to make a change--we need to do it right. Especially because in the back of my mind I knew about the Superfund issue." Another women reported that engaging in transgressive behavior was not a primary motivation. She said, "I don't think there were any thoughts about rebellion or going against the company . . . . It was strictly me doing something for my family, for my property and for my neighbors, and I think that's all it was." The "doing something" meant learning to construct, and then articulate knowledges alternative to the industrial discourse.

Although "coping" with stress is a complex phenomenon, gender-related characteristics have been described (Hobfoll et al., 1994). Researchers have found that women are more likely than men to approach community stress through pro-social behavior, and "active" (assertive) coping strategies, rather than anti-social and aggressive ones. They frequently seek social support as well as offer it to others. Women have been found to customarily use emotion-focused and problem-focused social strategies. Examples from the women's experiences show how they related family (emotion-centered) concerns to problem solving.

All informants were attentive to the fact that they were marked as "different" by many members of the community; they were genderized in a demeaning way. One respondent saw that the difference was rooted in inferior notions of women who work at home. She said, "at first the industry would mock us saying we were radical and hysterical housewives. There was nothing hysterical in me!" Another spoke of the Othering which

she and fellow members experienced, "the industry people--and a lot of people--try to make [us] into fanatical, crazy housewives who don't have anything better to do than test our porch dust [for contamination]." One said she felt the impacts of being marked as deviant: "Talk about being patted on the head. They kept using the word 'housecleaning' and stuff like that, it's just like housecleaning problems we're having down there, ladies, you know." They treated her with the attitude, "go home and bake something . . . go bake some cookies or something." Environmental consciousness became a sexually coded word linking women with an anti-industrial discourse.

Although not directly articulated, most of the women in the group agreed that their concerns originated in domesticity, that is, making and keeping the domestic sphere a protected and salubrious place in which to live. The emerging citizens group's center of gravity was the home and hearth. Their lives consisted of domocentric patterns; the home, therefore, became the arena in which they were conscientisized to contamination.

The women frequently used the term, "clean up" in our conversations. They extended the concept from personal homes to the local milieu since for them the home was a part of the social and cultural surroundings. Once when asked by one of her children, "Mom, where ya goin'?" a member responded, "[To a] meeting! I'm gonna clean this town up yet!" Every respondent offered comments on the dirt that was a daily occurrence in their lives, and the daily cleansing rituals with which they had to contend. Ablutions were a fact of life. One said, "You live here, you cleaned and you cleaned black dirt and you didn't much question what was in it."

Car washing rituals were also mentioned by numerous respondents. One gave a litany of ablutions that she would perform, saying, "[I would] wash the car twice a week, wash the porch three times a week, [and] wipe the window sills." Another claimed, "You could wipe your window sills off with a tissue every other day and the tissue would be black. Every other day!" She even considered at one point, "putting the tissues in a plastic bag, putting them in an envelope and mailing [the dirty tissues to opponents]".

One of the more powerful forces shaping the group's attitudes and beliefs were children. The Rle of "traditional" motherhood was the significant antecedent to political action. The grassroots members who were mothers often expressed that they were insulted when the quality and integrity of their motherhood was called into question. One reported that the community discourse on health was related to children care. If there was something wrong with a child, popular wisdom, based on information provided by the official makers of knowledge, was "You have to change [the kid's] diet. He needs a multivitamin. He has poor hygiene." "What's the doctor doing?" she asked rhetorically. She answered that most of the town's folk would not look for metal exposure, but instead would suggest to "straighten out his diet, give him a multivitamin and clean his hands a little bit more and he'll get better."

Domesticity moved beyond private attempts to have a safe home and hearth. In a seeming challenge to home makers to chase more dirt, an industry-funded community group purchased a special vacuum sweeper and unique soaps which they loaned to residents for domestic dust control. In 1992, the town received $18,000 to purchase a new street sweeper to suck up dust and dirt from the roads. Vacuuming was elevated to an art form in 1996 when the federal government began to utilize a specially designed vacuum cleaner mounted on the back of a truck to vacuum boulders on the landscape. Vacuuming rocks became the quintessential obsession with cleanliness; the federal government assumed the image of new handmaids in white decontamination suits tidying up the natural environment.

The relationship between domesticity and environmentalism was voiced by one woman while reflecting on the talks she would give at public meetings at the beginning of their public struggle, "basically I just made the plea for everybody to start being an environmentalist in their own homes!"

The women were engaged in a transformative process to ensure that their town, a community-at-risk, would become a community-at-promise; caring, hope and possibility were its central moments. The theme of hope, faith in ordinary people, a sense of personal and community pride, and courage repeatedly emerged in the interviews with group members. Ethics saturated their rationale for: assigning responsibility to the industry,

taking up a practice of caring, a pedagogy of hope, feelings of pride and courage, and for mobilizing the desire for a bright future.

Radical democratic processes in the group were a microcosm that deviated from the processes that occurred in the larger public sphere--a sphere where there exists a fundamental gap between constitutional, legal, and regulatory commitments to a clean environment and the harsh realities of people's lives. Environmental reform for the women consisted of rewriting the boundaries of environmental discourse from the vision of an industrial ethic to that of a human-centered one; from one premised on singular and narrowly prescribed notions, to one based on a diversity of information; from a static one rooted in education that reinforced the *status quo*, to one that flowed from the perception that there are multiple ways of seeing; and from the constricted borders of science, to one that integrated science with ethics infused with hope in an equitable future.

The women created a new place, an interrogative- and narrative-space, from which alternatives were articulated and individuals engaged in the social practice of learning; it allowed formerly unsayable utterances to have a voice; it gave shape to what could be thought in a milieu that formerly was impregnated with controlling citizens' consciousness. The working-class women became a model of civic courage which led to growing a grassroots movement that significantly changed the landscape of their contaminated community.

REFERENCES

Freire, P., & Faundez, A. (1989). *Learning to question: A pedagogy of liberation.* NY: Continuum.

LeCompte, M. D., & Goetz, J. P. (1982). Problems of reliability and validity in ethnographic research. *Educational Evaluation and Policy Analysis, 4*(3), 387-400.

Hill, R. J. (1997). *Growing grassroots: Environmental conflict, adult education, and the quest for cultural authority.* Unpublished doctoral dissertation, Pennsylvania State University, University Park.

Hobfoll, S. E., Dunabar, C. L., Ben Porath, Y., & Monnier, J. (1994). Gender and coping: The dual axis model of coping. *American Journal of Community Psychology, 22*(1), 49-82.

Lewin, K. (1946). Action research in minority problems. *Journal of Social Issues, 266,* 3-26.

Luttrell, W. (1989, January). Working-class women's ways of knowing: Effects of gender, race, and class. *Sociology of Education, 62,* 33-46.

Mezirow, J. (1991). *Transformative dimensions of adult learning.* San Francisco: Jossey-Bass.

Reason, P., & Rowan, J. (1981). Issues of validity in new paradigm research. In P. Reason & J. Rowan (Eds.), *Human inquiry* (pp. 239-252). New York: Wiley.

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1999 Pennsylvania Adult & Continuing Education Research Conference

Invited Papers

HOW ADULT LEARNERS CHANGE IN HIGHER EDUCATION

Kathleen P. King, Ed.D.

ABSTRACT

Research about the nature of the relationship between perspective transformation and education was conducted among 422 adult learners in higher education. This paper addresses the areas of change recognized, the formal stages of perspective transformation identified, the relationship of the experience in adult learners' education and the implications of the findings.

INTRODUCTION

"Developing the whole person," "enabling students to reach their highest potential," "opening new doors of learning"--these are some of the familiar goals of adult education viewed from the perspective of humanistic philosophy. Educators may focus on the change in a student's understanding and application of a specific topic, such as scientific theory, but there are other qualitative changes that are experienced by adult learners as well. This paper reports on research about one such experience of change, perspective transformation, among adult learners in higher education.

Based on this research, the specific experiences of change are many in number, but there is an undercurrent that draws some of them together. This common theme has often been described in the collected data as a "change of perspective" or "a greater openness to new ideas, issues, and views." The literature refers to such significant learning in a variety of ways; Mezirow approaches it as an experience of perspective transformation that he details in ten stages (Mezirow, 1978, 1991). He and other adult education theorists (Brookfield, 1987; Cranton, 1994; Mezirow, 1991; Tennant & Pogson, 1995) also describe it as a process of liberation from limiting constructs through reflection and action. This is a process that develops a new "perspective meaning" by which to view and interpret life experience.

PURPOSE

The purpose of this paper is to extend the theoretical work of Mezirow and others on perspective transformation among adult learners in higher education. This is conceptualized as responding to the following questions: 1) What areas of change do adult learners recognize? 2) What characteristics of perspective transformation do they identify? 3) How is this experience related to their education? and 4) What implications do these findings have for the adult learner, classes, programs, and the adult educator? Answers to these questions will serve to better understand the perspective transformation experience, its relationship to education, and its significance for adult education practice.

METHOD

Although the philosophical framework for this study is phenomenology, data gathering integrated several methodologies. Information was collected in two phases: through the use of a tool that had free response and objective questions, and follow-up interviews. In Phase One an instrument based on Mezirow's theory was used -- the Learning Activities Survey (King, 1997, 1998). Students were asked to read statements that described different aspects of change in their thoughts, views, and perceptions; they selected any of the statements they identified. They were then asked to focus on one such instance of change that was related to their educational experience as an adult. With this in mind, they were asked to describe the change, and state how it related to their education. Follow-up interviews conducted in Phase Two served two purposes: 1) they served to evaluate the preliminary analysis of participants' responses and emergent themes, and 2) they served to expand upon the content of those responses.

In Phase One of the research, 737 questionnaires were distributed to professors in four private colleges who had agreed to participate. These were distributed in packets that included the final instrument, instructions for its use and participant interview sign-up forms. Once completed, the questionnaires and related forms were returned by the professor in a postpaid, self-addressed envelope to the researcher.

Phase Two of the research focused on follow-up interviews. Following the administration and collection of the surveys, eight participants who had volunteered for follow-up interviews were contacted and interviews conducted. The interview questions were structured to more thoroughly examine responses to the questionnaire and to evaluate initial analysis of the data that had been gathered.

DESCRIPTION OF THE SAMPLE

This study focused on undergraduate adult learners enrolled in private, four-year institutions of higher education in the Philadelphia metropolitan area. Characteristic of the student population of many colleges today, many of these students were adult learners who had entered or re-entered higher education several years after their high school experience. The assessment instruments were distributed to students enrolled in evening and "university college" programs at the colleges. Four hundred and seventy-one (471) questionnaires were returned to the researcher. The initial sorting of the responses eliminated surveys that were incomplete or from students who would not qualify as adult learners because they were under the age of 21; the total of these unusable surveys was 49. The total number of surveys used in the statistical analysis of the research was 422.

A most common profile of the students who participated is a white, single female in her 30's and in her sixth semester of undergraduate studies. Forty-eight point eight percent (48.8%) of the respondents were single. Female students comprised 68.7% of the sample, and white participants accounted for 90.2% of the sample. The highest percentage of respondents, 33.7%, was between the ages of 30-39. The mean of semesters of enrollment was 6.836 (M = 6.836), and 73% of the respondents were within their second to eighth semester of study.

FINDINGS AND CONCLUSIONS

Based on responses to several questions, it was determined that 159, or 37%, of the adult learners identified with descriptions of perspective transformation. Their responses were analyzed to determine emergent themes related to their experience of change and education.

Dimensions of Change
Prominent themes identified in participants' accounts include changes associated with three dimensions of their lives: the social, professional (or work), and the personal (self) dimensions. As they reflected on their experiences of perspective transformation, these over-arching distinctions were supported by many different responses. Examples of these responses described the social dimension of adult learners' lives in increased acceptance of others: "I learned to be more tolerant of other peoples' beliefs and opinions. My way was not the only way to think about things;" "Being and working among people different from myself, allowed me to see the beauty in differences;" "My experience has made me more open to conflicting opinions;" and "I am more open to new experiences, learning about different groups of people." Many respondents specifically stated that the perspective transformation experience "broadened" or "opened" their minds in the social dimension of their lives.

Other respondents addressed professional issues: "My education reinforced my ideas about my new vocation," and "I realized a significant change in my career interests, that I hadn't realized before." Some of the responses about careers focused on professionalization: "Nursing became more responsible, more of a career," and "nursing became more of a career, and less a job."

Characteristic of those who experienced change in the personal dimension of their lives, many adult learners described how their self-images changed: "When I went to school I realized I could use my brain . . . . School has given me the confidence I never dreamed I would possess;" "I have higher self-esteem, and I found I enjoyed education;" " I feel better about myself, more independent;" and "Classes helped me realize that my

reasoning ability is important." A perspective transformation experience that results in such changes in adult learners' views of themselves can have far reaching consequences for the individuals.

Characteristics of Perspective Transformation
Mezirow's (1978, 1991) model of ten stages of perspective transformation served as a guideline from which to examine what aspects of perspective transformation the individuals personally recognized and identified. Pilot studies had resulted in the original ten stages being rephrased so that the adult learners could more easily understand them. These stages, or characteristics, of perspective transformation were selected individually by the students. Of the ten characteristics provided, six of them were cited much more frequently than others, and one was seldom cited.

Mezirow's Stage 2 of "self-examination" dominated the list of which characteristics were identified by the students; it was selected 50% of the time by adult learners who perceived themselves as having a perspective transformation. This evidence supports the theory that critical reflection is a central theme of perspective transformation, and that learners recognize it as such. Five of the other stages were selected 40-46% of the time: Stage 1, "experiencing a disorienting dilemma"; Stage 4, "recognizing that one's discontent is similar to the experiences of others"; Stage 5, "exploring options for new ways of acting"; Stage 8, "provisional trying on new roles"; and Stage 9, "building competence and self-confidence in new roles."

Overall, the adult learners identified with the perspective transformation stages very well; their selections were well distributed throughout the list. The only stage that was considerably lower than the others was a rephrased representation of Mezirow's Stage 3, "critical assessment of epistemic, socio-cultural or psychic assumptions." This was seldom cited, at 21% of the time. Evidently the respondents did not identify with or explicitly recognize this stage. A likely explanation is that the learners' critical examination may have been more directed at individual beliefs and assumptions, rather than those held by society.

A study of relationships among the stages reveals additional insight into the learners' experiences. In pairwise correlations, many of the ten stages correlated with one another: 17 of the 44 pairs had a two-tailed .01 or .0001 level of significance (N = 159). The experience of perspective transformation was not isolated to one or two individual stages or singular pairs of stages; instead, the learners identified with most of the stages. Two generalizations about the patterns of the correlations may be made: 1) most of the later stages of perspective transformation significantly correlate (α = .0001 for each pair) with one another (i.e., Stages 5, 6, 8, 9, 10) and 2) the beginning stage (Stage 1) of the "disorienting dilemma" significantly correlates (α = .0001 or .001) with the earlier stages (i.e., Stages 3, 4, 5, 6). This dichotomy may suggest that adult learners grouped like experiences in reflecting upon perspective transformation experiences.

Education's Contribution to Perspective Transformation
The participants also noted how their education contributed to the transformative experience. Specific contributors to the perspective transformation experience that were repeatedly mentioned are discussions, readings and course content. As in the following examples, discussions were frequently mentioned by the respondents: "If my ideas or beliefs were never questioned or discussed with other classmates or my teacher, then I would have never changed or thought about changing my views or beliefs," and "While participating in class discussions . . . [the educational experience] has opened my eyes to different opinions about some ideas." Readings were also cited by the respondents: "Reading assignments and discussion--these broadened my mind to more objectivity," and "Articles helped me in [adjusting to my] job transition." Other adult learners reported that it was the topic they studied that affected the change. Courses in examining the literature of their profession and "values" courses were also referenced several times.

One adult learner summarizes how critical reflection is part of the process of perspective transformation, "I became more aware of information from the media, my friends, teachers, etc . . . . I started to think more critically and independently." Others echo this theme as they relate how class activities, course content, readings and dialogue caused adult learners to examine and evaluate their assumptions, beliefs and values: "Discussions lead me to reconsider my values in an ethics class"; "term papers led me to deep thought about certain issues in my life"; and "[through] readings and courses I found out so many ideas and ways of thinking." In these instances, such reflection resulted in the learners adopting not only new ideas, but also a

new frame of reference (Mezirow, 1997) from which to view their worlds. These responses confirm that learning activities that incorporate the use of critical thinking skills may serve as facilitators of perspective transformation.

Implications
What implications do these findings about perspective transformation have for adult learners, educators, programs and institutions? They may be considered from the three areas of findings: the experience of perspective transformation, the dimensions of change, and contributions of education.

Additional implications for adult education emerge from a consideration of the social, professional and personal dimensions of change that respondents cited. They particularly cited oral and written discussion as instrumental in this aspect of perspective transformation. One consequence of this is that as curricula for classes are planned, adult educators must consider adult learners' needs to contemplate and discuss the social, professional, and personal dimensions of the subject areas. The opportunities and focus for such reflection could be provided through course topics or assignments such as reflective exercises, and position papers. Another consideration is that an environment of openness and safety is important, because many students noted that this was a change they experienced.

The study showed that 37% of respondents had experienced a perspective transformation in relation to their education. These adult learners identified with Mezirow's perspective transformation stages. There was a tendency, however, to group like thoughts and experiences so that some respondents focused on questioning beliefs, assumptions and values while others were focusing on discovering them and trying them out. A practical implication is that adult education should encourage opportunities for adult learners to reflect on the educational experience and its meaning for them. Important considerations would be a welcoming and safe environment, models of critical reflection, and learning activities such as discussions and reflective papers that would incorporate aspects of the experience. Opportunities for these learners to reflect on the perspective transformation experience could encourage adult learners to apply their educational experience to their lives. These adult learners indicated that they were encouraged to consider and critically examine new beliefs and opinions. Knowing how to and actually providing such opportunities in the classroom is up to the instructor.

Three areas emerge as practical applications for adult educators: 1) teaching methods, 2) course structure, and 3) interdisciplinary exchange. First, as mentioned, teaching methods that encourage the development of critical thinking skills should be well represented in the curriculum. Based on this research, discussions and readings are important contributors to the adult learner's perspective transformation experiences. Opportunities to cultivate the exposure to new ideas and to dialogue about divergent opinions should be teaching methods used in adult education courses. The impact of such experiences upon adult learners cannot be overstated. Second, the course structure as exhibited through course objectives, planned learning activities, and the size and location of the class should build upon the need for learners to be more engaged in reflection and dialogue. Small classes, comfortable classrooms and objectives that demonstrate qualitative changes would be reasonable results of such efforts. Third, the courses do not have to stand alone; instead, these activities of dialogue, discussion and writing may be interdisciplinary. For example, coupling courses in current issues and values would highlight the personal and professional application of the material. Many facets of adults' lives contribute to the perspective transformation experience, and application of these suggestions provides more opportunities for adult education to be part of that process.

Conclusion
This study provides a foundation for further research. Four recommendations are presented. First, engaging adult learners in describing the perspective transformation stage by stage should reveal additional insights into the experience. Second, exploration of the dimensions of change is needed; follow-up interviews that focus specifically on the areas cited by the respondents could offer insight into the impact of education on the lives of adult learners. Third, further study of the learning activities that facilitate perspective transformation should go beyond the type of activity and also include guidelines on how to present or conduct such activities well with adult learners. Finally, adult learners might be asked to work collaboratively and solve case studies that center about perspective transformation in education, in this way, the learners' perspective may become

clearer to adult educators.

Adult learners within the higher education context are changing as a result of their education. This research characterizes the change in terms of perspective transformation. The findings demonstrate that the perspective transformation stages set forth by Mezirow encapsulates well the experience of adult learners in higher education, and that adult learners especially experience change in their views about the professional, personal and social dimensions of their lives. The research shows that the education experiences of adult learners have an impact upon these changes in their lives. Implications about teaching methods, course structure and interdisciplinary exchange have also been described. Understanding these concepts will enable educators, program directors and educational institutions to better serve the adult learner.

REFERENCES

Brookfield, S. D. (1987). *Developing critical thinkers*. San Francisco: Jossey-Bass.

Cranton. P. (1994). *Understanding and promoting transformative learning: A guide for educators of adults*. San Francisco, Jossey-Bass.

King, K. P. (1997). *Examining activities that promote perspective transformation among adult learners in higher education*. Unpublished doctoral dissertation, Widener University, Chester, PA.

King, K. P. (1998). *A guide to perspective transformation and learning activities: The Learning Activities Survey*. Philadelphia, PA: Research for Better Schools.

Mezirow, J. (1978). *Education for perspective transformation: Women's re-entry programs in community colleges*. New York: Teachers College, Columbia University.

Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco: Jossey-Bass.

Mezirow, J. (1997). Transformative learning: Theory to practice. In P. Cranton, (Ed.), *Transformative learning in action: Insights from practice* (pp. 5-12). New Directions for Adult and Continuing Education,(No. 74). San Francisco: Jossey-Bass.

Tennant, M., & Pogson, P. (1995). *Learning and change in the adult years: A developmental perspective*. San Francisco: Jossey-Bass.

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EVALUATION RESEARCH IN WORKPLACE LITERACY PROGRAMS

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Andree Rose Catalfamo

ABSTRACT

The senior author served as evaluator for three of the three-year projects of the National Workplace Literacy Program funded by the US Department of Education. Strategies for evaluating workplace literacy programs, as well as lessons learned about effective practices in workplace literacy programs, are presented in this manuscript.

The purpose is to enable readers to know how to assess mastery of basic skills using a variety of measures in workforce education programs. The importance of a multi-faceted evaluation of impact is stressed with the presentation of Kirkpatrick's four-level program evaluation model in addition to the naturalistic model of evaluation. We used using the Filemaker Pro database software program to quantify anecdotal and qualitative data.

Lessons learned from evaluating three National Workforce Literacy Program projects included the importance of a state structure to provide support for staff training, curriculum development, and program institutionalization. Another important lesson was the involvement of labor unions as well as a "culture shift" on the part of management and workers alike.

INTRODUCTION

Numerous models of evaluation have been proposed over the years. [For example, Brookfield (1986) identifies the Predetermined Objectives Approach, Goal-Free Evaluation, CIPP Model of Evaluation, Kirkpatrick Hierarchy of Evaluation among others.] These models have been applied in a variety of settings including adult education. More recent models of evaluation have included the Naturalistic Evaluation (Guba & Lincoln, 1989), also called the fourth generation evaluation, in which the concerns and issues of the stakeholders serve as the organizing structure for the evaluation. The evaluation models used in this study of workplace literacy programs included the Kirkpatrick Hierarchy (1994) used in conjunction with the Naturalistic Evaluation. In addition, strategies that companies can use to conduct their own evaluations were employed (Askov, Hoops, & Alamprese, 1997).

BODY OF THE PAPER

The researcher served as external evaluator of three projects of the National Workplace Literacy Program (NWLP) of the US Department of Education that were funded for a three-year period. Two of the projects were statewide; one was a community college that provided a variety of adult education programs. She visited each site twice per year to interview all stakeholders (management of the companies, trainers, supervisors, learners, college personnel), observe classes, and troubleshoot for formative evaluation. The qualitative data from the interviews were entered into a Filemaker Pro database. Using the database, the researcher's assistant tallied the frequencies and categorized the responses to identify trends over time and across locations (company sites) within each project. They were also able to identify some generalizations that cut across projects. Additionally, data were gathered about each of the four levels of Kirkpatrick's evaluation hierarchy, permitting generalizations about the effectiveness of each of the three national projects.

The primary data source included interviews with stakeholders as well as other data (related to Kirkpatrick's four levels) supplied by three NWLP projects of the US Department of Education. The interviews from the NWLP projects provide a rich data source that can provide researchers and educational practitioners, as well as business/industry and labor unions, with knowledge about not only how to evaluate workplace literacy

programs but also how to design effective workforce education programs. This information is also useful to state and local policymakers as they design welfare-to-work programs.

CONCLUSIONS

The two statewide projects institutionalized the workplace literacy programs in businesses and industries at the conclusion of the grant; the community college did not. A coordinating state structure is recommended to provide support and training. One of the projects required a progressively greater match from companies each year; that seemed to lead to institutionalization since by the third year the businesses or industries were providing a 75% match.

Labor unions were very involved in one of the projects. The project initiated the concept of peer advisors who were workers who recruited co-workers to the workplace literacy program, developed promotional materials, and even assisted the instructor on occasion with instruction. In all projects workers served as equals on advisory boards with management, leading to a cultural change within some work organizations. Management grew to respect the input of the workers, and workers trusted and appreciated management for its commitment to the program.

Strong curriculum development and staff training components proved to be useful and led to cohesiveness in program design. Programs using the functional context approach to instruction, where instruction in literacy skills was related to job tasks, appeared to be the strongest both in terms of company support and learner involvement.

As to the evaluation, Kirkpatrick's hierarchy proved to be useful and understandable to practitioners who were collecting the data. Level 1 (reactions) data were easy to collect; Level 2 (mastery of the skills taught in class) was more difficult to assess since the instructors did not readily know how to create skill assessments. Level 3 (transfer to the workplace) data were collected by supervisor interviews; learners themselves proved to be the best source of information about transfer, however. Level 4 (impact) was best measured by determining the greatest need of the company (e.g., retention of workers) and showing the impact of the program on that need.

REFERENCES

Askov, E. N., Hoops, J., & Alamprese, J. (1997). *Assessing the value of workforce training.* Washington, DC: National Alliance of Business.

Brookfield, S. D. (1986). *Understanding and facilitating adult learning.* San Francisco: Jossey-Bass.

Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation.* Newbury Park, CA: Sage Publications.

Kirkpatrick, D. L. (1994). *Evaluating training programs: The four levels.* San Francisco: Berrett-Koehler.

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Refereed Papers

"IT'S NOT LIKE NORMAL SCHOOL": ADULT LEARNERS' PERSPECTIVES ON A NON-TRADITIONAL GED PROGRAM

Alisa Belzer

ABSTRACT

Using in-depth interviews with five adults participating in a non-traditional GED program, this study documents the ways in which these learners contrast their previous experiences in school with their experiences in a context that strives to be learner-centered and participatory. Learners identified four key components of the program that were particularly different for them: structures/activities, teaching, emotional support, and roles and responsibilities. Learners' feelings about these differences varied among and within individuals. This range of responses and the challenge of addressing them represents one of the central tensions in learner-centered education. However, data such as that provided here can give teachers and learners valuable information in constructing links between the traditional and non-traditional.

INTRODUCTION

Based on a series of in-depth interviews which focused on past and current educational experiences with five adult learners participating in a non-traditional GED program, this paper presents ways in which they conceptualized and problematized the differences in their learning experiences across their life-spans. Unlike children just starting out in school, adults come to programs with a wide variety of learning experiences--informal and formal, inside and outside of school. These experiences, over the course of their life times, must surely contribute to expectations and understandings of what school learning is and thus what to expect when participating in an adult education program. My work as an Adult Basic Education (ABE) and GED teacher have repeatedly provided me with evidence that learners come to the learning context with a well-formed set of beliefs about what school ought to be like.

Fingeret (1992) declares that in learner-centered classrooms, teachers share decision-making, power and control with learners in developing materials that respond to and respect their cultures, interests and prior experiences. The work is meaning-based and integrates prior learning with new learning. The study under discussion in this paper was a systematic attempt to understand the ways in which five adult literacy learners' education experiences contrast with some of the values, goals and assumptions of a GED program that was trying to be learner-centered and participatory.

The research participants each entered the program as adults who had been out of school for a minimum of eleven years and sometimes far longer. Some had been to one or more adult education programs during the intervening years. From these previous experiences, I assumed that each brought with her beliefs and expectations about herself as a learner and of the learning context she entered. What they actually encountered in the program fell somewhere along a continuum of "fit" from congruency to incongruency between their own beliefs and the intents and values of the program. I believe that it is in the disjunctures between beliefs and experiences in programs that important issues and tensions in classrooms and programs emerge. This is all the more true in a program trying to be learner-centered when there is a pronounced difference between learners' stated interests, goals and learning approaches and what practitioners' own training and experience tells learners will help learners best meet their goals.

Learners often arrive in adult education programs with an expectation and dread (Popp, 1991; Quigley, 1992) that their experience there will replicate their previous educational experiences in which teachers made all or most decisions about materials, formats for learning and content of the curriculum. In fact, because adults often have that expectation, many resist participating altogether. "On the conceptual level

of education, they wish things had turned out differently. But on the level of reality, schooling was and is a course of enormous personal turmoil which they do not want to experience again" (Quigley, 1992, p. 115). However, not all learners who actually do enter programs want their experiences there to be different from what school was like for them--no matter how unpleasant, traumatic, boring or unsatisfying it was.

When learners are invited to take some authority in the learning process, it usually runs counter to their expectations and often evokes a certain level of active or passive resistance. Furthermore, when learners take up invitations to co-construct their learning context, educators are sometimes confronted with learner constructions that are in contradiction to that very invitation. Likewise, learners may express a commitment to beliefs about literacy learning (e.g. phonics are a fundamental building block to improve reading skills) that directly contradict practitioners' beliefs (e.g. phonics are one single tool for reading that when taught in isolation from meaning-making strategies can actually be a detriment to learning). In the remainder of this paper, I shall explore the ways in which learners identified and thought about the differences in learning contexts between their earlier experiences with school and their experience in a non-traditional GED program.

"It's a Lot Different From Regular School"

At the study site the program mission statement includes the goal of developing "educational programs and support resources according to the expressed interests, desires, and needs of women in the community." Although students there might identify the program's main function as providing GED test preparation, the program staff view their jobs more broadly as helping learners meet diverse personal, economic and educational goals. Additionally, program staff have a social change agenda, working actively to strengthen and improve the local community and advocating for the value of participatory and learner centered, community-based education. The executive director identifies education as "a tool of change--in oneself, in the quality of life for one's family , and in the larger community" (program annual report to the community, program year 1994-95).

There was little doubt that all of the research participants perceived the program as markedly different from their earlier encounters with the educational system. As Diane said, "It's not like normal school where . . . you got homework, you got certain things you gotta do on the board and everything. It's more adult, one on one, woman to woman education." She explained that although the program has teachers and a blackboard like a regular school, the similarities end there. "Everything else is completely different." Tamika concurred, "I would say I learned a lot and it's a lot different from regular school . . . it's a lot different." The ways in which the women described these differences can be grouped into four aspects of the program: structures/activities, teaching, emotional support, and student roles and responsibilities. Each of these aspects of the program interrelate and overlap to create a web of comfort and support for learning that in and of itself was completely different from any school experiences any of the women had previously known.

STRUCTURES/ACTIVITIES: Polly made clear that the program offered far more than just GED training. Exploring personal issues is a part of the class work; so is developing skills in interviewing, resume writing and other job search skills. She even includes in her description activities designed to make learning fun like playing hangman and other word games. Tamika identified the announcements of community and program events during class meeting time as providing important resources and noted that discussions and presentations about volunteer work and completion of goal check lists helped her recognize past accomplishments. Diane felt that "individual time" (a self-directed work time) and the ways in which student input is solicited allowed her to shape appropriately her own learning. "I could work at my own pace and learn to my ability what I needed to learn, and I can state what I wanted to know and what I didn't need to know that I already knew so I wouldn't be going over the same things."

The descriptions of program structures and activities are all contrastive to the women's past experiences with school. Whether the women felt negatively or positively in regard to these differences, they position their experiences in the program as markedly different from any school situation they have ever known.

TEACHING: Most felt that the style of teaching was congruent with structures and activities that support

self-paced and self-planned learning. They noted, too, that the teachers go the extra mile to make sure everyone understands new concepts. For example, Tamika observed that her math tutor (who worked with a small group during individual time) not only made an effort to make new concepts accessible, she also assumed that there are multiple approaches to problem solving, and was eager to confirm that her students understood math concepts.

> She makes it seem easy . . . It's like she has a way about her, like she'll be like, "Did you get it?" She'll know you ain't get it. You be like, "Uh huh." She'll say, "Okay, now go up there [to the blackboard] and do it." You gonna know it with her whether you want to or not...And she make it sound easy cause she'll . . . go by the steps and she'll show you . . . you can do it this way or either you can do it that way, which way is easier for you. So she makes it seem easy.

Tamika uses this same tutor as an example when asked to describe the qualities of a good teacher. Here, she also makes clear that the teachers at the program have a quantity of patience that makes them outstanding in her experiences with school.

> I told [the tutor] . . . she got all this patience--cause I kept forgettin' . . . Now we went over that the other day and she would come back and I still didn't remember it. I was like, Jackie, you got a lot of patience...But she's good, cause I asked her, well I know you just told me that, but I really don't remember it. So she would go over it and then she would go over it again, and again, until you get it.

Diane concurs with Tamika's assessment, by explaining that the pace of teaching is determined by the students, not by an external authority or even by the teacher. She contrasts this to her experience in school.

> If we didn't get it, Jackie would stop it and make sure. "Did you get it Diane?" "No, Jackie, I ain't got it, go ahead." "No, we're gonna make sure you get it first. You have to do this, that and the other." And that was the big difference, because when you're in a class full of 30 people and the teacher doesn't have time to say, "Hey Johnny, did you get it today?" And Johnny say, "No teacher, I didn't get." [The teacher says,] "Okay, well tomorrow you stay after school and we'll . . . . " It wasn't like that with [this program], cause Jackie would stop it right then and be like, let's go over it right now.

The qualities described focus on the ways in which the teacher and tutors take care of and are responsive to the learners. There is an emphasis on the quality of the emotional rather than the intellectual interaction. Perhaps because this way of describing teachers builds on and complements the women's earlier experiences with teachers, they show little evidence of having a framework for talking about teachers in terms of the intellectual experience they provide.

Although the women use the same kind of lens (emotional rather than cognitive) for assessing the teaching they experience at the program as they did for their K-12 experiences, for the most part, their experience was again contrastive. By using similar criteria for judging teachers in a situation that is quite different, some of what the teachers do seems strange and objectionable to some of the research participants. For example, although Laura felt she had learned important things at this program, she could not get over a sense of discomfort that the teachers were not really teaching and that they weren't real teachers. The teacher gave neither tests nor homework. The former because she feels they are not good measures of achievement and often have negative impact on the moral of students by pointing out failure and bringing up bad memories of previous schooling. The latter because she believes that her students do not have time or energy to do school work outside of class and that establishing expectations around homework can discourage the many students who find it difficult to complete assignments. But Laura felt she was not "running class like class should run." When I asked Laura what she thought she should be getting but wasn't, her explanation sounded as if she wanted her adult education experience to replicate her high school experience.

L: You know how a teacher get up in front of the class. "All right class. Time to put all your stuff away. It's time to take a quiz"--or something.

A: It sounds like you really want your adult education to be very much like what traditional school is like.

L: Yeah. If I could go back to the tenth grade--

A: Really? You'd like to just do it all over again.

Laura's desire to replicate her school experiences also seems contradictory both to her critique of her past experiences and to her acknowledgment of the benefits of her current experience. For example, at one point she noted that traditionally teachers make all the decisions about what students should read in class. She said, "Usually it's up to the teacher what they bring. Whatever they bring to school for you to read, you read it." At this program, however, she reported that the teachers usually ask the students what they want to do. She readily affirmed that she preferred the latter approach of involving students in their own learning--a far cry from her experience in high school.

In spite of Laura's doubts about the teaching, there are obviously things she liked about it. Not only that, but it was helping her. Even though she had not yet passed the GED, she articulated areas in which she saw growth. For example, she observed that her achievements included more confidence to speak up about her feelings, more comfort with reading which has enabled her to read aloud in class, better ability to "pronounce" words that she finds difficult, improved spelling, punctuation and paragraphing. This array of changes provide a useful illustration of the ways in which the program both helps learners progress toward passing the GED and also serves as a support system that helps students feel more confident and empowered. Finally, it is important to note that Laura had spent three years in the program. She clearly was finding some very real satisfaction in her participation. Yet, for Laura, the program's approach to teaching and learning felt strange and somewhat less valuable than "real" school.

Polly, too, voiced concern about the approach to teaching there. Her critique seems to be in direct opposition to the program's learner-centered philosophy. In its effort to include students' concerns and respond to their needs, Polly sees the program as treating everyone the same--in her eyes as equally needy. "Everybody got different needs, but if you don't really stress that and stress that to Marie . . . she'll fit you in with the rest of the category." Polly wanted her learning experience to focus strictly on GED preparation (as she conceived it). "Just give me the little basic stuff I can go ahead and take that and get it out of the way." Another time she said, "I'm going to get upset because they're going to be talking about resumes and hang man and all this kind of stuff. That's not on the GED. I'm a get mad because I'm sitting up here and I'm tired. I'm getting up at four in the morning [to go to work]. I don't want to sit here [wasting my time]." In spite of her concern that the program provided too much of too many different things, Polly came regularly for about a year.

EMOTIONAL SUPPORT: When participants in the study talked about the program, the strongest impression I got is of an extraordinarily supportive learning context. Not only does coming there help them understand more about themselves and raise self-esteem, some of the women were clear that this kind of support actually helps them make progress toward reaching their academic goals.

The presence of a social worker and the fact that class time is set aside for group discussions which she facilitates is an important aspect of support. There also seem to be supportive mechanisms put in place in class from the very first day that communicate a sense of comfort, trust and safety to the women. For example, Tamika noted that she had been dreading going back to school and only did so reluctantly when she decided she need to brush up on her skills. However, when she got there, she felt comfortable right away. She recognized that there were people there "that care and then you talk about different things and that helps, and it's not only with the math and the English, it's dealing with the world too . . . and dealing with yourself. So I would say I learned a lot." Mattie was struck by the fact that on the first day of class they went around the room introducing themselves and talking about why they were there. Because of

this, she understood that she was not alone in her struggles and problems. This was very reassuring for her. She also felt this activity communicated that the staff would be "more involved with you. [I said to myself,] just imagine if you get into the program. I'm quite sure it's going to be more involved. And it was just like that." The teacher, too, affirmed that from the first day of class, she tried to set a tone that counters many students' expectations of school. They spend a lot of time just talking to get to know each other and the program. She feels that by setting a tone of friendliness and informality through open conversation a sense of support and community are quickly established.

STUDENT ROLES AND RESPONSIBILITIES: It is clear that an emphasis on a goal-oriented and learner-centered approach to teaching and learning automatically involve students in the educational process in a different way than what most experience in a traditional school setting. Indeed, the women were struck by the fact that they were encouraged to give input into structuring and making decisions about their own learning. Diane, for example, felt there was an effort to solicit and then accommodate to everyone's needs. "She asked us to write down what do we need. What do we want from this program. And everyone did and what they did was look it over and try to accommodate everyone. So by me seeing that, that let me know this was somethin' that I wanted. I liked this program and I wanted to be involved in it." Mattie observed that students had opportunities to make choices about their learning and noted the fact that students can set their own pace is one of her favorite aspects of the program. In addition, she explained, students can work "at a level that you feel comfortable" and they have a choice of working individually or in a small group.

Although a number of research participants appreciated that they played an important role in shaping their own learning, there were also negative trade-offs expressed by some. For example, because the way that "individual time" is spent is almost totally a matter of personal choice and there are no homework requirements or tests, students need to develop (or already have) a fairly high level of self-motivation to get the maximum benefit out of participating in the class. After several years in the program, Mattie considered going to another program where she thought she would get what she perceived as the needed structure of homework assignments to keep herself on track. Tamika reported that some students "can't get theyself started if it's too much space." She said that many students don't like individual time. "They're not used to that. They figure, well, if they don't say it, I'm just not gonna do it cause they got so used to that from high school." Tamika herself felt leaving so much dependent on the initiative of the learners was different from her past experiences with school, but "basically I liked the way it was [at the program]." However, she did state that she probably gets less done because of the freedom the program gives her to make many educational decisions for herself.

While Laura was strongly in favor of imposing more structure through homework assignments and tests and Mattie clearly thought homework would be helpful, the others expressed a range of responses to these issues. Tamika felt ambivalent. She noted that "tests be good cause then you'll know where--what you need to work on. In a way it's not [though], because a lot people get nervous when they have to take tests." Diane was very much against the assignment of homework. She felt it was inconsistent with the realities of students' lives. "We didn't want homework because you had families to take care of which the program wasn't about homework because they knew we had kids to take care of--which was great." Perhaps echoing Polly's negative perception that the program treats everyone the same, Laura notes that when students bring up the possibility of getting homework assignments, "[the teachers] say HOMEWORK [in a skeptical voice]--they talk about we can barely--a lot of people got families..." Although she understands the rationale, she does not agree with it for herself.

CONCLUSION

It seems important to note that most of the mixed feelings expressed by the women about the program related to learner and teacher roles. This is not so surprising given that the program encourages learners and teachers to create a context in which power relationships are potentially altered fundamentally from those found in most schools. This is a far more radical departure from the women's previous experiences with school. In their evaluation of two learner-centered literacy programs, Fingeret et al. (1994) observed that learners often had mixed feelings about their level of control, authority and decision making. While

they appreciated the freedom and flexibility they were offered, they sometimes just wanted someone to tell them what or how to do something. This same ambivalence seems reflected in some of the women's feelings about this program. Not only that, but there is some skepticism about whether something can "count" as school if it does not feel like school did in the past. Clearly, there is some question about the legitimacy of the learning experience which is shaped by learners' beliefs about what school should be like and what teachers and learners do there.

Given the clear differences between the women's previous experiences with school and their experience at the program studied, it is not all that surprising that there are mixed feelings about the program from among and even within the research participants. One woman's growth experience is a waste of time for another; one woman's perception that the program endows students with responsibility is another's floundering around without enough structure; one woman's enthusiasm for the ways in which the program respects the life realities of adult learners is another's disappointment that it is not more like high school. These differences represent some of the central tensions in participatory, learner-centered adult literacy education. Brookfield (1985) explains these tensions as normal by-products of true adult education (which he calls "critical practice" but is similar in many ways to learner-centered and participatory education) in which "all participants learn, no one member is regarded as having a monopoly on insight, and dissension and criticism are regarded as inevitable and desirable elements of the process" (p. 49). Candy (1991 as cited in Fingeret & Dannon, 1997) explains such differences in classrooms as symptomatic of the past experiences that learners have had with school. He assumes that learners must go through a process of transition from teacher directed to more learner-centered approaches. He argues that this transition will always involve some interference from traditional schooling experiences (for both the learners and teachers).

As practitioners work to negotiate differences and encourage transitions from traditional to non-traditional approaches with learners, it is helpful to understand the ways in which adults contrast their current learning experiences with their pasts and what they make of those differences. The data presented here, provides a sample of this type of learner perceptions. When teachers have such information generally and then seek to develop their understandings of the particular learners with whom they work, they can more effectively act on the full potential of learner-centered and participatory classroom and program strategies.

REFERENCES

Brookfield, S. (1985). A critical definition of adult education. *Adult Education Quarterly 36*(1), 44-49.

Candy, P. C. (1991). *Self-direction for lifelong learning.* San Francisco: Jossey-Bass.

Fingeret, H. A. (1992). *Adult literacy education: Current and future directions. An update* (ERIC Information Series No 355). Columbus, OH: Center on Education and Training for Employment, The Ohio State University.

Fingeret, H. A., Tom, A., Dyer, P., Morley, A., Dawson, A., Harper, L., Lee, D., McCue, M., & Niks, M. (1994). *Lives of change: An ethnographic evaluation of two learner centered literacy programs.* Durham, NC: Peppercorn Books and Press.

Fingeret, H. A., & Drennon, C. (1997). *Literacy for life: Adult learners, new practices.* New York: Teachers College Press.

Popp, R. J. (1991). *Past and present educational experiences of parents who enrolled in Kenan Trust Family Literacy Programs.* Louisville, KY: National Center for Family Literacy.

Quigley, A. (1992). Looking back in anger: The influences of schooling on illiterate adults. *Journal of education 174*(1), 104-121.

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Refereed Papers

LINGUISTIC, CULTURAL, AND EDUCATIONAL ADJUSTMENTS OF ADULT ESL FEMALE STUDENTS IN NEW YORK

Lucia Buttaro

ABSTRACT

The purpose of this study is to identify and describe the educational, cultural and linguistic adjustments and experiences Hispanic adult females' encounter in learning English as a second language. The study describes these experiences as they relate to the variables of language, culture and education of adult Hispanic females. There have been insufficient examinations of the assumptions underlying the content and aims of survival English instruction; especially the question of whether the programs are designed to serve the needs of the learners (Cervantes & Castro, 1988). Adult ESL learners are faced with problems of controlling linguistic rules and also of applications in various situations while attempting to deal with the shock of living in a new cultural environment.

BACKGROUND

The need for continuing education activities for women has been expressed in a variety of ways. They may be justified as a means to address career transitions and to provide information concerned with new research into biological and psychological development. Other programs may also be required to examine, from a woman's point of view, areas that are believed to have been treated historically from a male's perspective (Holt, 1980; Long, 1975). The need for separate programs on topics such as legal status and financial matters may decline, according to Holt (1980) and Long (1975). However, they believed that social changes that will obviate the need will be slow in arriving.

This study will answer the following research questions: (1) How does the linguistic environment influence Hispanic students' English performance? (2) How does Hispanic culture impact on students' English performance? (3) How do educational factors influence Hispanic students' English performance? (4) What special contributions can participants make to the understanding of social and effective learning strategies?

The participants for this study are eight Hispanic females who came to this country ten to fifteen years ago and have developed some functioning ESL skills. They are native Central American females who speak Spanish as their first language and who are enrolled in an ESL program for adults. They are adult females in the age range of 29 to 39. This age group was chosen because it is the most representative age group of Hispanic female adults learning English. The procedures used in the current investigation are interviews, essays, questionnaires and examination of academic records. The interview was conducted to solicit attitudes and experiential background information related to cultural, linguisitc and educational factors affecting their academic performance. Participants were aksed to write an essay in English or Spanish describing their lives as immigrant women in New York. The mode of the questionnaire (given in either Spanish or English) was 11 or 12 non structured questions. The first section gathered personal and demogrpahic information, the second section collected information with regard to language, cultural and educational factors.

The three variables investigated are educational, linguistic and cultural adjustment. Educational adjustment refers to the difficulties encountered by limited English proficient adults who are acquiring both a second language and initial literacy in a classroom setting (D'Anglejan, 1984). Linguistic adjustment refers to the process of literacy consciousness as one where people must become aware of their day to day conditioning in order to build a strong foundation for their role in society (Delgado-Gaitan, 1987;

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Freire, 1973; Ramirez, 1994). Cultural adjustment refers to situations where people attempt to deal with the shock of living in a new cultural environment, one which is confusing and sometimes hostile (de Castell & Luke, 1987; Freire, 1973; Giroux, 1987; Ogbu, 1978).

My research confirms the findings of McKay and Weinstein-Shr (1993), and Fowler-Frey (1996) that indicate that the barriers to participation in educational activities most frequently cited by adults are lack of time and cost. Bust schedules, home responsibilities, job responsibilities, and similar time-related obstacles were cited as important barriers to participation. Obstacles to participation are the situational barriers that relate to an individual's life context at a particular time, that is, the realities of one's social and physical environment. Cost and lack of time are examples. Other situational barriers of consequence include lack of transportation, lack of child care, and geographical isolation. Other institutional barriers are lack of attractive or appropriate courses and institutional policies and practices that impose inconvenience, confusions, or frustration on adult learners. Finally, psychological barriers are individually held beliefs, values, attitudes, or perceptions that inhibit participation in organized learning activities. Adults who cite as barriers "lack of interest", or state that they "are too old to learn", "don't enjoy studying", "are tired of school", and so forth are expresssing some of the wide variety of beliefs and attitudes that strongly influence participation behavior. Language minority populations are the "new majority". Adult education presents an interesting demographic profile. Between 1990 and 1996, there were 6.8 million adults of limited English proficiency; by the year 2,000, that number is expected to grow to 17.4 million (Numbers and Needs, 1997). English as a second language (ESL) is the "fastest-growing" area of study, with eight community colleges reporting more than 70 ESL sections (Ignash, 1992).

The following figures are especially important because of the demographics of the population I studied. According to Numbers and Needs (1997), one fourth of all foreign-born people in the United States of America in 1996 (about 6.7 million) were born in Mexico. Whites, including Hispanics, constituted nearly two thirds of the 1990-1996 immigrants. About 43% of the immigrants were Hispanics of all races (Numbers and Needs, 1997). The largest number of Hispanics reside in California, but Texas, New York and Florida also have Hispanic populations of 1 million or more. Hispanic communities are diverse and include Mexicans, Puerto Ricans, Cubans, Central Americans, and South Americans. Hispanics are also the least educated language group in the United States. More than 7 million Hispanics age 16 and older -- 50% of all Hispanic adults -- are functionally illiterate, according to statistics published in SER America (1989).

Among those who are motivated enough to risk their lives to come to The United States, those who were shut out from educational services previously because of their undocumented status but who enrolled and remained in the English language and literacy programs when amnesty was granted and those who have supported children and families in entry-level jobs but seek a better life. In the coming decades, the language minority population will present an even greater portion of our labor force and, potentially, of our adult education and ESL programs. But, will there be classes and programs for them and will they be appropriate? Will they face a bewildering maze of program options or will there be appropriate educational sequences offering a clear path from entry to further education, training or employment? Will the staff of these programs be able to provide effective education that leads to the fulfillment of real-world goals?

FINDINGS

The pilot study provided useful information to the researcher in terms of the adequacy of the instruments to yield necessary data for the analysis of the research questions of the study: (1) How does the linguistic environment influence Hispanic students' English performance? The five factors that contribute most to ESL adults' acquisition of English were: (a) going to the doctor; (b) experience with the English language (going to an English school, looking up words in the dictionary, using English to interpret cookbooks, and communicating with American friends); (c) getting a job in The United States of America; (d) adjusting to American society and (e) English being the language that is spoken in The United States of America. Data were gathered to answer research question (2) How does Hispanic culture impact on students' English performance? The five factors that contributed most to ESL adults' acquisition of English were (a) feelings of embarrassment due to not knowing the English language; (b) feeling helpless in the Anglo-Saxon culture; (c) English being indispensable for survival; (d) adjustment to the Anglo-Saxon culture, and (e)

having American friends.

Research question (3) How do educational factors influence Hispanic students' English performance? The five factors that contributed most to ESL adults' acquisition of English were: (a) being able to help children with homework; (b) reading books, (c) having a good teacher, (d) adjusting to American culture, and (e) getting a job. Research question (4) What special contributions can participants make to the understanding of social and effective learning strategies? The five factors that contributed most to ESL adults' acquisition of English were: (a) drawing pictures to remember; (b) memorizing names of products at work; (c) writing stories in Spanish, then translating them into English; (d) singing and, (e) practicing with children.

Participants' interview responses provided additional information on linguistic strategies. One participant said: "Aqui en New York se usa el ingles para trabajar, para ganar mas dinero, para poder movilizarse dentro del pais. En el gimnasio y en la escuela se usa el ingles." ("Here in New York, English is used to work, to earn more money, to move around throughout the country. At the gym and at school, they also use English.") Another participant said: "Yo no hablo mi dioma cuando voy a Manhattan. Por ejemplo, hablo espanol con mi hermana en el Bronx pero no en Manhattan." ("I don't speak my language with my sister when I go to manhattan. For example, I speak Spanish with my sister in the Bronx, but not in Manhattan.") Another participant said: "Yo uso el ingles en el hospital para las citas y los doctores. Tambien lo uso para los maestros de Angelina y Christian." ("I use English in the hospital to make appointments, and with the doctors. I also use it with Angelina's and Christian's teachers.")

Participants' essay responses provided additional information on linguistic strategies. One participant said: "Otra de las formas que utilizaba el ingles era ver la television usando 'caption' y copiaba las palabras extranas y las buscaba en el diccionario." ("Another way in which I would use English was to watch TV in English using caption and I would copy the strange words and look them up in the dictionary.") Another participant said: "Yo imito a mi profesora por que ella habla bien lindo y pronuncia bien. Mi profesora siempre dice 'Yeah, right,' y ahora yo tambien uso mucho esa expresion." ("I imitate my teacher because she speaks beautifully and pronounces well. My teacher says: 'Yeah, right' and now I use that expression a lot.") Another participant said: "Yo trato de hacer los crucigramas que encuentro en el periodico en ingles y asi aprendo palabras nuevas." ("I try to do crossword puzzles that I find in English newspapers; that way I learn new words.")

Recommendations to the study include (1) a comparative analysis of interactive development, a multicultural perspective that would describe, among other things, interrelationships between participants' fundamental need to communicate and multiplicity of language learning contexts; (2) social, economic, psychological and cultural influences, and the process of language developments; (3) interactive androgogical theories and activities that prepare teachers to meet second language learners' cultural, educational and linguistic needs in general education; (4) teachers' attitudes in classes where students for whom English is a second language are involved in oral discourse in student-directed and teacher-directed contexts; and (5) courses that prepare and sensitize teachers as cultural brokers and students' advocates when their social, economic and cultural backgrounds differ from those with whom they come into contact. This study offers recommendations for such programs.

CONCLUSION

Class discussions of cultural and personal differences in learning style and interaction patterns may help overcome initial resistance. The fundamental duty of a teacher of adult ESL is to facilitate the development of communication skills in English, either in a classroom setting or in a one-on-one tutoring structure. Teachers must also include substantive content beyond language instruction, such as employment skills, survival skills, cultural information, American history and citizenship facts. Teachers must also take into consideration the implications of the learners' cultural differences and cultural adjustment processes. Viewed in a narrow sense, literacy is the ability to comprehend and produce natural language in its written form. A broader definition of literacy encompasses functional notions of literacy tied to take ability to use both written and spoken language, to accomplish specific problem-solving and communicative goals arising in the workplace or in conducting transactions within everyday institutions of the community

(Venezkyy, Wagner, & Ciliberti, 1990). A broader definition of literacy refers to the general ability of individuals to interpret and act upon the world within cultural and social communities of practice (Wertsch, 1991). This broader definition proposes that there is a fundamental connection between language, communication and everyday cultural activity. In order to participate in such everyday activities, individuals must interpret the cultural and social demands and contexts of activities and the means of using language to participate effectively in cultural and social activities. Ethnographic studies of the survival needs of immigrants families suggest that public and private institutions can be ill-equipped to assist immigrants with vital literacy needs pertaining to health care, social services, banking and commercial exchanges, schooling of children and other issues. If we are able to help immigrant non-English background families develop literacy, we must explore hoe language, culture and society are intertwined.

Table 1:
Linguistic Factors Contributing to English Language Acquisition
(N=3)

Interview	f	Essay	f	Questionnaire	f
Going to an English school	14	Going to the doctor	11	Speaking Spanish	3
Looking up words in the in the dictionary	9	Speaking to childrens' teacher	6	Understanding English music well	3
English being the language of the USA	7	Purchasing English cassettes	6	Understanding TV programs in English well	3
Getting a job in the USA	6	Using English to interpret cookbooks	6		

Table 2:
Cultural Factors Contributing to English Language Acquisition
(N=3)

Interview	f	Essay	f	Questionnaire	f
Adjusting to Anglo-Saxon culture	8	Feeling embarrassed due to not knowing English	21	Watching TV programs in English	3
Having American friends	7	Indispensable for survival	16	Watching TV programs in Spanish	3
Feeling helpless in Anglo-Saxon culture	5	Being able to find a job I like	3	Shopping n Latin stores	3
Being discriminated against because of Spanish accent	4				

Table 3:
Educational factors Contributing to English Language Acquisition
(N=3)

Interview	f	Essay	f	Questionnaire	f
Being able to help children with homework	11	Reading books	13	Studying English intensively	3
Having a good teacher	11	Translating	9	Studying English to take GED test, computer classes, etc.	3
Adjusting to American culture	10	Getting a job	9	Reading Spanish	3
Reading childrens' books	8	Practicing in English	8	Thinking in Spanish	3
Being bilingual	6	Taking USA citizenship test	7	Writing in Spanish	3

REFERENCES

De Castell, S. & Luke, A. (1987). Literacy instruction: Technology and technique. *American Journal of Education, 95,* 413-440.

Delgado-Gaitan, C. (1987). Mexican adult literacy: New directions for immigrants. In S. Goldman & H. Trueba (Eds.), *Becoming literate in a second language: Advances in research and theory* (pp. 9-32). Norwood, NJ: Ablex.

Fowler-Frey, J. M. (1996). Linguistic minority adults and literacy education. *Adult Basic Education, 6* (2), 84-96.

Freire, P. (1973). *Education for critical consciousness.* New York: Seabury.

Freire, P., & Macedo, D. (1987). *Literacy: Reading the word and the world.* South Hadley, MA: Bergin & Garvey.

Giroux, H. A. (1987). Critical literacy and student expedience: Donald Graves' approach to literacy. *Language Arts, 64,* 175-181.

Holt, M. (1980). *Women's programs: A panel presentation.* Paper presented at the meeting of the Association for Continuing Higher Education, Atlanta, GA.

Ignash, J. (1992). Study shows ESL is fastest growing area of study in U.S. community colleges. *TESOL Matters, 2,* 17.

Jarvis, P. (1992). *Paradoxes of learning: On becoming an individual in society.* San Francisco: Jossey-Bass.

Long, H. B. (1975). The education of girls and women in colonial America. *Journal of Research and Development in Education, 8*(4), 66-82.

McKay, S. L., & Weinstein-Shr, G. (1983). English literacy in the U.S.: National policies, personal consequences. *TESOL Quarterly, 27,* 399-419.

Numbers and Needs. (1997). 7(4).

Ogbu, J. U. (1978). *Minority education and caste: The American system in cross cultural perspective.* New York: Academic.

Ramirez, H. M. (1994) Literacy acquisition among second language learners. In B. M. Ferdman, R. M. Weber, & A. G. Ramirez (Eds.), *Literacy across language and cultures* (pp. 75-101). Albany: State University of New York Press.

SER America. (1989, Spring). *Hispanic literacy act sheet.* Dallas, TX.

Venezky, R. L., Wagner, D. A., & Ciliberti, B. S. (Eds.). (1990). *Toward defining literacy.* Newark,

DE:International Reading Association.

Wertsch, J. V. (1991). *Voices of the mind: A sociological approach to meditated action.* Cambridge, MA: Harvard University Press

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Refereed Papers

LEARNING WHILE WORKING WITH "THE OPPOSITION": A STUDY OF MEANING IN A CROSS BOUNDARY WORK GROUP

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ABSTRACT

The primary purpose of this study was to determine the meaning of learning for participants while working in a cross boundary work group. This study presents evidence that great personal, professional and team member learning was foundational to their work experience and reciprocal to collective team and organizational learning. These findings propose use of cross boundary work groups as a process for facilitating learning integrated with and parallel to solving problems in the multi-organizational workplace.

INTRODUCTION

Today as work organizations and the work they do becomes more complex and competitive the decisions and actions of individuals are within a work group context. Teams are the focal point of how organizations are engaging in learning tasks through strategic planning, process improvement, or developing and improving new services (Parker, 1990, Brooks; 1992, 1994). Problem solving in teams has gone beyond organizational walls to accommodate the nature of today's business problems. Staffs cross boundaries when they work as groups of individuals assigned either short or long term to solve a problem through collective discussion and inquiry (Watkins & Marsick, 1993). A cross boundary work group is the explicit heterogeneous, either/both in work roles or organizations, mix of adults engaged to participate in the above stated activity (Carkhuff, 1996). Given the nature of today's workplace wherein work often occurs cross organizationally there is a need to understand the potential for such cross boundary work groups as processes for facilitating real-time learning while solving organizational problems.

PROBLEM STATEMENT AND THEORETICAL FRAMEWORK

One of many workplace environments undergoing work reorganization is health care. This particular industry is in the process of redesign and upheaval due to the impact of managed care. The missing element in most health care delivery systems is a virtual lack of integration of these components (Witt, Kieffer, Ford, Hadelman, & Lloyd, 1993). The health care work environment is shifting from within institutional walls to working with the extended or integrated delivery system of care that spans across geographic regions and across organizational lines. This creates particular challenges from an Adult Education perspective for the preparation of staff and the possibility of utilizing this forum as a learning experience for personal, professional and organizational benefit. From particular studies in the literature regarding learning as a collective team activity there is focus on the adult learning process (Dechant, Marsick, & Kasl, 1993), notion of dialogue in collective team learning (Cicourel, 1990; Dixon, 1994), capture of reflective and communicative behavior (Purser, Pasmore &Tenkasi, 1992), distribution of formal power to individual team members and the collective team-learning outcome of productive useful new knowledge (Brooks, 1994), and a study of factors affecting group learning with a distinction between learning and task in relation to group purpose (Marsick & Kasl, 1997).

Due to the extensive literature regarding teams and learning, I investigated scholarly critique to provide direction for study. Suggested areas for research included: (a) examination of team learning within different contexts; (b) teams that reflect on, critique and develop strategies to change organizational structures and policies; (c) organizations that have the intention to change unproductive ways of organizing themselves for work in organizations, (Brooks, 1994); and (d) research needs to be carried out with groups in their natural context rather than artificially constructed groups in laboratories (Goodman, Ravlin, & Schminke, 1990). This study addressed these research needs in the following way: (a) operate within the natural context of work group activity rather create than artificial one, (b) chose a cross

boundary work group that was charged with improving the way in which care is delivered to a population of patients to maximize impact, and (c) examine a work group that developed new protocols.

THEORETICAL FRAME

Traditionally, workplace learning was thought to be basically instrumental or learning from one's own experience, which could lead to a repetition of mistakes (Argyris, 1994; Brooks, 1994; Watkins & Marsick, 1993). Today the ways we make meaning of ideas, distribute privilege and power, are held accountable to validity testing through rational dialogue. Communicative or dialogic learning is explained as achieving coherence, a critique of relevant social norms, cultural codes and a critique of the assertion itself. As such, meaning is validated through critical discourse, and each item of relevant information becomes a building block of understanding (Mezirow, 1991). I looked to the reflective learning theory literature to provide a foundation for the study. By definition the focus of reflection is not a purely internal thinking process, but also involves action. What gives reflection its' character and significance is thought-in-action immersed within a context. The process of reflection and critical reflection helps us to adjust the distortions in our beliefs, and our errors in problem solving (Mezirow, 1991; Schon, 1987). Within a work group context, reflective learning becomes generative of new thinking as members challenge one another's thinking, reframe their perspectives, and build on integrated perspectives to construct new knowledge (Marsick, Dechant & Kasl, 1993; Mezirow, 1991). Learning through critical reflection provides a transformation of personal frames of reference, and can be described as a "holistic" blend including personal development, work related knowledge, and skills (Marsick, 1991, p. 24). Research tells us that reflection and action promote inquiry, that aspects of adult learning process such as framing, reframing, experimenting, crossing boundaries, and integrating perspectives are characteristic of the collective team learning process (Brooks, 1994; Dechant, Marsick & Kasl, 1993). The purpose of this study is to add to our understanding of a particular type of team learning environment, cross boundary work groups, to investigate the links between individual learning and collective team learning

RESEARCH QUESTIONS

The main question for the study was: What are the meanings for participants while working within a cross boundary work group? To guide the study I sought sub-questions as research indicators from the studies in current literature to see how the emerging data compares using an adult learning lens. These sub-questions were used in comparisons after the first interview during the observations and prior to second interview questions during the data collection and analysis procedures. The sub-questions and their connection to the literature are: (1) How do the participants perceive their assumptions about learning affect collective work group learning? This question comes from the reflective learning theory base (Mezirow, 1991) in the form of open-mindedness, reflection to test and refer back to assumptions, interpret the unfamiliar relate to a meaning perspective, probing for assumptions, values, and beliefs. (2) How does the group share knowledge and ideas? Interactive team learning processes revolve around collective thinking and action. This question stems from the Team Learning Open Systems Model (Dechant, Marsick, & Kasl, 1993) in the form of framing/reframing perceptions, experimenting, crossing boundaries, and integrating perspectives. (3) How do differences in formal power distribution between individual work group participants affect the meaning for participants? Collective team learning process requires team members to carry out both active and reflective work, and communication is essential. This line of inquiry stems from Team-Learning Process Model (Brooks, 1994) looking at active and reflective work, leadership style, and power level.

METHODOLOGY

The qualitative, phenomenological method was selected as the appropriate methodology to support the investigation of meaning or how the participants interpreted and made sense out of their work group experience (Denzin & Lincoln, 1994). The setting for this study was natural and the key instrument was the researcher. As the researcher I was concerned about the process of the group experience, of what this experience has become for the participants, and what has changed for them because of this cross boundary work group experience (Bogdan & Biklen, 1982).

STUDY POPULATION

The particular cross boundary work group called the Diabetes Awareness Team, or DAT, was selected

based on the criteria of an effective group (Goodman & Associates, 1986) and was comprised of a collection of eleven participants from four competing health systems and one business setting covering a geographic region of patient care. The participant mix ranged from four to over twenty-five years of work experience and included all members of the work group. Their roles were as follows: Diabetic Nurse Educators, Home Health Nurse, Pharmacist, Rehabilitation Specialist, Health Promotions Administrator, Business Executive, Community Health Workers, and a Staff Development Specialist. They were charged by their respective organizations to work together to improve the health status of the diabetic patient population assessed to be at risk within their particular geographic region of care (Smith, 1994). The health care organizations and the professionals had a history of turfism regarding caring for the diabetic patient to protect their respective market share. The goal of the DAT was to improve the diagnosis, reduce complications and cost of treatment for the patients with diabetes across the region through education, collaboration and partnering as organizations.

DATA COLLECTION AND ANALYSIS

The data collection was divided into two phases. Phase One included: a) pilot interview and subsequent refinement of the interview tool; b) the initial sixty minute interview regarding social-biographical information, past work group experiences, and a problem solving critical incident (Flanagan, 1954; Ericsson & Simon, 1980); five work group observations with field notes; and document analysis of all agendas, reports, and meeting minutes. I focused on gathering information from the participants utilizing the elite interviewing technique prior to their work group experience to investigate the meaning of their experiences regarding previous problem solving, past work group experiences and their assumptions about working in groups as well as the role of the facilitator and group members. The problem solving critical incident exercise gave a snapshot of their past experience in learning. The main concept from each interviewee's critical problem solving incident was extracted from the data and verified through the member checking process.

I attended all work group meetings over the six-month period and took field notes attending to recording observed behaviors on the activities and work of the individual members and the group as a whole. I related this to the initial interview information to validate information gathered, and to plan for clarification and additional questions based on the observations during the Phase Two interview. The use of sub-questions was employed to provide an understanding of the data links to the literature utilizing the adult learning lens. I collected records, i.e., agendas, reports, meeting minutes of the DAT work group to provide another data source to compare with the interview and group observation data. Data were analyzed from all Phase One data, using member checks and triangulation of data sources.

At the conclusion of the five work group sessions I conducted the Phase Two ninety-minute interview with all eleven participants, focusing on the work experience and problem solving in the DAT as experienced and told by the interviewees. In order to understand how they organized interpersonal and intrapersonal experience, real-life situations were elicited by having the interviewee respond to eleven index cards that listed a concept or idea involving learning while problem solving. The interviewees were asked to respond to these ideas and concepts as it applied to their work group experience. They were also encouraged to complete blank concept cards with any other concepts that were offered based on their work group experience. These reactions provided data to further explore the interviewee's underlying principle of meaning-coherence (Patton, 1990). Questions were asked to clarify observations and to draw out their stories.

All Phase One and Phase Two data were analyzed in light of the multiple data sources. Data analysis was a continuous process in that I analyzed data as I gathered it, adjusting and expanding the observation and interview strategy. I identified meaning units, coded the data, organized it in logical patterns identifying categories and constructed themes. I verified authenticity of the data analysis through the triangulation and use of multiple sources (Lincoln & Guba, 1985), corroborated through member checks and peer review. I discovered patterns of belief as defined by the participants, and through thick, rich description provided a holistic picture of their experience in the DAT.

RESULTS, LIMITATIONS

The nature of learning as described by participants was a story based on their prior assumptions of what a work group should be, how learning had meaning for them, roles of the facilitator/leader, and member's own roles and responsibilities. The discussions in this paper are focused on the findings of individual learning coinciding with team learning. Additional findings related to issues of power, ethnicity and a discussion of organizational learning can be found in the complete research study document (Carkhuff, 1998). The findings of this study are limited due to the nature of the methodology utilized, that is the naturalistic paradigm, in that the primary concern of the qualitative research is to discover meanings of certain phenomenon, and these meanings are context-bound.

LEARNING

The membership valued expertise and freely networked with one another. They provided insights into their home organizations, shared knowledge and expertise. This valuing of expertise was related to the perceived value to the impact of problem solving for the improvement of patient care for the regional population. I observed a unification of purpose in all work group meetings that transcended the competitive advantage or disadvantage.

Personal Learning

The notion of personal learning was fundamental to the experience of the DAT members. This learning included development from learner to educator in the group, growth through self-expression, self-discovery through the application of new knowledge gained in the group, growth in their willingness to link thinking and action to people and organizations, learning to change orientation from a loner to a collaborator, and shift in thinking from individual to organizational focus. For example, Peter related learning in the DAT, as an opportunity to grow personally as he learned that problem solving requires collaboration, "I'm learning, I'm growing. And that's what this whole group is about ."

Professional Learning

As members they all related to increasing their clinical and political expertise, acquired an "improved" view of themselves through the assumption of the role of "educator" in the group, experienced change through taking an active work role in the group and through the role of mentor. It was interesting that these shifts in role which was reciprocal to active work roles, and that all members expressed they learned greatly as professionals. For example, in the work group meetings there was sharing as well as a challenging of processes such as educational protocols for diabetics, new techniques for testing, and new ways of evaluating program outcomes. All described learning through the sharing of expertise, decision-making processes of trial and error, and collaboration of ideas.

Learning as a Team Member

There was a pervasive feeling that the active and reflective work experience helped the participants learn as team members. The DAT meetings were sixty to ninety minutes in length in which the problem investigation process was noted throughout the meetings. I observed that Selena, Ellen, Willa, and Helen described "learning as a member of a team" through shared knowledge, the articulation of a clear goal, trial and error of coming to a solution, and by gaining an integrated view of the problem they were trying to solve. They expressed that having the diversity of membership provided a "rich place to learn," that this learning was constant throughout the course of the DAT meetings, and that they could apply it directly to their daily work in other groups.

Learning through experience in the work group was very much a product of active and reflective work done within the context of the group, among and between the members supporting the idea of critical reflection and transformative learning (Brookfield, 1991; Mezirow, 1991). This study also uncovered data that support the four team learning processes identified in the study of Dechant, Marsick and Kasl (1993). For example, the majority of the DAT members "framed" their work initially by separating the targeted diabetic population into project events by fiscal quarter instead of combining them. The minority members noticed this and challenged this approach during the six-month work group sessions. As the work group experimented and crossed boundaries dialogue led to reframing of direction to be in sync with the mission to target the under-served as well as the African-American and Latino at-risk populations forming a new

mental construct. Within the work group, there was significant growth in the individual's willingness to link thinking and action between members, which meant between organizations. Unlike the literature, this study provided an in-depth view of individual learning as well as insights regarding collective team learning and organizational learning. Individual learning was different for each member, but they all learned through the mechanisms of opportunity for growth, problem investigation, collaboration, and listening to other points of view. Another concept different from the reviewed literature on team learning was the notion of "learner" and "educator". Members transitioned between being either the "learner" or the "educator" during specific meetings and between meetings. This shift always included an opportunity for learning and happened as a result of mentoring activities between members, during the learning processes, and connected to the active work role.

CONCLUSIONS

This paper presented research that generated new knowledge related to (a) adult learning in cross boundary work groups, and (b) use of cross boundary work groups as processes for facilitating learning integrated with and parallel to solving problems in the workplace. The diverse nature of cross boundary work groups is important to the field of Adult Education because of the potential for reciprocal multi-organizational learning to take place. This study supports the notion that the learning in the cross boundary work group was insituated, or occurred during the work process, it impacted their view of life, their approach to current and future work, and the expertise they held as professionals. Methodologically, learning while working in a cross boundary setting works, and is worth consideration by those responsible for organizational development as a learning tool for generative professional learning through shared expertise in the workplace while solving inter-organizational problems. It may lead to increased organizational capacity and the ability to adapt to the ever-changing environment surrounding health care.

REFERENCES

Argyris, C. (1994). On organizational learning. Cambridge, MA: African-Americanwell Publishers.

Bogdan, R. C. & Biklen, S. (1982). Qualitative research for education: An introduction to theory and methods. Boston: Allyn and Bacon.

Brookfield, S. D. (1991). Using critical incidents to explore learner's assumptions. In J. Mezirow (Ed.), Fostering critical reflection in adulthood: A guide to transformative and emancipatory learning (pp. 177-193). San Francisco, CA: Jossey- Bass.

Brooks, A. (1992). Building learning organizations: The individual-culture interaction. Human Resource Development Quarterly, 3, 323-335.

Brooks, A. (1994). Power and the production of knowledge: Collective team learning in work organizations. Human Resource Development Quarterly, 5, 213-235.

Carkhuff, M. H. (1996). Reflective learning: Work groups as learning groups. The Journal of Continuing Education in Nursing, 27, 209-214.

Carkhuff, M. H. (1998). "Collaboration in Public with the Opposition": A Study of the Complex Meaning of Learning in A Cross Boundary Work Group. Unpublished doctoral dissertation, The Pennsylvania State University, University Park.

Cirourel, A. V. (1990). The integration of distributed knowledge in collaborative medical diagnosis. In J. Galegher, R. E. Kraut, & C. Egido (Eds.), Intellectual teamwork (pp. 221-242). Hillsdale, NJ: Erlbaum.

Dechant, K., Marsick, V. J., & Kasl, E. (1993). Toward a model of team learning. Studies in Continuing Education, 15(1) 1-14.

Denzin N., & Lincoln, Y. (1994). Entering the field of qualitative research. In N. Denzin & Y. Lincoln. (Eds.), Handbook of qualitative research (pp. 1-17). Thousand Oaks, CA: Sage Publications.

Dixon, N. M. (1994). Organizational learning: Becoming intentional. New York: McGraw-Hill.

Ericsson, K. A., & Simon, H. A. (1980). Verbal reports as data. Psychological Review, 87(3), 215-251.

Flanagan, J. C. (1954). The critical incident technique. Psychological Bulletin, 51, 327-358.

Goodman, P. S., & Associates. (1986). Designing effective work groups. San Francisco, CA: Jossey-Bass.

Goodman, P. S., Ravlin, E., & Schminke, M. (1990). Understanding groups in organizations. In L. L. Cummings & B. M. Staw (Eds.), Leadership, participation, and group behavior (pp. 333-385). Greenwich, CT: JAI Press.

Hackman, R. J. (1987). The design of work teams. In J. W. Lorsch (Ed.), *Handbook of organizational behavior* (pp.315-340). Englewood Cliffs, NJ: Prentice Hall.

Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry.* London: Sage Publishers.

Marsick, V. J. (1991). Action reflection learning in the workplace. In J. Mezirow (Ed.) *Fostering critical reflection in adulthood: A guide to transformative and emancipatory learning* (pp. 23-45). San Francisco, CA: Jossey -Bass.

Marsick, V. J. , & Kasl, E. Factors that affect the epistemology of group learning: A research-based analysis. *Proceedings of the 38th Annual Adult Education Research Conference* (pp. 1-6). [On-line] Available: http://www.educ.ubc.ca/edst/aerc/1997/97marsick.htm

Mezirow, J., & Associates. (1991). *Fostering critical reflection in adulthood: A guide to transformative and emancipatory learning.* San Francisco, CA: Jossey-Bass.

Parker, G. M. (1994). *Cross functional teams: Working with allies, enemies, and other strangers.* San Francisco, CA: Jossey-Bass.

Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.

Purser, R. E., Pasmore, W. A. & Tenkasi, R. V. (1992). The influence of deliberations on learning in new product development teams. *Journal of Engineering and Technology Management, 9*(1), 1-28.

Schön, D. A. (1987). *Educating the reflective practitioner.* San Francisco, CA: Jossey-Bass.

Smith, D. B. (1994). *York County community health assessment: Community summary.* York, PA.

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Refereed Papers

AFRICAN AMERICAN WOMEN IN A PREDOMINANTLY CAUCASIAN FEMALE PROFESSION: LEARNING PATHS TO POSITIONS OF PROMINENCE

Janet V. DeLany

ABSTRACT

This study explored the learning paths of twenty-one African American women who held positions of prominence within the predominantly Caucasian female profession of occupational therapy. The learning paths occurred within family, educational, societal, network, and personal systems. Though racial discrimination was a constant, the women did not allow it to dominate their lives. Generational differences were noted in their responses to racism.

INTRODUCTION

Similar to nursing, females comprise more than 90 percent of the occupational therapy membership. As a profession, it has encouraged women to engage in advanced level, lifelong learning pursuits and to earn positions of prominence within governmental agencies and national organizations. Of its 70,000 members, however, less than four percent are African American (AOTA, personal communication,1998). Unfortunately, little is known as to how African American women entered into the profession (Frank, 1992) nor how some acquired the knowledge and skills to assume positions of prominence (Bolden, 1993). By using an oral history research methodology, this study sought to understand the learning paths of African American women who achieved positions of prominence within the predominantly Caucasian female profession of occupational therapy.

LITERATURE REVIEW

As background to this question the literature review examined three themes: the membership composition of occupational therapy, and African American women's learning and leadership. A post structural feminist perspective served as the lens for the interpreting each of these themes.

MEMBERSHIP COMPOSITION

The occupational therapy profession was officially founded in 1917, a time in United States history marked by progressive education ideologies (Elias & Merriam, 1995), early feminist movements (Frank, 1992), and medical beliefs which adhered to the male curing - female caring dichotomy (Hamlin, 1992). Consistent with this gendered division of labor, the founding fathers of occupational therapy, who were psychiatrists and architects by profession, focused on creating a strong organizational base, developing scientific theories, strengthening associations with the medical society, publicizing journals, and holding national office presidency positions (Quiroga, 1995). The founding mothers, who were social workers, nurses, and educators by profession, focused on developing a theory utilizing goal directed occupations to improve health (Hamlin, 1992), drafted educational curricula, recruited members, and established philanthropic networks with white women's clubs, clergy, and physicians. Because occupational therapy was conceived as a caring profession, the founding fathers never considered themselves as occupational therapists but maintained their original professional identities. In contrast, the founding mothers made the professional transition (Quiroga, 1995).

The first occupational therapists, all females, came from predominantly middle to upper middle class Caucasian backgrounds whose families could afford the educational costs. As the demand for their services expanded in the wake of World War I, the Surgeon General recruited only single women who were white, 25 years of age or older, had a high school diploma and previous education in nursing, social work, or arts and crafts. It was argued that women, rather than men, would best provide morale and

motivation for the wounded soldiers with the least amount of discipline disruption (Quiroga, 1995). By World War II, 50 men had become occupational therapists (Hopkins & Smith, 1983). However, not until 1946, in the wake of heated struggle for acceptance of the National Association of Colored Graduate Nurses by the military (Hamlin, 1992) did the occupational therapy association record the names of two African American females, Ruth Coleman Denard and Naomi Wright, as members of its profession (Wells, 1993).

By 1998, the membership expanded to 70,000. In spite of the growth in numbers, its composition remained predominantly white and female. Of those who were occupational therapists, 93.9 percent were females, 90.5 percent were white and 2.6 percent were African American. Records did not reveal the number of occupational therapists or occupational therapy assistants who identified themselves as both female and African American (AOTA, 1998).

No other information has been recorded about the learning and career paths of the first two African American female occupational therapists. As well, little has been recorded about the learning and career paths of other African American female occupational therapists. The life and work of Lela Llorens, who is the only African American to be honored with the prestigious Slagle Lectureship Award and AOTF-AOTA Presidents Award, remain a notable exception (Llorens, 1970, Wells, 1993). Such a dearth of information challenges the members of the profession to examine why this has occurred, how this has contributed to the limited number of African American women within the profession, and why so few hold positions of prominence. By accepting the task, the profession places itself in a position to consider issues of privilege and oppression that have facilitated or hindered the learning and leadership paths for African American female occupational therapists. It allows the profession to examine the racial and ethnic responsiveness of its recruitment, mentoring, and professional education practices for individuals from diverse backgrounds.

AFRICAN AMERICAN WOMEN'S LEARNING
Collins (1989, 1991) argued that African American women have long held outsider status with respect to the generation of knowledge within academic settings. As a counter to this exclusion from formal educational systems, they united together in national organizations and local clubs which became central for addressing educational, professional, industrial, economic, and social service concerns of Black women and the Black community across all social classes (Gilkes, 1991). In the 1960s, the doors of higher education opened more, at least officially, to women of color (Coleman-Burns, 1989). However, systems of oppression, as reflected in institutional admission practices, knowledge production, faculty - student interactions, etc., perpetuated the negation of African American women's capacities (Johnson-Bailey & Cervero, 1996). As a result, the women sought alternatives settings, such as music and literature, daily conversation and daily actions, for the expression of their voices and for the production and validation of knowledge (Coleman-Burns, 1989).

Johnson-Bailey and Cervero (1996) and Scott (1991) contended that the knowledge and perspectives of African America women were distinct from as well as reflective of their dual membership in/separation from both women and African American groups. Such knowledge resulted from African American women's position of oppression, unique economic and political status, lived-experiences, and extended sisterhood.

In oral history interviews with four college educated African American women who were politically conscious and economically successful, Scott (1991) identified that African American women learned habits of surviving that were passed down from one generation of women to another. These learned habits of surviving, regardless of whether they were emancipating or self negating, were taught by example and were an unquestioned component of African American women's socialization processes. They reflected internalized and externalized oppression, internal adaptation, and external compromises to racism, sexism, and classism. They allowed the women to manage their anger and pain and have a sense of control and hope, while accepting the dominant society's prejudices. Through these habits of surviving, the women learned to suppress demonstration of feelings, appear strong, and to assume responsibility for the care of others. The cost for such learned habits for many Black women has been homicide, suicide, drug addiction, and community activism burn out.

From the narratives of African American women from all walks of life, Collins (1989, 1991) summarized that African American women valued wisdom based on everyday experiences collected through the generations. As well, they respected the active engagement in dialogue and the blending of words with actions, which enabled an individual to gain wisdom and a sense of empowerment within the community. They valued an ethic of caring which prized wisdom from the heart, seeing each individual as a unique expression of the common spirit, and personal differences as complimentary and co-existing. Dialogue infused with emotion reflected this ethic of caring, blended cognitive and affective processes, and gave validity to the argument. As well, they believed individuals were personally accountable for their learning and knowledge claims. Within this framework, reason, emotion, and ethics held equal, interconnected importance.

Johnson-Bailey and Cervero (1996) provided additional insight into those factors which affected the learning processes of African American women. Their analysis of the narratives of eight African American women who reentered higher education revealed that issues of racism, sexism, classism, and colorism continuously filtered through their higher education experiences and duplicated those within the larger society. They used coping mechanisms of silence, negotiation, and resistance to survive. The women learned through their families, schools, communities, and workplaces to use silence as a cocoon and negotiation as a bargaining tool for freedom. Acts of silence and negotiation occurred both internally and externally. Resistance, the least used of all coping mechanisms, occurred at pivotal times in their lives. An external act, it was chosen after much deliberation and internal strife as to its consequences upon their educational paths.

Specifically within occupational therapy, Bolden (1993) found that African American women experienced racial discrimination in their educational paths and racially related setbacks in their work experiences, though they enjoyed economic success similar to their Caucasian counterparts. Compared to the Caucasian therapists, the African American therapists tended to come from working class families whose mothers were more frequently employed on continuous basis outside of the home, and whose fathers received less formal education. More black than white therapists held educational credentials higher than those minimally required for practice, though they needed to work for longer periods of time to receive managerial status. They identified that they experienced isolation as a professional black woman.

AFRICAN AMERICAN WOMEN'S LEADERSHIP
The limited studies on the leadership of African American women addressed either leadership characteristics (Jones, 1992; Parker & ogilvie, 1996; White, 1990) or themes to success (Gilkes, 1991; Talley-Ross, 1991). In a survey of 17 African American women college presidents, Jones (1990) found that they described their leadership as transformational, combining feminine and masculine leadership traits to facilitate direct participation, empowerment, team building, and vision creation. Similarly, through in-depth interviews with seven African American women who held executive positions, White (1990) concluded that strategies for leadership success included: risk taking, campaigning for themselves through highlighting of achievements, and establishing networks, especially with black, female colleagues.

Building upon the work of Jones (1992) and White (1990), Parker and Ogilvie (1996) proposed that, African American women demonstrated blended male and female leadership styles of assertiveness, independence, autonomy, androgyny, self confidence, strength, and direct communication skills. They employed bicultural, avoidance, and confrontational strategies to lead within a context of racial and gender discrimination, devalued leadership abilities, complex organizational interactions, and expectations for high performance.

Using an oral history research methodology, Talley-Ross (1991) interviewed a select group of 17 African American women who were practicing in male dominated professions of medicine, law, journalism, and corporate management. Themes related to their career success included: parental promotion of optimism, parental and self promotion of self reliance, support for attending traditional black universities of higher education, church affiliation, and the ability to accommodate racism. Positive self definition, as a result of parental rearing practices which protected them from racial hostility as children, enabled them to "move around the walls of racism" as adults (p. 126). They described egalitarian distribution of power within the

homes of their childhood, and in their relationships with their spouses or male friends. They viewed their accomplishments as a natural evolution of events fueled by their will to succeed.

African American women who held leadership positions within community advocacy organizations identified that they needed to carefully balance the demands of their professional membership with a critical analysis of the practiced ideologies of that profession, especially when those ideologies were grounded in dominant cultural beliefs that devalued or misrepresented the capacities of minority cultures. Essential to sustaining them in their leadership roles were memberships in black professional caucuses and organizations. Such memberships provided social linkages and a foundation for communicating professional disagreements with the dominant, white professional organization (Gilkes, 1982, 1991).

SUMMARY OF THE LITERATURE
Though these studies provided foundational understanding about the membership composition of occupational therapy, and African American women's learning and leadership, they did not inter-relate these themes to answer the central question to this research endeavor. They did not identify the learning paths that African American women followed to achieve positions of prominence within predominantly female Caucasian.

DESIGN AND METHODOLOGY
This study used a phenomenologically based, oral history research methodology to interview a purposive sample of 21 African American women who held positions of prominence within the occupational therapy association. This association served as the specific organization because of its national recognition within the female dominated field of allied health and because of its dominant white, female membership. Snowballing technique, professional journals, and the researcher's personal knowledge of professional leaders were used to identify the participants.

Prior to the interview, the participants received mailed copies of: the letter of intent, a sample release form, an outline of potential topics for discussion, and confirmation of the time and place for the interviews. The first stage of the interview process occurred over the phone to gain demographic information about each participant, to identify journal articles, books, and/or videos completed by or written about her, and to request a copy of the participant's curriculum vita. This stage took 30-45 minutes to complete. For twenty of the interviews, the second stage occurred in participant's place of employment, home, or a location of their choice. For one the interviews, the second stage occurred over the phone at the request of the participant. The second stage of the interview process resulted in a collection of thick, rich, descriptions of the lived history of each participant as remembered by her. The details that the participants shared about their lives, rather than specific questions directed the interview. The interviews lasted between two and one-half to seven hours, and were audio taped and transcribed verbatim. Based upon the preference of each of the participants, the interviews occurred over one or several sessions. The participants reviewed copies of the tapes and transcripts to insure accuracy of recording.

A constant comparative method was used to index and categorize emerging themes. Member checks and expert consultations were conducted to verify findings and ensure trustworthiness. The researcher met with the participants to discuss the emerging patterns.

RESULTS
The study provided a framework for understanding the multifaceted dimensions of those learning paths that led to positions of prominence for this select group of women. Learning paths occurred within family, network, societal, educational and personal systems. Within each system, the women held differential positions of privilege and restriction. The systems overlapped and provided varying amounts of support for, barriers to, and expectations upon the women.

Family systems included immediate and extended family units that were biologically and culturally determined. They created lifelong safety zones where the women were able to develop personal and racial self esteem. They generated dreams about the women's capacities as well as expectations to excel. They modeled for the women strategies for coping with rather than being dominated by racism. As the

women transitioned from childhood to adulthood, they shifted their role within the family to create safety zones and mentoring for younger members.

Network systems included peers, colleagues, mentors, friends, and religious groups. For many of the women, networks with other black students, sorority sisters, professionals, and church members provided support systems where the women could discuss topics from perspectives other than which they could in the larger societal context. As well, they allowed for balancing of professional with cultural beliefs and for coping with issues of racism. Non-black network systems provided a method for navigating through the institutions of the dominant cultural to achieve higher educational and professional objectives. Within these non-black network systems, the women experienced either acts of racial discrimination, de-racing, or validation.

Societal systems included those political, social, cultural, and physical contexts in which the women learned. Though racism was a constant within these systems, affecting access to education, transportation, finance, and community resources, the women chose not to let it dominate their learning paths. Their methods for addressing issues of racism seemed to vary along generational lines. Those women in their late 60's through 80's tended to discuss the impact of racism from a perspective of fitting into the larger society through academic and professional excellence. Those women in their 40s and 50s tended to emphasize the civil rights advocacy responsibility associated with their learning paths.Those in their 30s highlighted patterns of injustice within the societal, educational and institutional settings that affected their learning paths. Though gender discrimination also occurred, the women tended not to identify such incidence within the direct educational and practice arena of occupational therapy. Gender discrimination that they did report occurred within the larger healthcare or educational context.

Formal and informal educational and professional systems included those structured and non-structured, planned and non-planned learning and professional growth opportunities that occurred within academic institutions, work environments, professional organizations, and the community. Within the formal educational system, the women benefitted from the support of some one who believed in their academic capacity. For some, issues of racism were not blatant. Others needed an advocate to prevent being tracked in to non-academic, stereotypic jobs for black women. In occupational therapy school and work, they were often the only African American; thus they created networks with other African American women outside of occupational therapy. Family and church were the major sources of informal education and focused on education for living as member of a community rather than that which was needed for professional job tasks.

Personal systems included the physical, cognitive, psychological and social capacities, as well as the belief systems and values of each of the women. Dominant within this system was the belief by the women that they were blessed with cognitive, psychological, spiritual, and social talents. Thus, it was their responsibility to take care of, educate, and empower members of the larger society. To do so, they committed themselves to life-long education and community endeavors.

CONCLUSION

This study provided a rich, in-depth understanding of learning paths of a purposive sample of African American women. The learning paths involved wisdom generated through experience, dialogue, ethic of caring, and ethic of responsibility as suggested by Collins (1991). To navigate through these learning paths, the women employed coping mechanisms of silence, negotiation, and resistance as described by Johnson-Bailey and Cervero (1996). Consistent with the findings of Talley-Ross (1991) their career success included: parental promotion of optimism, and parental and self promotion of self reliance. Positive self definition, as a result of parental rearing practices, enabled them to create effective strategies for accommodating to racism. The women learned to be bicultural, as well as function as a cultural broker between black and white therapists/clients within their work environments. The sustained affiliations with black sororities, assumed responsibility for the betterment of the occupational therapy profession and the African American community, and viewed their accomplishments as a natural evolution of events fueled by their will to succeed. Similar to the work of Jones (1992) and White (1990), they reflected a transformational leadership style which encompassed direct participation, empowerment, team building,

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establishment of networks, risk taking, and vision creation.

It is recognized that similar studies need to be conducted within other predominantly, female, Caucasian professions to generate a more comprehensive appreciation of the contributions of African American women and to ascertain whether their learning paths, as suggested in this study, reflect those of African American women in other professions. Also, studies need to be conducted about other women of color to more fully understand the learning paths of these women and the methods by which they were able to negotiate through the biases of the dominant culture to achieve leadership positions.

REFERENCES

Bolden, J. (1993). *Differential occupational outcomes among African American and white women in female dominated professions: The case of occupational therapy.* Unpublished doctoral dissertation, Boston University, Boston, MA.

Coleman-Burns. P. (1989). African American women: Education for what? *Sex Role, 21*(1-2), 145-160.

Collins, P. H. (1989). The social construction of black feminist thought. *Signs, 14*(4), 745-773.

Collins, H. P. (1991). *Black feminist thought: Knowledge, consciousness and the politics of empowerment.* Boston, MA: Unwin Hyman.

Elias, J., & Merriam, S. (1995). *Philosophical foundations of adult education* (2nd ed.). Malabar, FL: Krieger Publishing

Frank, G. (1992). Opening feminist history of occupational therapy. *American Journal of Occupational Therapy, 46*(11) 89-99.

Gilkes, C. (1982). Successful rebellious professionals: The black woman's professional identity and community commitment. *Psychology of Women's Quarterly, 6,* 289-311.

Gilkes, C. (1991). Liberated to work like dogs! Labeling Black women and their work. In H. Grossman & N. L. Chester (Eds.), *The experience and meaning of work in women's lives* (pp. 165-188). Hillsdale, NY: Lawrence Erlbaum Associates.

Hamlin, P. (1992). Embracing our past, informing our future: A feminist revision of health care. *American Journal of Occupational Therapy, 46,* 967-969.

Hopkins. H. & Smith, H. (Eds.)(1983). *Occupational Therapy* (3rd ed.) Philadelphia, PA: Lippincott.

Johnson-Bailey, J., & Cervero, R. (1996). An analysis of educational narratives of reentry black women. *Adult Education Quarterly, 46*(3), 142-157.

Jones, M. C. (1992). *Learning to lead: A study of developmental paths of African American women college presidents.* Unpublished dissertation, The George Washington University, Washington, DC.

Llorens, L. (1970). Facilitating growth and development: The promise of occupational therapy. *American Journal of Occupational Therapy, 24*(2), 93-101.

Parker, P. & Ogilvie, D. T. (1996). Gender, culture and leadership: Towards a culturally distinct model of African American women executives' leadership strategies. *Leadership Quarterly: Special Issue on Leadership and Diversity, Part II, 7* (2).

Quiroga, V. (1995). *Occupational therapy: The first 30 years.* AOTA: Bethesda, MD.

Scott, K. Y. (1991). *The habit of surviving: Black women's strategies for life.* New Brunswick: Rutgers University Press.

Talley-Ross, N. (1991). *The African American woman practicing in non-traditional professions: A life history approach.* Unpublished doctoral dissertation, The University of South Florida, Tampa, FL

Wells, S. (1993). A legacy of involvement. *Occupational Therapy Week, 8,* 18-19.

White, Y. (1990). Understanding the Black woman Manager's interaction with the corporate culture. *Western Journal of Black Studies, 14,* 182-186.

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Refereed Papers

SELECTING COMMUNICATIONS TECHNOLOGY FOR CONTINUING PROFESSIONAL EDUCATION (CPE) PROGRAM DELIVERY

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ABSTRACT

Ideally, Continuing Professional Education (CPE) enables practitioners to keep abreast of new knowledge, maintain and enhance their competence, progress from beginning to mature practitioners, advance their careers through promotion and other job changes, and even move into different fields (Queeney, 1996). This paper begins to identify the human elements addressed by decision-makers and Continuing Professional Engineering Educators (CPEE) in high-tech industries as they decide on delivery systems for employee educational opportunities.

This will enable the adult educator concerned with instructional design and the learning environment, the impact of the delivery medium with attributed mood, effort, ability, resistance, need to do well, and other items of social need and learner attitude to better understand just how those decisions come about. The importance of human factors in decision-making is often denied or ignored. If this study helps understand the impact of human factors on the selection process, the quality of those decisions will be improved. If done well, all other program delivery will be helped.

INTRODUCTION

For many, the "Information Age" arrived before we realized it, with the 1990s witnessing unparalleled growth and development of information technology. This has changed the world around us--not only how we view it, but also how we interact and cope with it. Holding your own in this rapidly evolving world is a considerable challenge for those seeking to enhance their value as employees and expand their horizons as individuals. Career competition with growing numbers of increasingly sophisticated fellow "experts" is on the minds and tongues of those in virtually every profession. Just as our appetite for continued career education grows, the diversity and sophistication of ways to deliver that education continues to expand.

Communications technology has had a dual effect on us–driving the need for continuing education, and expanding our opportunities for obtaining it. Distance Education, for example, has been re-defined to describe the teaching-learning relationship in which participants interact through advanced communication technology.

PROFESSION AWAKENS TO THE NEED

Continuing Professional Education is especially critical in the engineering profession, where knowledge has a generally accepted five-year half-life. The need for career-long continuing engineering education was formally recognized by individual engineers, industry experts, academicians and professional societies when a panel of the National Research Council recommended that the National Science Foundation (NSF) establish learning objectives for career-long engineering education.

In 1992, the NSF funded several engineering educational institutions to test and verify whether people learn more effectively in self-paced or collaborative learning environments. The result was the National Engineering Education Delivery System (NEEDS). Through NEEDS, the NSF demonstrated that it recognized the value of rapid response to specific business-related problems.

The development of Continuing Professional Engineering Education is a point in the evolution of the concept of andragogy that Malcolm Knowles described. The primary purpose remains the same. It

continues to help adult individuals satisfy their life needs and achieve their life goals (Knowles, 1980). Research has shown continued high use of tele-conferencing formats and multiple conferencing technologies, as well as high enthusiasm for conferencing. However, descriptive research indicates that new systems have generally failed to be studied from the context of communications technology, while other research confirms industry managers' dissatisfaction with the current status of continuing education programs.

LEARNING FROM A DISTANCE

Interest in telecommunicated distance education has been growing so rapidly that it is impossible to accurately document the many projects presently underway or being considered in the United States. Distance learning projects using communication technologies such as cable television, fiber optics, satellites, and microcomputer networking have opened multiple opportunities to coordinate schedules and share resources, thereby expanding curricular offerings and educational opportunities. A major factor in the growing interest in distance education is the ability to conduct live, real-time interaction between teachers and students.

Technology is often equated with good, and almost always assumed to be an improvement. But we don't know a lot about how corporate professional educators go about making their technology selection decisions, or how they integrate and utilize the individual and organizational factors in the decision-making process.

When business organizations consider certain communication technologies, they focus largely on technical issues. They rarely or only marginally consider the non-technical or human factors ultimately influencing levels of acceptance and effectiveness of the chosen technologies on the teachers or their participants. Is the media selected on the basis of defined learning needs? Is the delivery system selected because it is more glamorous or more expensive? What are the criteria for selection? Furthermore, which human elements affect technology choices? and Why?

Having posed those questions, consider the gap between educational needs and educational provisions. The gap is wide, and even though much of it is a result of the technological age, communication technology and distance education may very well be the best means of bridging that gap. Consider the opportunities for more learners and the promise of improved quality of education for everyone. But the excitement of the opportunity to use new media can distract us from choosing the most suitable alternatives.

USING TECHNOLOGY TO TEACH TECHNOLOGY

Communication technology today provides the networking approach that enables technical professionals and managers to share educational resources on a global scale. Since starting in the mid-1960s, instructional television (ITV) in the United States has grown steadily so that, today, it has become the primary way engineers and technical managers continue their education while at work. Nowhere has this been more evident than in the National Technological University (NTU). Regional ITV systems operated by individual universities continue to grow, and these networks since 1985 have been simultaneously interconnected nationally by satellite via NTU.

The National Technological University is a cooperative effort of 46 major engineering and management colleges linked by satellite and compressed digital-video technology to provide 25,000 hours of instruction to 115,000 participants annually. The regional interactive television systems operated by the individual universities are simultaneously interconnected through NTU. All of its programs focus strongly on learner needs and it is an accredited and respected university.

A 1992 study reported that NTU provided 78 percent of all university instruction delivered by satellite in North America, and a similar customer-driven initiative delivers non-credit specific development programs to more than 100,000 enrollees each year. Clearly, innovative use of the communication media is upon us with a structure and technology of what has been termed "a virtual university" (Baldwin 1997).

CHOOSING FROM THE TECHNOLOGY MENU

In the United States today, the engineering profession has become concerned about the impact of

technology on university level learning. Today, most engineering graduates enter the workforce with only a baccalaureate degree as they did in 1900, despite the enormous complexity and rapid change of evolving technology. Once they enter the workforce, engineers face accelerating change that makes career-long learning a necessity. In pursuit of this career-long learning, engineers have become exposed and acclimated to ITV as a learning medium.

Missing from today's distance education research is a study of how the significant decision makers go about choosing communication media for continuing engineering education.

Choosing is deciding, and decision theory has a strong foundation in statistics and the behavioral sciences. By identifying those elements that go to make up decision theory, it is possible to describe the elements that are common to all decisions.

An oversimplified description of the decision-making process:
- establishing objectives,
- measuring performance,
- identifying the problem,
- developing alternative solutions,
- evaluating alternatives,
- choosing an alternative, and
- implementing the decision.

It would seem that the decision-making process is a sequential process of steps that begins with a statement of the problem and ends with an assessment of the results.

On the whole, research on decision-making by individuals has relied largely on analyzing thought processes while solving simplified problems. This theory has not been carried out in practice.

In addition, research on decision-making by groups has been concerned with the interactions among the participants in an oversimplified laboratory situation, and not with the decision process. The fallacy in this type of group research is that the very structure of the process has been ignored (Mintzberg, 1976).

In both cases, decisions have been categorized as being routine or novel, structured or unstructured. In business situations, routine decisions are dealt with using policies, rules and procedures. On the other hand, decisions that are unstructured are usually complex, and do not fit a particular pattern. Business situations like venturing into new processes, products, equipment or markets are unique, and are not dealt with in a routine manner. Relatively little is known about this type of human decision process even though they are the complex decisions that require general problem solving, judgment, intuition, and creativity techniques.

Nor do these unstructured decisions fit any of the three major decision-making models. First, the Rational model selects from among thoroughly analyzed alternatives. Second, the Bounded Rationality model tends to consider the limitations of day-to-day decision-making, reflecting limited searches for alternatives, making choices under situations of inadequate information or control, and selecting the less-than-best solution. Finally, the Political model is evident when bias is employed and the distribution of power and self-serving interests dominate.

In reality, simplistic models are seldom encountered. More likely, the elements of decision making are found in a common base within an obviously complex structure.

THE STRUCTURE OF UNSTRUCTURED DECISIONS
In 1976, a general model of unstructured decision-making process was developed. It is a flow chart of seven steps inside three identifiable phases; operating within an environment of three supporting routines and six sets of dynamic factors. Using this general model, the author was able to categorize seven types of path configurations which fit all types of unstructured decisions (Mintzberg, 1976).

Mintzberg brought the elements of the unstructured decision-making process to a common base and developed them into the general model. The model delineates three distinct phases of the strategic

decision process: I) Identification, 2) Development, and 3) Selection; and describes the phases in a mainline of seven central routines: 1) Decision Recognition, 2) Diagnosis, 3) Search, 4) Design, 5) Screen, 6) Evaluation-Choice, and 7) Authorization. Important to the model are supporting routines and dynamic factors. These routines are imbedded in an environment of three Supporting Routines, and six sets of Dynamic Factors.

This general model, obviously complex, is the result of rigorous and intense analysis and study of the decision-making process. Its application has withstood scrutiny and review, and remains tested and proven. Selecting an alternative is not simply choosing the one or best solution; it is a complete phase in the process considering screening, evaluation, and choice. Selecting is an integral part of the process within the Evaluation-Choice Routine, and has been defined as "crude, at best" in the literature, and loaded with soft human factors, particularly in bargaining, design, and development.

Mintzberg demonstrated that complex and dynamic decision processes can be conceptually structured. He described elements and routines about which little is known, concluding that selection routines are mere trimmings in the overall decision process. Ultimately, it is the Decision Support Routines that make up the totality of impact on the process. They are off the mainline on the flow chart, wherein soft issues guide all three of the Decision Supporting routines. Thereupon, it is the human factors that make up the totality of the dynamics of the overall scheme, to include the decision control routine, the decision communications routine, and the political routine. Furthermore, the Dynamic Factors are primarily human factors acting upon the total process, and not just upon any single element.

Likewise, behavioral influences such as individual values, personalities, propensity for risk, potential for disagreement, and ethical intensity all come to bear. Behavioral factors are human factors. How do Continuing Professional Engineering Educators go about dealing with those human factors when selecting technology to teach technology?

They focus largely on technical issues. They rarely or only marginally consider the non-technical or human factors, which ultimately influence levels of acceptance and effectiveness of the chosen technologies on the part of teachers and participants.

What understanding do they have, or sense do they make of these factors regarding the organizational issues of competition, politics, power and influence? Exploring the beliefs, actions and reflections of decision-makers will provide insight into how the individual and the organization are integrated.

THE INQUIRY

Surveying key decision-makers in a purposive sample of 23 leading high tech Fortune 500 companies will collect information. The questionnaire will ask open-ended questions directed at business-based managers and leaders such as: vice-president of human resources, director of human resource development, director of organizational development, manager of professional and management development, personnel manager, etc. The written survey will ask to consider all human, economic, and environmental elements in addition to engineering and professional considerations. I will follow with telephone and personal interviews for in-depth exploration, and for ranking in order of importance.

This structured qualitative study of significant actors in industry will be conducted through techniques of focus group interviews, biographical data/reflection questionnaires, and personal telephone interviews to provide in-depth detail-rich data based on individual perspectives and experiences. The significant actors I intend to study are Continuing Professional Engineering Educators and officers at Fortune-500 companies represented on the National Technological University (NTU) Advisory Committee. All are involved in decision-making regarding the planning and programming of corporate engineering development programs.

(Note: In 1998 and 1999, the NTU Executive Advisory Committee included representatives from: AMP Incorporated, AT&T Global Information, Digital Equipment Corporation, Eastman Kodak, Exxon, Hewlett Packard, Honeywell, IBM, Intel, Lockheed-Martin, Lucent Technologies, Milliken, Motorola, National Cash

Register, National Semiconductor, Pacific Bell, Phillips Petroleum, Polaroid, Texas Instruments, and Xerox.)

The first step is to invite them to participate using the Dillman technique. Following this step, a select focus group of 3 or 4 will be used to identify relevant factors for inclusion in a survey questionnaire. At that point, I am going to talk to them about how they went through the selection process in choosing the system they are now using. Possible beginning questions may include: "Is the media selected on the basis of defined learning needs? Instructional needs? Professional or technical expertise? Available budget? Is the delivery system selected because it is more glamorous or more expensive? What are the criteria for selection?"

The survey questionnaire will involve open-ended questions about communication technologies. The questions will define which technologies are perceived to be the best match for delivering externally provided competency education, as well as the concerns, reservations, and challenges currently known and foreseen. Reference will be made to a leadership model that focuses on the role played by leaders in making selection decisions.

Telephone interviews will follow the survey to elicit responses ranked in order of importance. Interviewees will be asked to react to responses provided by the survey and to indicate the extent of agreement with the mean agreement scores of all other respondents. Finally, results will be compiled, analyzed, and summarized into a discussion of the findings' implications, which will then be distributed for comment to all participating organizations.

CONCLUSION

Themes that emerge from the study may include soft issues like: forces driving change, shared vision, opportunities for change, effect of outsiders on the decision team, nature of resistance, moving away from paternalism, redesigning processes, personal stresses, costs, relationships and connections, hidden agendas, role of human resource professionals, or others.

As higher education goes beyond its traditional boundaries to create useful and meaningful programs with Continuing Professional Engineering Educators, both must be prepared to create an awareness of these external influences. It is expected that many of these factors do not align with what adult educators emphasize in instructional design and delivery, suggesting a more holistic perspective on issues of program planning.

Defining the decision-making profile of corporations and developing a strategy to address the profile elements will go a long way to helping you seek the understanding you can take to your professions and to those administrators and decision makers through your educational programs.

REFERENCES

Baldwin, L. V. (1997, July). *The National Technological University: A pioneering "virtual university."* Lecture presented at Tokyo Institute of Technology, Tokyo, Japan.

Knowles, M. (1980). *The modern practice of adult education: From pedagogy to andragogy.* (Rev. ed.). New York: Cambridge Books.

Mintzberg, H., Raisinghani, D., & Theoret, A. (1976). The structure of "unstructured" decisions. *Administrative Science Quarterly, 21,* 266-275.

Queeney, D. S. (1996). Continuing professional education. In R. L. Craig (Ed.), *The ASTD Training & Development Handbook* (4th ed.). New York: McGraw-Hill.

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Refereed Papers

FACTORS THAT INFLUENCE PERSISTENCE AMONG STUDENTS IN MIDDLE ADULTHOOD AT THE COMMUNITY COLLEGE

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ABSTRACT

As baby boomers enter their middle adult years, there has been a dramatic increase in the number of midlife adults returning to community colleges. Over 63% of adults age 35 to 54 years old do not have college degrees (U.S. Bureau of the Census, 1995). Since adult undergraduates are more likely to select two-year colleges to begin their studies (Cross, 1981), community colleges need to develop strategies for the retention of the midlife adult student. But what theoretical framework should such a plan be based? The purpose of this exploratory study was to develop a reliable instrument that would measure factors related to the persistence of adult students who, between the ages of 34 and 55, successfully entered and completed an Associate's Degree program at a two-year public college.

The Adult Student Persistence Questionnaire (ASPQ) was developed for this study of 180 Associate Degree graduates. Results indicated that the following factors appeared to influence the persistence of midlife adult college students: encouragement and support from others, institutional commitment, academic and social integration, and self-motivation. By examining subpopulations within the sample, the results showed significant differences among respondents.

BACKGROUND

Recent demographic and occupational changes are resulting in the college enrollment of more adults between the ages of 35 and 54. From 1990 to 1994, the population of this age cohort increased by 15% in the United States. Corresponding with the population increase is the number of adults in this age group who do not have college degrees. Two-year colleges especially have experienced tremendous growth in the enrollment of students in their middle years. Between 1987 and 1993, the number of adults between the ages of 35 and 49 enrolled in two-year colleges increased 25.5%; in comparison, the number of students age 34 and under enrolled in two-year colleges rose by 16.1% (U.S. Bureau of the Census, 1995). Since the age 35 and over population is expected to increase until the year 2005, we can expect more midlife adults returning to the community college to obtain an Associate's Degree.

Research on undergraduate student persistence in higher education has focused largely on traditional students attending residential institutions (Tinto, 1993). When research has been conducted on the persistence of nontraditional students, such studies have tended to merge this population into one age criteria - students 25 years old and over. Considering the diverse age range and needs of nontraditional students, studies based on specific age cohorts would be more useful. Successful completion of college for students in middle adulthood is often in competition with other external demands, such as family, job, and community responsibilities. The factors influencing the college persistence of this age cohort are likely to be quite different from those influencing younger, nontraditional students.

DESIGN OF ADULT STUDENT PERSISTENCE QUESTIONNAIRE

The Adult Student Persistence Questionnaire (APQ) was developed to identify areas that adults between the ages of 34 and 55 perceived as important factors in their successful completion of the Associate's Degree. The ASPQ consists of four components. The first component seeks demographic information about the student, including age, gender, ethnicity, high school graduation date or GED, highest level of education completed, and current occupation. Highest levels of education for the student's mother, father, and spouse, as well as the educational attainment of siblings and friends are also included.

The second component of the ASPQ asks about college enrollment, including (a) the age at which students first started attending the college, (b) the age they completed their Associate's Degree, (c) their program of study, (d) their enrollment status (day/ evening, full-time/part-time), (e) their responsibilities in addition to being a student, (f) their first semester GPA and final GPA, (g) whether they had previously attended college, (h) their reason(s) for returning to school, and (i) whether they seriously considered withdrawing at any time prior to completing the degree.

The third part of the questionnaire is designed to measure factors associated with student persistence. Respondents are asked to think back to their experiences at the college and indicate on a 4-point Likert Scale to what extent they agreed or disagreed with each of 43 statements measuring the following 8 constructs: Academic Integration, College Environment, Educational Aspirations, Finance Attitude, Institutional Commitment, Instructors, Support/ Encouragement, and Social Integration.

The fourth component of the ASPQ asked students to assess the importance of specific factors in helping them complete the degree. For example, if students had a high satisfaction score with the construct of Support/Encouragement in Part III, the question remained whether they perceived the construct as important to their persistence. And, if so, which sources of support were most valuable in helping students persist (e.g., spouse/significant other, children, parents, siblings, friends, classmates, instructors, college staff, etc.). The four major factors examined in this final section of the ASPQ were Support/Encouragement, College Services, Instructors, and Social Integration. A Likert Scale was again used to determine the levels of importance.

RESEARCH DESIGN

This was a cross-sectional survey design of 180 adults who enrolled in and completed an Associate's Degree at a two-year public college when they were between the ages of 34 and 55. The instrument used is the ASPQ, a self-administered, mailed questionnaire. Graduates from three public two-year colleges in the Greater Boston area who met the following criteria were surveyed: (1) students had graduated from the college with an Associate's Degree within the past five years, (2) students were between the ages of 34 and 55 when they returned to the college and when they graduated, and (3) students did not have a college degree prior to entry.

The ASPQ was mailed to 957 students. 77 questionnaires were returned unopened without a forwarding address. Of the remaining 880 questionnaires, 322 were returned. A response rate of 37.7% was obtained by subtracting the surveys that were nondeliverable from the original pool (a rate of 33.6% if these were kept in the pool). 180 of the completed questionnaires were useable for the current study.

DATA ANALYSIS

Using SPSS, Cronbach alpha reliabilities for the various scales were computed to calculate scale reliabilities. Factor analysis was conducted to assess the construct validity. A factor analysis was conducted on the ASPQ scales to confirm the hypothesized structure. Each scale was individually factor analyzed using a principal components analysis to determine if the items fit an hypothesized single factor (e.g., had substantial loadings above .40). The results of the factor analysis indicated that, as expected, the items had high loadings on the respective factors. A reliability analysis was done for the entire 43 item scale (alpha = .89). Reliability analyses were then conducted for each individual scale. The mean for each item was based on a score of 1 to 4, 1 being the lowest score and 4 being the highest. T-tests, one way analysis of variance, and analysis of covariance were used to determine levels of significance at $p \leq .05$.

HYPOTHESIS

It was hypothesized that during midlife, adult students who persisted at two-year public colleges would have highly positive scores ($\bar{x} \geq 3.0$) on the ASPQ scales measuring Academic Integration, College Environment, Educational Aspiration, Finance Attitude, Institutional Commitment, Instructors, Social Integration, and Support/Encouragement. Since this was an exploratory study, no formal hypotheses were developed for the independent variables.

RESULTS

Descriptive statistics were done to determine the demographics of the respondents. Of the 180 useable questionnaires, 137 (76.1%) were completed by women and 43 (23.9%) by men. The ethnicity of the respondents was predominantly white (92.8%). Minorities comprised only 3.9%.

The majority of respondents (65.6%) reported attending college prior to enrolling at the two-year institution. 37.3% of them had attended more than one college before. The mean age at which students returned to college was 39.6 years old; the mean for graduation was 43 years old.

Respondents were divided in attending college full-time (34.4%), part-time (40.6%), or both (25%). This was also true for attending days (31.1%), evenings (31.7%), or both (37.2%). The majority of respondents reported high academic grades. 68.8% of the respondents had a GPA of 3.5 or higher at the end of the first semester; 68.9% reported a final GPA of 3.5 or higher.

Students were asked about the responsibilities they had in addition to attending college. 82.8% worked outside the home while attending school. Among them, 28.6% worked 20 hours per week or less, 55% worked between 21 and 40 hours, and 16.4% worked over 40 hours each week. At the time they were enrolled, 57.2% of the respondents had childcare responsibilities and 31.7% took care of other family members.

Of the 8 Dependent Variables, Institutional Commitment and Support/Encouragement had the highest scale item means ($\bar{x}$ = 3.28). This was followed by Academic Integration ($\bar{x}$ = 3.13), Social Integration ($\bar{x}$ = 3.06), College Environment ($\bar{x}$ = 2.90), Finance Attitude ($\ddot{x}$ = 2.82), Educational Aspirations ($\bar{x}$ = 2.76), and Instructors ($\bar{x}$ = 2.73). The mean for Academic Integration as measured by GPA was approximately 3.50 after the first semester and at graduation.

While the 43 items in Part III of the questionnaire explored how students experienced college, Part IV examined to what extent students perceived certain factors as important in helping them complete the Associate's Degree. There were four components to this last section measuring Support/Encouragement, College Services, Instructors, and Social Integration. Results showed that students attached primary importance to support from spouse/significant other ($\bar{x}$ = 3.48) and support from their children ($\bar{x}$ = 3.27). Respondents attached primary importance to the following instructor characteristics: treating students with respect ($\bar{x}$ = 3.47), expertise ($\bar{x}$ = 3.40), enthusiasm for teaching ($\bar{x}$ = 3.37), fairness in grading ($\bar{x}$ = 3.31), teaching methods ($\bar{x}$ = 3.28), knowledge of adult learners ($\bar{x}$ = 3.12), and concern for students ($\bar{x}$ = 3.03). Under social integration, the mean score of only one item was $\geq$ 3.0, "interaction with instructors during class" ($\bar{x}$ = 3.18). None of the college services received a mean score of $\geq$ 3.0.

DISCUSSION AND IMPLICATIONS

SUPPORT/ENCOURAGEMENT

The high score on the variable of Support/Encouragement corroborated Metzner and Bean's (1987) model of nontraditional student persistence, which contends that outside encouragement and family support have the greatest influence on adult student retention. Confirmation for this model also came from 44 of the 49 ASPQ respondents who indicated they had seriously considered withdrawing prior to graduation. The reasons these individuals did not withdraw were attributed to the support and/or encouragement they received from spouses, instructors, children, friends, family members, classmates, doctors, and therapists.

Sources of support/encouragement varied among the sample. Not surprisingly, married students reported support from their spouses as most important. Some students cited financial and moral support from spouses; others mentioned spouses who helped with childcare, cooking, cleaning, shopping, and other tasks.

Children were cited as the second most important source of support/encouragement by married students, and the most important source by divorced parents. Children supported their parent's educational goals in different ways, such as helping with housework, taking care of younger siblings, cooking, and providing encouragement.

Enrollment status as a full-time student was the single largest indicator of the importance of receiving support/encouragement from others. Full-time students attributed significantly greater importance than part-time students to the support they received from their spouse/significant other, children, and friends outside of college.

Another source of support came from instructors; however, there was a significant difference in the experiences of day/evening and full-time/part-time students. The support from instructors meant significantly more to the persistence of students who attended either days or full-time.

A significant difference regarding the importance of support from college staff was found between age groups. Older students (those who entered the college at age 40 or over) were significantly more likely than the younger cohort (ages 34-39) to attribute support from college staff as a reason for their persistence. Since older students were more likely to have been away from school longer, perhaps they experienced greater anxiety and uncertainty upon enrollment. They especially seemed to benefit from the caring, personal attention given by staff members.

INSTITUTIONAL COMMITMENT

Respondents reported a high level of satisfaction with the institution and a commitment to graduating there. The only significant difference on this measure was between day and evening adult students. Day students scored significantly higher on the Institutional Commitment scale than evening students. A frequent comment by evening students was that college services (e.g., financial aid, tutoring, career placement, etc.) weren't available during evening hours. As a result, some evening students felt that they didn't matter to the institution. Colleges will need to rethink their hours of operation if they are to earn the institutional commitment of evening students.

ACADEMIC INTEGRATION

The respondents had clearly achieved academic success, with 92% reporting a GPA of 3.0 or higher, both at the completion of the first semester and at graduation. Doing well academically during the first semester was perceived as an important factor in the decision to remain in college ($\bar{x}$ = 3.15). However, first semester academic success was significantly more important to the persistence of two subpopulations: (1) students who had never attended college before, and (2) students who enrolled at the college when they were 40 years old or over.

First-time adult college students may feel more intimidated upon entering higher education and uncertain of their academic abilities. A successful first semester grade report may help to validate their capabilities and bolster their self-confidence. The same could be said about the adult student 40 years old or over, despite having attended college previously. Indeed, some older students wondered if they could "compete" with younger students. Their first grade report served to confirm that they could.

SOCIAL INTEGRATION

It appears that the importance of social integration is dependent primarily on enrollment status. Day students and full-time students scored significantly higher ($p \leq .001$) on this scale than evening and part-time students. Day and full-time students attributed significantly greater importance to interaction with students both inside and outside the classroom, and interaction with instructors outside of class. More full-time than part-time students (46.4% vs. 18.6%) cited "to meet people" as a very important or important reason for attending college.

A confounding factor affecting the scores on social integration may have been the composition of the sample. Since 29.4% of the respondents were enrolled in the Registered Nursing Programs, it is possible that this particular group of students was more relationship oriented and sought out social integration more than students enrolled in other programs. An analysis of the three largest program groups - Nursing, Business and Liberal Arts - supported this notion.

The results here raise several questions regarding the influence of social integration on the persistence of adult students. Further research among midlife college students is needed to explore the following: (1) To

what extent is the lack of social integration a factor in the decision to withdraw from the community college? (2) Are students in particular degree programs more likely than students enrolled in other programs to benefit from social integration? (3) How do instructors of particular programs generate social integration via the classroom and what is the affect? Answers to these research questions could help colleges plan and promote opportunities for students to socialize with one another both inside and outside the classroom.

COLLEGE ENVIRONMENT
There were no significant differences among the independent variables on the ASPQ's College Environment scale ($\bar{x}$ = 2.90).These items measured student satisfaction with the college facilities, support services, course schedule, and safety. There were, however, significant differences between full and part-time students in the level of importance attributed to college services. Full-time students attached significantly greater importance to the following college services in helping them persist: tutoring, personal counseling, career counseling, the college library and student activities

Student utilization of college services appeared to be related to the student's reasons for attending college. Academic advising and tutoring services were significantly more important for students whose reasons for attending college included "to make a forced career change as a result of the job market" and/or "to receive preparation to enter the job market." Since full-time students at midlife were more likely than part-time students to attend college to gain job skills, they may have depended more on college services in helping them succeed.

EDUCATIONAL ASPIRATIONS
Several studies have found a positive correlation between the highest academic degree expected upon entering college and student persistence (Tinto, 1993; Mallette & Cabrera, 1991). These studies would suggest that community college students who aspire to a bachelor's degree or higher upon entry are more likely to persist than those seeking only the Associate's Degree. However, the mean score on the ASPQ Educational Aspirations scale ($\bar{x}$ = 2.76) was lower than expected, and the majority of graduates (53.3%) had not yet continued with their education after receiving the Associate's Degrees.

One reason why Educational Aspirations may not have served as a good indicator of persistence in this study was because of the sample. The overwhelming majority (29%) of the respondents were RN students. Unlike most other Associate Degree programs, the A.S. in Registered Nursing is sufficient for passing the state license and becoming a registered nurse. In comparison, the Associate's Degree in Business or Liberal Arts offers limited job opportunities without further education.

An independent t-test revealed that respondents who seriously considered withdrawing had significantly less educational aspirations than students who had not seriously considered withdrawing ($\bar{x}$ = 2.53 vs. $\bar{x}$ = 2.85, p = .039). A comparison study of midlife adults who withdrew from the community college could explore further the impact of educational aspirations on the perception of outside demands and persistence.

INSTRUCTORS
Respondents who attended college full-time attributed significantly greater importance than those attending part-time to the "instructor's concern for students." This finding is consistent with the importance that full-time students attributed to interaction with instructors outside of class. Full-time students seemed to have greater difficulty finding a balance between home, work and school, and were significantly more likely than part-time students to seriously consider withdrawing from college. Faced with so many external demands, full-time students appeared to find support and motivation from their instructor's concern for their development.

FINANCE ATTITUDE
There were two subpopulations of students who reported significantly less anxiety about paying for college: (1) students who enrolled at the college when they were age 40 and over, and
(2) students who did not work outside the home. It would appear that both groups were financially more

secure than the others. Older students may have built up greater savings and/or had higher paying positions; students who did not work outside the home were perhaps in a financial position where they didn't need to. Only 4 out of the 49 respondents who seriously considered withdrawing from college cited a lack of finances as the reason.

CONCLUSION

Two-year public colleges throughout the nation have an opportunity to significantly contribute to the lives of a growing number of adult students who, during their middle adult years, have decided to return to college for an Associate's Degree. In follow-up telephone interviews with 31 ASPQ respondents, their determination and self-motivation were evident. The respondents were determined to complete what they had started; they had gone too far and invested too much to turn back. In the end, they did not want to fail. In many cases, it seemed that being in midlife made their determination greater. By understanding the factors influencing the persistence of the midlife student population, community college faculty and administrators will be in a better position to help them complete their degrees.

REFERENCES

Cross, K. P. (1981). *Adults as learners: Increasing participation and facilitating learning.* San Francisco: Jossey-Bass.

Mallette, B. I., & Cabrera, A. F. (1991). Determinants of withdrawal behavior: An exploratory study. *Research in Higher Education, 32,* 179-194.

Metzner, B. S., & Bean, J. P. (1987). The estimation of a conceptual model of nontraditional student attrition. *Research in Higher Education, 27,* 15-38.

Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago: The University of Chicago Press.

U.S. Bureau of the Census. (1995). *Statistical abstract of the United States: 1995.* (115th ed.). Washington, DC: Author.

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Refereed Papers

TECHNICAL NONTRADITIONAL STUDENT COLLEGE ATTRITION: THE STUDENT'S PERSPECTIVE

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ABSTRACT

Using a qualitative research methodology, this study explored reasons nontraditional students selected and entered an engineering program of study leading to a baccalaureate degree and then withdrew before graduation. The study focused on career oriented adult learners involved in a formal degree-granting engineering program at an institution that has the express mission of serving the nontraditional technical undergraduate-commuting student. This study examined attrition from the students' perspective and probed their individual stories about their reasons for dropping out, stopping out, re-entering, or transferring out of a baccalaureate degree program. Each student interviewed interrupted his or her undergraduate education career multiple times and attended more than one undergraduate college in pursuit of their degree. Students did not necessarily inform the primary degree granting institution of their decision to take courses at another institution. The interaction of several factors influenced the attrition/retention decision.

INTRODUCTION

College student attrition has been a subject of considerable research over the past thirty years. Historically, half of all traditional freshmen entering college ultimately graduate (Astin, 1975; Cope & Hannah, 1975; Ramist, 1981). Tinto (1987) estimated that 45% of freshman eventually obtain a 4-year college degree and 13 to 14% earn a 2-year degree. Cuseo (1991) reported that nearly 39% of all students leave without receiving a 4-year degree. The attrition rate for nontraditional students is nearer to 60% (Lombard, 1992). Of all the demographic changes on college campuses, perhaps the most evident is the consistently rising nontraditional student population (Bishop-Clark & Lynch, 1992). U.S. Department of Education (1997) data indicate that part-time nontraditional college student population approximates two-thirds of the traditional student population.

A bachelor's degree is usually required for beginning engineering jobs (Savisaar, 1998). Students are motivated to enter the field in part because starting salaries are higher than those of bachelor's degree graduates in other fields and good employment opportunities are expected for new graduates (Savisaar, 1998). With regard to the benefits of higher education, a Montana State University (1998) report states that "The returns to individuals include higher incomes, more satisfying jobs, better care of health, greater consumer and investor efficiency, and more fruitful leisure." The returns to society include higher productivity, higher tax contributions, greater citizen participation and more tolerance among groups (Kerr, 1997). A high attrition rate is a cause for concern in view of the high cost of an engineering education, the need for technical graduates, and the impact on the college teaching and administrative environment.

This study approached the attrition question from a holistic viewpoint. It focused on career oriented adult learners involved in a formal degree-granting engineering program. The study investigated the thought patterns that underlies the choices made by nontraditional students about continuing in their studies or leaving school and then sometimes returning. This study examined attrition from the students' perspective and probed students about the reasons for their decisions.

REVIEW OF THE LITERATURE

Chickering's (1969) analysis of the influence of college on student development considered three major

sources of variation in the socialization of college students in order to understand the effects of college on students. These included the initial or pre-enrollment characteristics of students; the institution's structural and organizational factors; and student/faculty interactions. Tinto (1975, 1987) added academic integration and proposed a model of individual departure that included both individual and institutional characteristics. Tinto (1993) concluded that necessary conditions for retention include social and intellectual integration of students in the institution's life. The attrition-persistence outcome was a result of a longitudinal interaction between the student and the academic and social systems of the college. Tinto's model has been tested and partially supported by many studies (see for example Ashar & Skenes, 1993; Getzlaf, Sedlacek, Kearney, & Blackwell, 1984; Pascarella & Chapman, 1983; Stoecker, Pascarella, & Wolfle, 1988).

Bean and Metzner (1985) and Metzner and Bean (1987) broadened Tinto's model to include nontraditional students. In contrast with Tinto's expectations, the social integration variable did not have a significant effect on nontraditional student attrition. Metzner and Bean (1987) found the most significant variables influencing dropout decisions for nontraditional students were academic performance, intent to leave, background and defining variables -- mainly high school performance and educational goals, and environmental variables. Farabaugh-Dorkins' (1991) found that intent to leave, Fall GPA, and student's age directly predicted attrition. Cabrera, Nora, and Castañeda (1993) added the role of significant others to the persistence process.

The majority of adult education research uses survey methods. The relatively short 6-month to 1-year period frequently allotted to these studies does not take into consideration stop-outs resulting from pregnancy, a temporary heavy workload, and personal or family crises. Statistical analysis of data from persistence/attrition research studies has yielded a total variance (R^2) explained by the main effects in the selected models ranging from 13.9% to 47% (Ashar & Skenes, 1993; Burns 1990; Cabrera, Nora, & Castañeda, 1993; Farabaugh, 1989; Metzner & Bean, 1987; Pascarella & Chapman, 1983; Pascarella, Duby, & Iverson, 1983; Pascarella & Terenzini, 1983; Stoecker, Pascarella, & Wolfle, 1988; Thomas & Bean, 1988). The studies have provided less than 50% of the explanation for student attrition. Many of these quantitative studies had small sample sizes and less than 50% survey response returns. Cabrera, Nora, and Castañeda (1993) cautioned that "the generalizability of the findings to other institutions is to be approached cautiously. . . . The patterns underlying the college persistence process may vary by type of institution, the setting and the composition of the student enrollment" (p. 136). These quantitative studies do not adequately explain undergraduate attrition.

Applying holistic concepts, several researchers applied qualitative research techniques to career related higher education (for example, Reiff, 1992; Thompson, 1992; Wilson & Levy, 1978). Murguia, Padilla, and Pavel's (1991) suggested the addition of ethnicity as an element in the social integration process in Tinto's model. Thompson (1992) developed a participation model that combined the barriers to initial participation in the program and the persistence issue in the pursuit of a BSN. Blankenship (1991) explored the reasons re-entry men enter and then withdraw from a nursing program. She found that goal clarity and the opportunity to improve occupational status and income levels are the most important motivators in persistence to graduation.

METHODOLOGY
This study used themes similar to those described by Blankenship (1991). These included motivation to enter engineering, the image of engineering, role salience, the socialization process, career employment possibilities, employer and peer influences, situational, institutional, and dispositional barriers, and other possible influences on completion of the program such as college preparatory courses. The qualitative research methodology was chosen because of a desire to explore from the participants' viewpoint reasons nontraditional students enter and then withdraw from an engineering education program. Understanding the participants' perspective required a research design allowing free expression of ideas, thoughts, experiences, feelings, and memories.

THE SETTING AND THE PARTICIPANTS
The study examined nontraditional engineering students enrolled at the Fairfield University BEI School of Engineering. Founded in 1924, Bridgeport Engineering Institute (BEI) merged with Fairfield University in

1994. As a fully accredited undergraduate evening college of engineering, BEI offered an engineering education to the regional workforce. Fairfield University agreed to continue the Institute's mission of serving the nontraditional technical undergraduate-commuting student. The BEI student population consisted of approximately 325 part-time nonresidential commuting students.

A random purposeful sample was selected from a list of 247 potential participants. Of 54 people contacted, 12 agreed to participate. Three students subsequently declined. The remaining nine volunteers pursued baccalaureate degrees in the electrical, mechanical, and information systems engineering departments. All students completed a minimum of 25 credit hours toward the degree program. All interrupted their studies one or more terms. Two respondents previously earned an associate degree. Four respondents were married, two were divorced, and five had children. The three female and six male respondents comprised four whites, three Blacks, one Asian, and one Hispanic and ranged in age from 27 to 40 years. Two of the respondents were enrolled in college and a third graduated during the study period. All earned college credits at other colleges.

REPRESENTATIVE DATA

All of the students were *employment focused.* Most of the respondents thought that engineering represented a pathway towards an improved economic status. Marie declared, "I thought engineering was one of the highest paid non-management jobs in the Phone Company." Peter stated "electronics seemed like the wave of the future." All of the respondents had prior experience working in the engineering field and five students held technical positions within the engineering industry at the time of the interview.

Images of self as an engineer varied widely and seemed to form a love/hate dipole: love for the intellectual stimulation and challenge, and hate/fear of the instability in the profession. They voiced strong support for the kind of work that engineers perform. Kate said "you get to use your imagination. . . . No boredom, something different all the time. I felt that it was a decent way to make a living." Art described engineering "as like a mystery. I wanted to explore and the more I ventured the more I liked it." They expressed concern about periodic industry down sizing. Those that had difficulty maintaining employment in the field also appeared to lack motivation to complete the degree program.

The respondents engaged in *adult life roles.* Adding the student role to the usual roles of spouse, parent, worker, homemaker, and community participant meant reinterpreting these roles. Art encountered personal scheduling and financial problems. Married with two children, a wife attending college, and the responsibilities of a new home he said "The greatest impact it made on my family was the time. . . . The financial impact wasn't as great as the time which I gave up with my kids."

Gender issues arose when Kate recalled that the "normal fields for women to go into--typing and all that-- seemed so boring." At the beginning of her career, she was told that she "had to be two to three times as good as any guy." She now feels that companies accept her value based on the skills that she offers. She believes that she does not "get the same salary as the guys and yet I do the same job." Kate also feels that she does not receive promotions that male engineers do. Carol stated that her colleagues seemed to hold "negative feelings' of women in the technical environment. "They call it old aerospace." Although Carol is Black, she did not state that her colleagues discriminated against her based on color. She focused on gender and said, "There are backlashes against too many women." Women did have opportunities at her company. She mentioned that the aerospace company for whom she worked "didn't hire those women that you can't promote. "The male technical community seemed to bind together and displayed a "kind of negative feeling" which affected the quality of her work.

All students experienced *competition for time* among job, school and private life needs. Kate's employer expected large amounts of overtime. "You had to stay at work. There was no way I could work a 50-60 hour week and go to school at the same time. . . . I have other outside interests too, just to break up the stress." Kate felt that she had to place a priority on playing tennis to relax. "I find that with the job I have, I really need tennis at this point." Kate experienced a common role conflict common among the people interviewed. Job demands frequently required them to work continual overtime or shift work which

detracted from their studies. Respondents did not involve themselves in college social activities or formal study groups. Nor did anyone express a need to interact socially within the confines of the university.

Employers sent mixed messages to their employees regarding education. Very often, there were two positions: the official corporate dictum and the supervisor's view. Marie explained that her employer officially encouraged students to attend college and even paid for tuition. "One of my bosses was very supportive of me. But after he retired, the boss I ended up with could not care less. He wouldn't even congratulate me for graduating with my associate's degree. The company put a notice in the company newspaper." Kate said that her employer "voiced *support* for me to go to school, but they don't pay for it." Some supervisors placed obstacles in front of the student. Shem's supervisor commented that he had "lifetime employment here. 'Why do you attend school?'" The supervisor suggested that Shem "take seminars that they [the company] offer and then forget it." As a consequence of attending college, Shem felt a bias against him "because I could not work overtime as much as everyone did." The need for business travel proved an impediment to school attendance for some students.

FINDINGS AND IMPLICATIONS FOR PRACTICE

From an analysis of the nontraditional students' interview transcripts and college records, two immediate observations were made. First, all students interviewed interrupted their undergraduate career multiple times. Second, all students interviewed attended more than one undergraduate 4-year college or community college in pursuit of a degree. These observations suggest a broader view of the definition of a college dropout should be considered. The accepted definition of dropout was a student who enrolled at an institution, but did not complete his or her formally declared program of study within a 6-month to 1-year time period (see for example Ashar & Skenes, 1993; and Pittman, 1997). Most studies did not consider students that interrupted their studies and returned sometime later. Perhaps a more appropriate phrase is stop-out--a student who interrupts his or her studies, leaves a college for one or more semesters, and then re-enrolls. At some time during their careers, all interviewed students took one or more courses at an institution other than the one at which they were officially matriculated. Students took courses at other institutions for reasons that included a preferred schedule, lower tuition, or a desire to take a specific course (e.g., for job purposes). They did not perceive of themselves as dropouts. They were taking steps to pursue their degree independent of which school they attended. They acted with the expectation that the primary college from which they intended to ultimately graduate would accept course work towards the degree program no matter where they took the courses. Frequently, the students did not inform the primary institution of their intent to take courses elsewhere. Indeed, the primary degree granting institution was not always aware of the students' course load and intent. Since program interruptions and cross-college course enrollment was common, the student's presence or absence at the primary institution was insufficient data to obtain a true view of nontraditional student attrition during a 1-year study period.

At times in their student life, the participants confronted significant events that prevented them from taking courses. These crises included caring for a family member, job loss or a significant financial outlay (a house or car, spouses tuition, divorce settlement, etc.). The study clearly brought forth the importance of continued *employment and financial support* for the nontraditional student. Students halted their studies during times of crisis. The students appeared to welcome mentoring support or some other form of encouragement and positive reinforcement. Carol lacked a single course to complete her degree requirements. Following the interview, she re-entered and completed that course and received her baccalaureate degree.

Some respondents noted the weakness of their *educational background*, which they felt placed them at a disadvantage. While a contributing factor, it was not the sole determinant for attrition or persistence. Most, but not all students received *motivational support* from their families. Spousal support varied as school, employment, and community obligations disrupted family roles and day-to-day life. Employers' provided inconsistent support.

This research confirms the arguments made by Cabrera, Nora, and Castañeda (1993), Metzner and Bean (1987), and Tinto (1993) that persistence is the result of a complex set of interactions over time and is affected by the successful match between the student and the institution. It clearly confirmed Blankenship's

(1991) findings that the student's pursuit of occupational improvement motivated retention. Nontraditional student's social integration did not have an effect on attrition. The findings of this study have practical implications for adult education administrators and educators. These include the following:

1. Create a regional consortium that would share students, courses, schedules, and facilities.
2. Provide maximum flexibility and simplicity. Add the Internet to the repertoire of strategies to attract, maintain, and communicate with adult students. Minimize the complications of a re-entry process.
3. Emphasize goal proximity by organizing the baccalaureate degree into segments with usable credentials earned at specific points and careful articulation with the next segment of the program. This would permit the adult student to complete specific attainable goals and receive recognition for this effort.
4. Involve the college placement office in securing employment for the nontraditional student. Develop a college-employer-student relationship to improve the course-taking milieu.
5. Develop financial payment, aid and support plans for part-time students. Provide financing or leasing opportunities for tools such as computers and software applications.
6. Establish mentoring and cohort relationships. The value of undergraduate mentoring relationships remains unclear (see Jacobi, 1991), however researchers have completed few nontraditional student studies.

REFERENCES

Ashar, H., & Skenes, R. (1993). Can Tinto's student departure model be applied to nontraditional students? *Adult Education Quarterly, 43*, 90-100.

Astin, A. W. (1975). *Preventing students from dropping out.* San Francisco: Jossey-Bass.

Bean, J. P., & Metzner, B. S. (1985). A conceptual model of nontraditional undergraduate student attrition. *Review of Educational Research, 55,* 485-540.

Bishop-Clark, C., & Lynch, J. M. (1992). The mixed-age college classroom. *College Teaching, 40*(3), 114-117.

Blankenship, J. C. (1991). Attrition among male nursing students. *Dissertation Abstracts International, 52,* (University Microfilms No. AAT9206936).

Burns, M. S. (1990). The factors associated with persistence of nontraditional students. *Dissertation Abstracts International, 51,* (University Microfilms No. AAT9029406).

Cabrera, A. F., Nora, A., & Castañeda, M. B. (1993). College persistence: Structural equations modeling test of an integrated model of student retention. *Journal of Higher Education, 64*(2), 123-139.

Chickering, A. (1969). *Education and identity.* San Francisco: Jossey-Bass.

Cope, R., & Hannah, W. (1975). *Revolving college doors.* New York: John Wiley & Sons.

Cuseo, J. B. (1991). *The freshman orientation seminar: A research based rationale for its value, delivery, and content* (The Freshman Year Experience Monograph No. 9). Columbia, MO: University of Missouri-Columbia.

Farabaugh, C. A. (1989). *Nontraditional student attrition: Assessment of a theoretical model using path analysis.* Doctoral dissertation, Southern Illinois University at Carbondale.

Farabaugh-Dorkins, C. (1991, Spring). Beginning to understand why older students drop out of college. *AIR Professional File, 39*, 1-10.

Getzlaf, S. B., Sedlacek, G. M., Kearney, K. A., & Blackwell, J. M. (1984). Two types of voluntary undergraduate attrition: Application of Tinto's model. *Research in Higher Education, 20*, 257-268.

Jacobi, M. (1991). Mentoring and undergraduate academic success: A literature review. Review of Education Research, *61*(4), 505-532.

Kerr, C. (1997). Speculations about the increasingly indeterminate future of higher education in the United States. *The Review of Higher Education 20*, 345-356.

Lombard, R. R. (1992). Persistence of nontraditional students in a two-year college: A Test of the Bean and Metzner model. *Dissertation Abstracts International, 53,* (University Microfilms No. ATT9226453).

Metzner, B. S., & Bean, J. P. (1987). The estimation of a conceptual model of nontraditional undergraduate student attrition. *Research in Higher Education, 27*(1), 15-37.

Murguia, E., Padilla, R. V., & Pavel, M. (1991). Ethnicity and the concept of social integration in Tinto's

model of institutional departure. *Journal of College Student Development, 32*(5), 433-439.

Montana State University-Bozeman (March 1998). *Report of the PQO task force on advising: The university advising plan a comprehensive, collaborative proposal.* [On-line]. Available Internet: http://www.montana.edu/aircj/report/pqo/PQOAdvisingPlan.html

Pascarella, E. T., & Chapman, D. (1983). A multi-institutional, path analytic validation of Tinto's model of college withdrawal. *American Educational Research Journal, 20*(1), 87-102.

Pascarella, E. T., Duby, P. B., & Iverson, B. K. (1983). A test and reconceptualization of a theoretical model of college withdrawal in a commuter institution setting. *Sociology of Education, 56*, 88-100.

Pascarella, E. T., & Terenzini, P. T. (1983). Predicting voluntary freshman year persistence/withdrawal behavior in a residential university: A path analytic validation of Tinto's model. *Journal of Educational Psychology, 75*, 215-226.

Pittman, C. (1997). Factors affecting student continuation in technical institutes (persistence, enrollment, attrition). *Dissertation International, 58(04), 1258.* (University Microfilms No. AAT9731176)

Ramist, L. (1981). *College student attrition and retention.* New York: College Entrance Examination Board.

Reiff, M. (1992). Adults in graduate school: A qualitative study of how experience differs for persisting and non-persisting students. *Dissertation Abstracts International, 53,* (University Microfilms No. AAT9303209).

Savisaar, E. (1998, November 30). *Bureau of Labor Statistics, 1998-99 Occupational Outlook Handbook.*[On-line]. Available Internet: http://stats/bls.gov/oco/ocos027.htm

Stoecker, J., Pascarella, E. T., & Wolfle, L. M. (1988). Persistence in higher education: A 9-year test of a theoretical model. *Journal of College Student Development, 29*(3), 196-209.

Thomas, R. O., & Bean, J. P. (1988). *Student retention at liberal arts colleges: The development and test of a model.* St. Louis, MO: Association for the Study of Higher Education. (ERIC Document Reproduction Services No. ED 303 099)

Thompson, D. (1992). Beyond motivation: A model of registered nurses' participation and persistence in baccalaureate nursing programs. *Adult Education Quarterly, 42*, 94-105.

Tinto, V. (1975, Winter). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research, 45*, 89-125.

Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition.* Chicago: The University of Chicago Press.

Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago: The University of Chicago Press.

U.S. Department of Education, National Center for Education Statistics, Fall Enrollment in Institutions of Higher Education, Integrated Postsecondary Education Data System (IPEDS) surveys. (1997, November). *Table 174. --Total fall enrollment in institutions of higher education, by attendance status, sex, and age.* Author.

Wilson, H. S., & Levy, J. (1978). Why RN students drop out. *Nursing Outlook, 26,* 437-441.

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COMPLEXITY THEORY AS A FRAMEWORK
FOR ADULT EDUCATION RESEARCH DESIGN

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ABSTRACT

Complexity theory constructs provide rationale and strategy for adult education research design. This nonlinear dynamical systems perspective provides a framework for using mixed model and method research. Whereas the quantitative vs. qualitative debate has largely been resolved through use of both, complexity perspectives can inform researchers as they aim to discover relationships, processes and patterns with a holistic and integrated systemic view. Research is seen more as providing awareness of patterns and possibilities rather than prescriptions or solutions. It promotes creative and adaptive behavior that aims to be contextually appropriate, as no two persons, units or conditions are exactly alike. The authors summarize assumptions underlying quantitative and qualitative research design, then present several concepts of complexity theory that are key to understanding implications for mixed model and method research. Case examples include the ethnographic study of how learning and development take place in an American adult church choir, and of how South African public education professionals redesigned their organizational trajectory and continue to learn, collectively and individually, as they engage in formative research and practice. Conclusions apply to adult informal and formal learning situations that account for dynamic social contexts and evolving options.

INTRODUCTION

People learn throughout the lifespan and most of that learning is not confined to formal institutional settings. Much of adult learning is informal in nature, occurring in the social and cultural context of everyday activities and interactions. Despite the extent of adult involvement in informal learning activities, most adult education research has concentrated on formal settings and individual learners, overlooking the amount of informal learning that occurs through group process and culture. Research has frequently attempted to attribute causality of learning to quantifiable educational and technical variables, rather than to explore a complex system and the phenomenological realities of its members. Complexity theory offers a potent perspective for utilizing multiple methodologies to study the rich and varied dynamic contexts and processes of adult learning.

A basic premise of complexity theory is that those who study or "research" any phenomena in context are part of the context, just as those who are studied are researchers. So it is important to recognize that learning and development are not separable from the process of doing research. Although some may specialize in research design and methods, thereby being defined as researchers, all who actively seek to improve their decisions and capacities to take appropriate action can gain by understanding alternative frameworks and methods for deriving useful understanding. Many practitioners are alienated from the processes and products they have learned to be "research". Complexity perspectives tend to broaden the range of understanding of research and give credence to the idea that if the endeavor lacks practicality it lacks value. It also gives credence to informed intuition, paying attention to complex factors that may form simple patterns.

Understanding that evolves from a research endeavor must represent the complex, dynamic realities of formal and informal learning situations. By using information collection methods within a dynamical systems perspective, researchers can help to identify emerging patterns and interconnections, illuminate individual and collective options, and indicate potential change leverage points (Titcomb, 1998). This paper examines complexity theory and mixed model research strategies, and discusses implications for evolutionary educational research design in dynamic social environments.

COMPLEXITY THEORY

Complexity is the study of how complicated systems generate simple behavior. A complex system is one that is nonlinear, dynamic, open, and interactive. Such systems behave in irregular, unpredictable ways, yet they tend to generate repetitive, similar (though never identical) patterns across time (Krafft, Brodnick, & Titcomb, 1998). They attract to a certain pattern of stability and appear to self-organize from random behavioral conditions, or chaos. Change occurs through feedback, impacting the equilibrium of the system. At times, small changes in the elements of the system may produce dramatic changes in the overall organization. At other times, dramatic shifts in elements may produce insignificant systemic changes. Change may be observed as major shifts in structure, or redundant processes, occurring at what are defined as bifurcation points under far-from-equilibrium conditions; or more subtle change may be experienced as pattern deviations of repeated fractals or reflections of the structure of the entire system by system components. Systems theory provides a framework via which to examine and determine research design choices. Systems theory can be differentiated on polarities from linear-causal to nonlinear-dynamical (Brodnick & Krafft, 1997). Although it can be useful to gather information that is based on linear-causal systems perspectives that are constrained by similarity of context and brief duration (most compatible with controlled experiment and quasi-experimental approaches), it is generally more useful to practice ongoing research, under dynamic and social learning and development conditions that are compatible with the life space of contextualized adult learning. Complexity, or nonlinear system perspectives, can greatly increase the potency of derived information, as it requires accountability for complex dynamics in real situations.

More important than the search for specific prediction and control under abstractly constrained conditions (linear-causal systems views), complexity theory provides ample evidence for alternative phenomena as representations of practical reality. This approach aims to discover relationships, processes and patterns within a holistic and integrated systemic view. Complexity constructs promote awareness of phenomena such as attractors and fractals, or patterns of self similarity across scale, entrainment, sensitivity to initial conditions and trajectory, edge of chaos and bifurcation points (Marshall & Zohar, 1997). Research is seen more as providing understanding of processes and possibilities for action rather than simple prescriptions or solutions. It promotes creative and adaptive behavior that aims to be contextually appropriate, as no two persons, units or conditions are exactly alike.

RESEARCH MODELS AND METHODS

Two basic research paradigms are represented by the positivist and the constructivist models. The positivist assumes (1) a single reality, (2) identifiable and replicable cause-effect relationships, and (3) that it is appropriate to reduce entities to their component parts in order to study and understand them. They emphasize deductive logic, arguing from the general to the particular, often applying a priori hypotheses using quantitative measurement and analysis. The constructivist model employs more qualitative examination. It is based on the idea that (1) there are multiple constructed realities, (2) that cause and effects are indistiguishable in most practical conditions and (3) that a holistic systemic perspective that derives patterns across units and events is an appropriate focus. It argues from the particular to the general, or "grounded theory," perspective (Tashakkori & Teddlie, 1998). These contending paradigm conflicts are now quite fairly well resolved in practice as mixed models and methodologies have evolved in efforts increasingly to approximate useful reality.

Mixed methodology research utilizes multiple methods, typically both quantitative and qualitative, in an attempt to obtain the most complete picture possible of the phenomena of interest. This approach

provides researchers and educators with a more comprehensive, multi-perspective understanding of the issue under investigation than any single method could provide. By integrating multiple data collection methods, the researcher can more accurately and thoroughly depict the adult learning process within its dynamic, interactive, social and cultural context. Mixed methodological research is like asking many who have traveled a given route to describe what they saw, including those who traveled by plane, train, car, on foot, or on horseback. One person's account is not more or less correct than another person's, just different. When all descriptions are combined, a comprehensive picture is drawn. Quantitative and qualitative research methods are used in complementary fashion.

Data of many sorts and sources are collected in various ways. Rather than exclusively to control findings through creation of hypotheses and methods in advance, the research process is emergent, based on the evolving perspectives of researcher-participants. Multiple targets and system levels of study as well as ethnographic and technology-assisted methods may evolve over time. As are the constructs of complexity theory, the process of meaning making is through the use of inference (as pattern discovery) more than analysis (search through segmentation and reductionism). Patterns that transcend specifics are sought based on diverse evolving information that may include past to future trajectories and intra-system as well as extra-system dynamics. The researcher is considered to be part of the researched phenomena, and those researched become collaborators, informants and users.

CASE EXAMPLES

The following case examples of research-in-progress use multiple ethnographic and technology-assisted research methodologies to study adult informal and formal learning and development contexts. In all cases, the researcher is part of the dynamic system examined, as it is not possible to be removed or external and dispassionate. Similarly, the learners being researched become research collaborators, informants, owners, and users of the information collected.

Ethnography of a Church Choir

This study is investigating the social and cultural context of informal adult learning in an adult church choir in south central Pennsylvania. It utilizes an ethnographic approach, exploring the influence, effects and interaction of the culture on processes, relationships and outcomes. It is an inductive journey, seeking an insider's perspective to discover why the members think and act as they do. Its goal is a holistic description that will document a multi-layered view of the choir and the culture and context in which it exists.

Operating within the framework of complexity theory, the study views the choir as a complex, nonlinear, dynamical social system. The investigation is considering the interconnections of individuals and subgroups, as well as the repeating patterns of their interactions. It is examining multiple causality, disproportionate results of seemingly small events, the significance of critical turning points or bifurcations, and the inherent unpredictability of human systems. It is exploring the experiences and individuality of the choir members, as well as emergent properties (realities or perceptions that emerge on one level but are not present in the next higher level) and fractal geometry (repeating patterns at different scales within the social system).

The study is attempting to answer the following research questions: (1) What norms, values, and basic assumptions underlie the group's work? (2) What meanings do participation and outcome have for members? (3) What motivates individual members to participate? (4) How do members deal with differences in skill, talent, and commitment? and (5) What does the leader/director do to facilitate learning, influence motivation, and enhance outcomes?

Multiple data collection methods include descriptive observation of choir activities by the researcher, focused individual and group interviews, and audio and videotaping. New methods and research questions may be generated through the fieldwork process.

The research is also utilizing multiple variations within multiple methods. For example, the videotaping is

being done from various locations in the room in order to gain multiple perspectives. The observations include formal rehearsals and choir presentations, as well as informal social gatherings of choir members. Group interviews include individuals by position (members and leadership) and by voice section (soprano, alto, tenor, bass). Analysis of two major musical events, the Christmas and Easter cantata performances, is enabling the study of choir interactions with collateral groups such as orchestra, other choirs, and readers.

South African Public Educational Professionals
As in the church choir described above the South African setting explores the influence, effects and interaction of the culture on processes, relationships and outcomes. It too is an inductive journey seeking insider's perspectives to discover why the members think and act as they do. Its goal is also a holistic description that will document a multi-layered view of the system.

However the purposes are additionally to discover, as they are occurring, the evolving dynamic conditions that require not only understanding but collective volitional reformulation of large system strategy, structures, and methods. The chaotic and complex communications that occur under such conditions must be understood and simplified. Collective and individual commitment and learning of new skills, roles, and relationships are likely to be required in a context where these changes can make profound differences to many peoples' roles and lives in the short term and potentially to those of succeeding generations. In the church case choir participants' time together is differently bounded, so there are significant variations in scale by time as well as by size and purpose.

Participative research is employed. It includes evolution of structures and groups that are trusted to translate resulting focused pattern discernment that leads to complex strategy. This strategy, in turn, is reduced to several simple clear formulations that encapsulate directional changes and implications for voluntary action by the multiple constituencies affected. The actions are applied, as understood and appropriate, in the various local and individual circumstances. Ongoing research is required to determine appropriate evolving intervention at respective levels while cohering adequately at all levels.

The methodology varies considerably from that of the church choir case. Dominant methods have been: recursive interviews with broadly diverging sources inside and outside the formal system, documentary and other forms to examine historical and political pressures and trajectories, cultural and subcultural interests and dynamics, direct observation of practices and meetings, statistical representation of productivity and resource conditions and trends, conferences and problem-addressing meetings that are stimulated and documented with position papers and reports as well as with video and audio taping. Special investigative and decision groups were formed to integrate information and recommend strategy. Experimental subsystem designs are implemented and monitored for purposes of testing, adaptation and communication to encourage local initiative and experimentation. The wealth of data is reviewed and filtered to monitor patterns, define modifications and maintain coherent focus.

Background briefing: After a number of post-apartheid years and considerable disruption and reorganization of the Western Cape regional educational system, the management was committed to implementation of a plan to decentralize this regional system to nine Areas, thereby increasing greatly the numbers of administrative personnel that would be required to control the various functions that were managed inadequately from the Head Office. This commitment followed several years of intensive negotiation with the respective unions, politicized government approvals and commitments to various personnel to be moved from one location to another. However, following the brief assessment and questioning of this strategy by several external consultants, key system members began seriously to question the decision and its consequences.

Although the external stimulation was small, it snowballed into a massive research effort accomplished almost wholly by the organizational members. As the various forms and threads of data were compiled, the importance of strategic modification became increasingly apparent. Experts reviewed statistical data such as student and teacher performance and fiscal capacities. National governmental initiatives and local management capacities were examined in relationship to the trajectories of local plans. Morale and

commitment assessments, values and ideological perspectives were clarified; instructional methods, organization and management, and support systems were defined as requiring significant modification. Projections regarding the roles and human capacities necessary for system redesign and implementation were deemed wholly inadequate. As huge amounts of data were accumulated, clear patterns emerged through a recursive assessment process.

Multiple meetings and discussions addressed difficulties largely in the minds and experiences of people who were, on the whole, committed to doing their best to improve system performance and their own capacities to support changes. Not only was evidence clearly available at all system levels but it was evident that people needed to understand alternatives and to evolve a consensus strategy that incorporated a vision, requiring contending constituencies to engage in ongoing individual and collective learning.

A major organizational trajectory was aborted and a new plan was approved formally within about six months. Ongoing formal and informal research is guiding system strategy that includes the creation of new organizational units and demise of others under conditions of continuously eroding fiscal resources. However human resources have been released and energized in creative ways are qualitatively identifiable but not quantitatively measured. As concepts were discussed and argued entrainment (the process of "falling into step" together) occurred. Local experimentation stimulated successive experimentation. Positive processes were emulated and adapted. Measures and results were reported. One of the major impediments to an earlier recognition of the patterns was not the lack of recognition by many, but one of not understanding alternatives nor believing in individual and collective capacities to learn and create. So the earlier decentralization solution was the traditional one of doing more of what already was not working.

The bifurcation described above is in its infancy. Complexity theory assists one not only to describe this complex process but prepares the researching participant to recognize and be prepared for redirections made probable through available information, and to be prepared for unexpected changes due to the confluence of forces into new patterns. Similarly participants can recognize increasingly the possibilities of such vagaries and prepare themselves. It encourages a process of personal research and learning in the context of complex social dynamics.

CONCLUSIONS
While the case examples are works-in-progress, results are never finalized. Some clear implications are apparent.
1. Follow-up of the results will be necessary to facilitate the sharing of the emergent reality constructed by the research information. Transformation in adult education cannot occur with the production of a report, but only through continued dialogue that leads to a shared understanding of the meaning surrounding the research issue.
2. Complexity theory provides another way of understanding new possibilities for action in adult learning under conditions that are too complicated and changing too quickly to be understood through traditional linear methodology.
3. Multiple research methodologies enable investigation of multiple realities and perceptions of adult informal and formal learning. Understanding the individual and collective differences and commonalities in perceptions of learners and educators can help guide more advanced research and transformation strategies.

REFERENCES
Brodnick, R. J., Jr., & Krafft, L. J. (1997, May). Chaos and complexity theory: Implications for research and planning in higher education. Paper presented at the meeting of the Association for Institutional Research, Orlando, FL.

Krafft, L. J., Brodnick, R. J., Jr., & Titcomb, T. J. (1998, August). Complexity science as a model for organizational assessment: Practice and limits. Paper presented at the meeting of the

International Congress of Applied Psychology, San Francisco, CA.

Marshall, I., & Zohar, D. (1997). *Who's afraid of Schroedinger's cat?* New York: Morrow.

Merry, U. (1995). *Coping with uncertainty: Insights from the new science of chaos, self-organization and complexity.* Westport, CT: Praeger.

Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches.* Thousand Oaks: Sage.

Titcomb, T. J. (1998, July). *Chaos and complexity theory: Organizational development.* [Issue 9807] *ASTD Info-line,*

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Refereed Papers

COHORT GROUP EFFECTIVENESS IN ACCELERATED PROGRAMMING

Alan R. Lisk
Colleen A. DiRaddo

ABSTRACT

The primary purpose of this research was to investigate the relationship between group developmental patterns and levels of group productivity in an adult student cohort group model of education. Nineteen adult groups consisting of 263 students at a comprehensive liberal arts college were studied. Data about member perception of the group were derived from student group member's responses to the Group Development Questionnaire (GDQ) (Wheelan & Hochberger, 1996). Group Effectiveness was measured through GDQ data and compared to group Grade Point Averages (GPAs). The results did suggest that there is a statistically significant relationship between Group Effectiveness and GPAs.

INTRODUCTION AND BACKGROUND

Adult students represent 42% of all undergraduate enrollments and this percentage is expected to increase to 46% by the year 2000 (Aslanian, 1993; Walker, 1995). As a result, new program delivery methods have been designed to address the increased quantity of adult students and their consumer-like expectations that educational programs be convenient, flexible, and of high quality (Eurich, 1990; Galbraith, 1990).

One such educational delivery model is the accelerated degree completion program. This type of programming enables adults, who are at least 25 years of age and have a minimum of 60 college credits, to earn a bachelor's degree in as little as 15 months. Classroom seat-time may be reduced to as few as 20 contact hours per three-credit course. Accelerated courses are typically offered in a rigid sequence, one right after the other, for a period of 15 months. When a sufficient number of students (usually between 10 and 20) apply and are accepted for admission to an accelerated degree program, a class is begun. Students in this class, called a cohort group, attend every class meeting together, for the next 15 months (Lisk, 1998).

Cooperative learning is the instructional use of small groups which enable students to work together to maximize their own and each other's, learning (Johnson, Johnson, & Smith, 1991; Kegan, 1992; Ventimiglia, 1994). The primary motivation for using cooperative learning groups is that such groups are assumed to increase student learning (Webb, Troper, & Fall, 1995).

Although King (1992) found evidence to support the assumption that students perform better academically in cooperative environments other studies have been unable to link the use of cooperative learning groups to increased student achievement (Webb, 1989; Webb, 1991; Webb & Farivar, 1994). Webb, Troper, & Fall (1995) suggested that the reason for these mixed results regarding a link between cooperative learning groups and student achievement may be methodological. Conditions, other that those investigated in previous studies, may be necessary for cooperative learning groups to have consistent positive effects on student achievement.

Stahl (1994) proposed a number of conditions that must be present if cooperative learning groups are to be successful and many are analogous to the characteristics found in high performance work teams that are functioning at the higher stages of group development (Wheelan, 1994).

The concept of group development is well documented in the literature (Bion, 1959; Bennis & Shepard, 1956; Tuckman, 1965; Tuckman & Jensen, 1977; Wheelan, 1994). What follows is a brief description of

the Integrated Model of Group Development outlined by Wheelan (1990, 1994) and summarized in Table 1.

Table 1. Stages of Group Development

Development Stage	Tuckman (1965) & Tuckman & Jensen (1977)	Wheelan's Integrated Model of Group Development (1994)
Stage 1	Forming	Dependency & Inclusion
Stage 2	Storming	Counterdependency & Fight
Stage 3	Norming	Trust & Structure
Stage 4	Performing	Work
Stage 5	Adjourning	Termination

The first phase of group development is a period of Dependency and Inclusion. In this phase members are concerned with personal safety and a need for dependable and directive leadership. In the second phase, Counter Dependency and Fight, members begin to challenge the authority of the leader and to openly disagree with each other about any number of issues. If these disagreements are successfully resolved, the group enters the third phase, Trust and Structure, which is characterized by an increase in group cohesion and cooperation. During this phase members begin in earnest, to organize and plan ways to achieve their goals and objectives. The fourth phase can be classified as the Work phase as there is a prolonged period of intense focus on goal achievement. Finally, in some instances a fifth stage emerges called Termination. This phase which was not included in this study, is typically reserved for small groups formed for short periods of time and/or specific purposes (Wheelan, 1994).

There appears to be a connection between Stahl's (1994) conditions for effective learning groups and group development. Stahl's conditions imply that for cooperative learning groups to increase student achievement, those groups must progress to the higher levels of development. Thus, a major reason for the equivocal results of investigations into the relationship between cooperative learning and student achievement may be that group development was not taken into account.

To address this matter, this study asked the following questions: (Q1) Do patterns of group development differ within the same adult education program and (Q2) Is there a relationship between cohort group development, effectiveness and the academic achievement of student members?

METHOD

Nineteen cohort groups containing 263 adult students enrolled in an accelerated degree completion program at a comprehensive liberal arts college participated in this study. Each cohort group formally met once a week for four hours for the 62-week duration of the program. Members of each cohort group were asked to participate in a pre-assessment during that group's 5th or 6th weekly meeting. A post-assessment was conducted in each group during that group's 51st or 52nd weekly meeting. At the end of each cohort group's program, each student's grade point average (GPA) was obtained. Based on these data, a group GPA was calculated. The fact that all cohort groups had, in most cases, the same instructors acted as a natural control for potential variations in grading policies. The number of students in each group varied from 8 to 19 individuals.

The Group Development Questionnaire (GDQ) (Wheelan & Hochberger, 1996) is designed to assess the developmental level of work groups. Based on the Integrative Model of Group Development described previously, the 60 item Group Development Questionnaire contains four scales that correspond to the first four stage of group development (Table 1). Each scale contains 15 items.

RESULTS

Since this was a field study, it was necessary to rule out potential confounding variables. One such variable was size. There is evidence to suggest that larger groups have more difficulty working effectively (Gladstein, 1984; McGrath, 1984). To determine the relationship between cohort group effectiveness and group size, GDQ Effectiveness Ratios were correlated with the number of students in each group. No significant differences were noted.

Q1. Do patterns of group development differ among cohort groups operating within the same

accelerated degree program? To determine if developmental differences existed among cohort groups, descriptive statistics were analyzed and paired T-tests were conducted. First, the GDQ scale scores of each group were compared with normative data collected from several hundred groups whose members had completed the GDQ. This was done to determine the stage of group development for each group at pre and post-test times. Table 2 summarizes these results.

Table 2. Pre and Post-test Number of Groups at Each Stage of Group Development

Test	Dysfunction	Stage 1	Stage 2	Stage 3	Stage 4	# Groups
Pre-test	0	15	0	4	0	19
Post-test	2	1	0	10	6	19

Fifteen groups were in Stage I at the time of the pre-test whereas four of the groups were in Stage III. Approximately one year later, at the time of the post-test, two groups were classified dysfunctional, only on group remained in Stage I, ten groups were classified as Stage III, and six group as Stage IV. Few differences were noted in the developmental level of these cohort groups at pre-test time. There were more differences at the post-test. In general, most groups developed across time in a manner consistent with theories of group development reaching either Stage III or Stage IV. Only three groups did not progress.

Secondly, paired T-tests were employed to determine whether GDQ mean scale scores, Effectiveness Ratios, and Stages of group development changed significantly from pre to post-test time. In order to conduct the paired T-test analysis for stage of group development, dysfunctional groups were assigned the numerical value of zero. Table 3 displays the results of these analyses.

Table 3. Paired T-Test for GDQ Scales, Effectiveness Ratio and Stage of Development

	GDQ1	GDQ2	GDQ3	GDQ4	ER	Stage
Pre-test	43.61	31.54	56.66	57.69	77.12	1.42
Post-test	41.60	33.34	57.33	59.81	79.74	2.90
Difference	2.01	-1.80	-.67	-1.85	-2.82	-1.48
T-Test Value	4.98***	-1.78	-.93	-2.01	-2.12*	5.27***

* $p < .05$, *** $p < .001$

GDQ mean scores on Scale I, Dependency, decreased significantly from pre to post-test. Effectiveness ratios and Stage of group development increased significantly.

Q2. Is there a relationship between cohort group development, effectiveness and the academic achievement of student members? To determine if there were relationships between cohort group development and academic achievement , Pearson product moment correlations were calculated utilizing GDQ scores and group grade point averages (GPAs). Table 4 Displays these results.

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Lisk, A. R. (1998). Cohort group effectiveness and student outcomes. *Dissertation Abstracts International, 59*(06), 1868A.(University Microfilms No. AAT 9838503)

McGrath, J. E. (1984). *Groups: Interaction and performance.* Englewood Cliffs, NJ: Prentice-Hall.

Reich, R. B. (1987). Entrapreneurship reconsidered: The team as hero. *Harvard Business Review, 65*(3), 77-83.

Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization.* New York, NY: Doubleday.

Stahl, R. J. (1994). *The essential elements of cooperative learning in the classroom* (Report No. EDO-SO-94-1). Washington, DC: Office of Educational Research and Improvement (CHN Clearinghouse NO. SO024086).

Tuckman, B. W. (1965). Developmental sequence in small groups. *Psychological Bulletin, 63*(6), 384-399.

Tuckman B. W., & Jensen, M. A. C. (1977). Stages of small group development revisited. *Group and Organizational Studies, 2,* 419-427.

Ventimiglia, L. M. (1994). Cooperative learning at the college level. In H. C. Foyle (Ed.), *Interactive learning in the higher education classroom: Cooperative, collaborative, and active learning strategies* (pp. 24-31). Washington, DC: National Education Association.

Walker, L. B. (1995). *The effect of membership in the Council of Adult and Experiential learning on the quality of prior learning assessment services in senior level institutions by the Southern Association of Schools and Colleges.* Unpublished doctoral dissertation, University of North Texas, TX.

Webb, N. M. (1989). Peer interaction and learning in small groups. *International Journal of Educational Research, 13,* 21-40.

Webb, N. M. (1991). Task-related verbal interaction and mathematics learning in small groups. *Journal for Research in Mathematics Education, 22,* 366-389.

Webb, N. M., & Farivar, S. (1994). Promoting helping behaviors in cooperative small groups. *American Educational Research Journal, 31,* 369-395.

Webb, N. M., Troper, J. D., & Fall, R. (1995). Constructive activity and learning in collaborative small groups. *Journal of Educational Psychology, 87,* 406-422.

Wheelan, S. (1994). *Group processes: A developmental perspective.* Boston, MA: Allyn & Bacon.

Wheelan, S. A. (1990). *Facilitating training groups: A guide to leadership and verbal intervention skills.* New York, NY: Praeger.

Wheelan, S., & Hochberger, J. (1996). Validation studies of the Group Development Questionnaire. *Small Group Research, 27*(1), 143-170.

Wheelan, S., Murphy, D., Tsumura, E., & Fried Kline, S. (1998). Member perceptions of internal group dynamics and productivity. *Small Group Research, 29,* 371-393,

Wheelan, S., & Tilin, F. (In press). The relationship between faculty group effectiveness and School productivity. *Small Group Research.*

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Lisk, A. R. (1998). Cohort group effectiveness and student outcomes. *Dissertation Abstracts International, 59*(06), 1868A.(University Microfilms No. AAT 9838503)

McGrath, J. E. (1984). *Groups: Interaction and performance.* Englewood Cliffs, NJ: Prentice-Hall.

Reich, R. B. (1987). Entrapreneurship reconsidered: The team as hero. *Harvard Business Review, 65*(3), 77-83.

Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization.* New York, NY: Doubleday.

Stahl, R. J. (1994). *The essential elements of cooperative learning in the classroom* (Report No. EDO-SO-94-1). Washington, DC: Office of Educational Research and Improvement (CHN Clearinghouse NO. SO024086).

Tuckman, B. W. (1965). Developmental sequence in small groups. *Psychological Bulletin, 63*(6), 384-399.

Tuckman B. W., & Jensen, M. A. C. (1977). Stages of small group development revisited. *Group and Organizational Studies, 2,* 419-427.

Ventimiglia, L. M. (1994). Cooperative learning at the college level. In H. C. Foyle (Ed.), *Interactive learning in the higher education classroom: Cooperative, collaborative, and active learning strategies* (pp. 24-31). Washington, DC: National Education Association.

Walker, L. B. (1995). *The effect of membership in the Council of Adult and Experiential learning on the quality of prior learning assessment services in senior level institutions by the Southern Association of Schools and Colleges.* Unpublished doctoral dissertation, University of North Texas, TX.

Webb, N. M. (1989). Peer interaction and learning in small groups. *International Journal of Educational Research, 13,* 21-40.

Webb, N. M. (1991). Task-related verbal interaction and mathematics learning in small groups. *Journal for Research in Mathematics Education, 22,* 366-389.

Webb, N. M., & Farivar, S. (1994). Promoting helping behaviors in cooperative small groups. *American Educational Research Journal, 31,* 369-395.

Webb, N. M., Troper, J. D., & Fall, R. (1995). Constructive activity and learning in collaborative small groups. *Journal of Educational Psychology, 87,* 406-422.

Wheelan, S. (1994). *Group processes: A developmental perspective.* Boston, MA: Allyn & Bacon.

Wheelan, S. A. (1990). *Facilitating training groups: A guide to leadership and verbal intervention skills.* New York, NY: Praeger.

Wheelan, S., & Hochberger, J. (1996). Validation studies of the Group Development Questionnaire. *Small Group Research, 27*(1), 143-170.

Wheelan, S., Murphy, D., Tsumura, E., & Fried Kline, S. (1998). Member perceptions of internal group dynamics and productivity. *Small Group Research, 29,* 371-393,

Wheelan, S., & Tilin, F. (In press). The relationship between faculty group effectiveness and School productivity. *Small Group Research.*

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1999 Pennsylvania Adult & Continuing Education Research Conference

Refereed Papers

COOPERATIVE LEARNING: TEST-TAKING IN A
NON-TRADITIONAL MANNER IN THE COLLEGE CLASSROOM

David L. Tucker

ABSTRACT

The researcher has used cooperative test taking in the traditional college classroom. There were several variations to the testing which helped to provide data and prove or disprove a high level of learning. These variations in testing included 1) various academic levels of students, freshman-senior; 2) one class cooperative testing, 3) another class (same subject) traditional testing and cooperative testing; and 4) pairing students giving choice/teacher's choice of partner.

It is not common for students to take tests together in a cooperative environment. The teacher usually does not feel comfortable in these situations because there is the feeling of not knowing whether the students are really learning, and the teacher may feel uncomfortable holding the students solely accountable for this knowledge. The students, on the other hand, feel less anxious during the testing and are teaching each other during the test.

This current semester the researcher plans to continue to use cooperative testing in the classroom. This will enable comparison of the same subject, with different students. The researcher also plans to use one class divided so that half of the students use cooperative testing and the other half uses the traditional format. This selection will be completely random.

The researcher has collected some interesting data indicating cooperative testing provides higher test scores by 7-8%. In addition, students tested better when paired randomly rather than being allowed to choose a partner. Many questions remain unanswered concerning this testing technique, but the data and the improved classroom atmosphere prove that research of this teaching/learning method should continue.

INTRODUCTION

Cooperative learning (CL) has been a part of the teaching/learning process for many years, longer than anybody may realize. CL comes in many forms, but is generally known to be the learning process of students teaching students. This learning is passed between students while they are in groups, either small groups of two, or larger groups. Teachers have been using CL in their classrooms and other learning environments to augment the regular style of teaching, I talk and you listen. Some teachers feel that by putting students in groups it may help the learning of all the students.

There are some teachers who are not receptive to CL and feel that this teaching technique is weakened by their loss of control over the learning process. When one student teaches another, the teacher is not sure of the outcome and this can be threatening to the teacher. Consequently, the teacher will avoid using CL in the classroom.

Cooperative learning traditionally in K-12 grades has been avoided for the reasons already mentioned. However, CL is becoming more popular because corporate America is putting more and more employees on teams. These teams demand cooperation between the members. People are expected to work together and accomplish the goals of the group and the corporation. Some of these basic skills of learning, sharing, and participation in groups can be taught in the traditional classroom.

LITERATURE REVIEW

Cooperative learning (CL) has been around for a long time in education. Teachers have used CL in laboratory settings, projects, and discussions (Slavin, 1990) for as long as anybody can remember. However, it was not until the 1970s that CL became a new, primary way to teach in the classroom. Slavin (1989, 1990) referred to cooperative learning "as one of the most thoroughly researched of all instruction methods, little done at the college level" (p. XI).

There are four ways to use CL in the classroom: Student Team-Achievement Divisions (STAD) (Slavin, 1978a, 1986a), Team-Games-Tournaments (TGT) (DeVries & Slavin, 1986a), Team Assisted Individualization (TAI) (Slain, Leavey, & Madden, 1986) and Cooperative Integrated Reading and Composition (CIRC) (Madden, Slavin, and Stevens, 1986; Stevens, Madden, Slavin, & Farnish, 1987). Each of these were developed by Slavin and others. STAD places students into groups of four and gives the students the opportunity to learn the subject after the teacher has presented the material. The students then take the quiz or test. TGT is further refinement of STAD where the students compete through tournaments, eliminating the quizzes, and accumulate points for their teams. TAI is especially designed for teaching mathematics. The students are placed in groups and work on different sequences according to their abilities. Teammates check each other's work and help one another. Each week the teacher checks the work and totals the students' progress. CIRC is the method of CL used specifically to teach reading and writing at the elementary grade levels.

These four methods of CL are very structured and need more work from the teacher to incorporate them into the daily teaching schedule. This is one reason why CL has been rather slow in becoming a more widely accepted teaching method. It takes a lot of learning and work on the part of the teacher to be effective. Other reasons teachers avoid CL are: not knowing how to use it, concern about giving proper credit to the students who do the work and less credit to the "free-loaders," lack of acceptable outcomes, and fear of the new and different. The education systems are full of teachers who were taught by other than CL and are skeptical of this method and find it easier and more comfortable using the standard lecture method of "teacher talks and the students listen."

There are other reasons to consider using CL in the classroom and elsewhere. The primary purpose is to teach, but CL can also give the student confidence and self-esteem, social connections, intergroup relations, and an opportunity to like their class and classmates better. Confidence can be gained from using CL and learning the lesson more thoroughly by working with peers, not only with the teacher. This confidence can help relieve anxiety which many students get prior to taking a test. Working in groups gives the students more opportunity to get to know their fellow classmates and have a more relaxed learning environment in the classroom. Many times people who know each other better will have more lively discussions than when the people are not as familiar with one another. Students in this CL position are also likely to be more accepting of the other person's perspective. "Johnson, Johnson, Johnson and Anderson (1976) found that students who had worked cooperatively were better able to identify feelings in taped conversations than were students who had worked individually" (Slavin, 1990, p. 52). CL offers group dynamics which the student can learn. In all groups there are leaders and followers, "doers and do nothings," and it may be a valuable lesson for the student to realize how they fit into the group and what contributions they are making to the success of the group's task. CL can be a reason the student likes the class and the classmates. If this is the case then it may be reason for less absenteeism, more enthusiastic learning, and being accepted by the group. "[This] supports the conclusion that cooperative learning promotes positive relationships between students" (Slavin, 1990, p. 51).

COOPERATIVE LEARNING AND TESTING

"I have had very positive experiences with group learning and with the incorporation of the theme of cooperative learning into the format of graded examinations" (Applegate, 1995, p. 364). This is one teacher's feelings towards testing in a CL manner. Research done on test anxiety has identified two main sources of this anxious state. The first source is in the organizational stage of test preparation, primarily inadequate learning or study skills. The second major cause of test anxiety stems from habitual, irrelevant negative thoughts which distract students. Consequently the students focus on their fears, inadequacies, and past failures and not the task of taking the test (Mealey & Host, 1992). In addition to this test anxiety,

students often feel alone and isolated and this is justification for cooperative learning to be used to help relieve these feelings. There is evidence for a positive relationship between cooperative learning and self-esteem (Mealey & Host, 1992). The two most important components of self-esteem are feeling well-liked by classmates and the feeling of doing well academically. Here again, CL methods affect both of these components.

Testing in a cooperative manner can be trying to a teacher and difficult to score, as well as make it hard to ascertain whether the students really have an understanding of the material being taught. There is a great fear on the part of the teacher that the stronger students cover for the weaker students. "I was concerned at first that the more studious students would 'carry' the less prepared student. This fear proved unfounded: the groups refused to be used by a student who had not studied and, in fact, unprepared students were exiled" (Murray, 1990, p. 150). Murray reported that end-of-term comprehensive test scores were not significantly different. This is good cause to consider cooperative test taking and experiment with it. It could help the students, broaden the teacher's approach to education, and lessen the burden of paper work, since there would be fewer papers to correct.

COOPERATIVE TEST TAKING

It was while studying cooperative learning that the researcher came to the idea of using cooperative test taking with his traditional college age students. The research had shown that teachers traditionally do not like cooperative learning due to 1) the loss of control over the students, 2) loss of control of learning outcomes, and 3) no predictability of the lesson plans (Kohn, 1992). However, the researcher wanted to use cooperative testing in the classroom to see if there was a distinct difference between students who took written tests cooperatively and those who did not.

The researcher is an Associate Professor of Hospitality Management and during the Fall semester of 1997 had two separate sections of an introductory course. These sections, A and B, met one hour apart on the same day. The students in each section were given the same tests. It was assumed that not much information would be passed to the students in the later section, since there was only ten minutes between classes.

When it came time for the first test of the semester, the researcher asked section A if they would prefer taking the test cooperatively or individually. A majority of the students asked for the test individually. When section B was asked the same question, they unanimously asked for the test cooperatively. The average results of these tests were section A: 79.6% and section B: 88.8%. This makes a clear case for allowing students to take the test with a partner. The students were randomly assigned their partner when they entered the classroom the morning of the test. The students who took the test cooperatively were more at ease. The whole atmosphere of the classroom was more relaxed and tension free. The students talked in low tones and conversed as they answered the test questions. There were even a few students smiling.

When it came time for the second test of the semester with these two sections, they were given the same option: cooperatively or individually. Section A quickly saw the error of their ways and opted to take the test cooperatively. Section B also was quick to agree for the cooperative method. This time members of section A were assigned partners and section B was given the choice of getting assigned partners or choosing their own partners. The students voted for choosing their own. The results of this second test were section A: 87.6%. The class average was eight points higher. Section B had rather surprising results, the average was 86.5%. This average was 2.3 points lower. It is hard to explain why the average score was lower when taking the test with a friend. When these students were surveyed, they claim to have studied as much or more than they normally would for any other test.

The students in these introductory courses were predominantly freshmen. They admitted that this was the first time they had ever taken a test like this in a cooperative manner. Later, this testing method was used with upper level students who are in their junior and senior years. The first test was taken individually. The average was 83.4%. The second test was taken cooperatively. The average was 94.5%, a significant difference. In the next class meeting, without notification, the students were given the same

test to take individually. The class average dropped to 84.5%. This shows a drop in retention.

This method of cooperative testing was used in another section of an introductory course in the following semester. This section of students was not predominantly freshmen, but a mixture of all grade levels. The first test average was 60.0% and the students took it individually. The second test was taken cooperatively and the average was 72.5%, a significant increase.

This most recent semester alternative methods of testing were used in an introductory course which was mostly Freshmen students. Half the students were assigned to take the test individually. Students were asked to volunteer; for what, they did not know. The first 12 volunteers were then assigned the individual method. The remaining students took the test cooperatively. The volunteerism is mentioned since the students were asked to volunteer several times throughout the semester. It was usually the more motivated, better students who raised their hands. When the test scores were compared they were almost identical: 82.6% for the cooperative group and 82.5% for the individual group. It would have been interesting to switch these groups for the second test and compare the results. However, the students were given the choice of choosing their partner or having the teacher pick. This choice was offered after the teacher related the results of the earlier testing when the prior section chose their own partners and the results were not as good. Thus, these students chose to have the teacher pick the partners. The class average was 82.6%, exactly the same.

IMPLICATIONS OF COOPERATIVE TESTING

The most obvious implications of the cooperative testing results are that there are more questions than answers. The first comparison of traditional testing compared to cooperative testing was just as anyone would suggest--cooperative scores would be higher. Then when the students who took the traditional test first were allowed to test cooperatively, their results rose to the higher cooperative levels.

These obvious results are diminished in the recent round of testing when the test results were equal for both the individual testing and the cooperative testing. From this most recent testing it is reasonable to assume that two heads are not always better than one. Unfortunately this group of students will not be together any longer to try different combinations to determine a pattern, if there is one. It would have been interesting, for example, to test the group in random pairs rather than using the volunteer method. As mentioned, the volunteers may be the better students, and consequently equal to students who work in pairs.

The one commonality to all these cooperative testing situations has been the atmosphere in the classroom. The students in all cases have been in high spirits and there is a less stressful environment. The students are even smiling and eager to test. When they are taking the test they are allowed to talk quietly and discuss the answers. Each student is given a copy of the test so they both can read the questions. However, at the end of the testing period, only one exam is handed in, with both names on the test paper. The students receive the same grade. There is no attempt by the teacher to determine if one student had more input than another. It is also noted that the students take more time to complete the test when it is done cooperatively. In almost all cases, the students did not leave before 45 minutes in a 50-minute period. When the tests are returned, the pairs of students are requested to sit next to each other to see the results of their efforts.

Based on the experience just discussed, there are two other advantages which come from cooperative testing which may or may not be obvious. The first is that when students are not able to pick their own partner, they get to meet another student in the class. Most students do not make a great effort to meet others in the room. The second advantage is the teacher has half the number of tests to grade.

FURTHER STUDY IN THIS AREA

The results from these testing situations are only the beginning of what can be a very interesting study of cooperative learning. A few different combinations have been used, but there are many other combinations which should be put to use and then analyzed. Comparing these combinations and looking

for a pattern to evolve is the long-range objective. It should be noted that at this point the cooperative testing has only been used for the tests during the regular part of the semester, not for the final examination testing period. The final exam should be brought into the analysis since it is a comprehensive test and could help to determine if there is definite learning by each and every student. This early in the study there is no way to determine if all the students are learning the material at an acceptable level, or whether some are lucky and getting by with another student's efforts.

The combination possibilities for pairing the students are almost without limits. Some examples of these pairs which could be used but have not to-date are: pairing females, pairing males and reviewing the results. Another interesting combination would be pairing the students who sit in the front of the room with one another. Other pairing combinations could include putting the brighter student with the less motivated student or pre-testing the students and then putting the highest and lowest students together, working towards the middle. Comparing the average scores of Junior/Senior classes and Freshman/Sophomore classes when tested cooperatively is another interesting way to look at this testing method.

CONCLUSION

This study in cooperative testing and learning is in its very early stages. The technique of pairing the students has been used in several variations and has had different results in the outcomes of average scores. In some cases the average scores have been widely different and in other cases the scores have been similar. More work has to be done to identify a pattern and determine whether in fact cooperative testing does increase student scores.

The other important part of this study is to determine whether all the students learn the material taught to an acceptable level. This would require a great deal of pre-testing and post-testing before and after the cooperative testing. Early findings show there is learning by the majority of students. Final exams taken individually, show average scores very close to the level in cooperative tests.

In this study, the cooperative testing has shown that students are enthusiastic about this method and would prefer a test of this type rather than the traditional individual test. The student surveys thus far indicate the students prepare for a test of this type as much as for the individual test. There is still more to be done to determine whether cooperative testing is a positive learning vehicle for the majority of students in the college classroom.

REFERENCES

Applegate, J. Cooperative learning in graded tests. *American Biology Teacher, 57*, 363-364.

Kohn, A. (1992). Resistance to cooperative learning: Making sense of its deletion and dilution. *Journal of Education, 174*(2), 38-56.

Mealey, D. L., & Host, T. R. (1992). Coping with test anxiety. *College Teaching, 40,* 145-150.

Murray, J. P. (1990). Better testing for better learning. *College Teaching 38,* 148-152.

Slavin, R. E. (1992). *Cooperative learning, theory, research and practice.* Englewood Cliffs, NJ: Prentice Hall.

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Refereed Papers

THE APPLICABILITY OF CLASSICAL AND METAPHORICAL ORGANIZATIONAL MODELS TO THE VIRTUAL UNIVERSITY: A CASE STUDY

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ABSTRACT

Advances in information technology such as the Internet and CD-ROM multimedia programs have converged with an aging workforce and other socioeconomic factors to create a new niche in higher education and lifelong learning: the "virtual university."

In recognition of this transformation to "network learning," many traditionally-based colleges and universities have actively entered the distance education market by offering a variety of programs and courses to the nontraditional student. In addition, other colleges and universities have begun to form academic alliances spanning entire states and geographic regions. Finally, accredited "for-profit" organizations have arisen to compete with non-profit institutions for the growing nontraditional student market.

Since the survivability of an organization is related, in part, to its ability to respond to environmental change and meet the needs of the emergent market, this investigation addressed the following research questions: 1) What organizational models and forms of governance are being followed by the virtual universities of today? 2) Do these models and processes allow the respective institutions to adequately respond to the changing demands of the higher educational market? 3) Are the subject institutions adequately described by classical organizational theory? and 4) Is there evidence of an emergent organizational model or metaphor with which to describe these institutions?

For the purposes of this study, virtual universities were categorized into one of the following classifications: traditional non-profit institutions offering distance education; multi-institutional non-profit virtual universities encompassing entire geographical regions; and for-profit virtual universities. A representative institution from each category was then examined qualitatively using document analysis, elite interviewing, and metaphorical organizational analysis as a means of elucidating their respective organizational structures. The results of the study indicated that, while all three institutions exhibited integral components which were most accurately described by the bureaucratic and bifurcated classical organizational models, the metaphorical method allowed for the development of a multidimensional dynamic model for each of the institutions. In addition, it was found that all three of the subject organizations could be categorized by a newly developed metaphorical model, namely that of the "coalition."

Since it is anticipated that much of adult and continuing education will be provided through distance education and virtual universities, the findings of this study are of relevance to all those involved in these educational disciplines.

INTRODUCTION

The rapid growth of information technology within the past decade has impacted nearly every aspect of our society. The melding together of information and communications technologies has made possible such concepts as the Internet and World Wide Web (WWW), video teleconferencing, and computer-aided instructional media (Van Dusen, 1997). Higher education has not been immune to this remarkable revolution; in fact, many observers have stated that the ramifications of these informational technologies to higher educational institutions will be most significant from both an organizational and pedagogical

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standpoint.

For example, Dolence and Norris (1995) have stated that "Higher education has encountered the leading edge of the world of Information Age learning. We are in the midst of a multitude of transitions to that new world" (p. 20). They have further argued that the transformation from the Industrial Age to the Information Age has mandated that organizations change from "rigid, formula-driven" entities to "fast, fluid, flexible" entities (p. 30). One such entity is that of the networked, or "virtual" organization, which consists of the linking together, through information technology, of geographically separated institutions. According to Dolence and Norris (1995), "The network is the fundamental organizational principle of 21st century enterprises. In considering the redesign of academe, the primacy of the network metaphor is paramount" (p. 34).

The rapid growth of distance education and virtual colleges and universities has been nothing short of phenomenal. A virtual college or university, as defined by Dixon (1996), is any institution which uses technology to break the time and space barriers traditionally associated with learning and studying. By this definition, "virtual" institutions have existed since the early 1800s, when the first home correspondence courses were introduced. However, within the last decade, the development of communications technology has combined with an aging workforce and other socioeconomic factors to produce an estimated 3,000 institutions worldwide offering distance education (Dixon, 1996). Through distance education, these institutions are attempting to address the educational needs of nontraditional students, who now comprise the majority of higher educational participants (Twigg, 1994).

It is anticipated that the competition among these higher educational providers will increase as both non-profit and for-profit institutions vie for a finite population of students. Indeed, Dolence and Norris (1995) have speculated that, in the foreseeable future "Higher education will not own the franchise as provider. Instead, it will compete for learners with commercial firms and other intermediaries" (p. 35). In response to this competition, many traditionally-based colleges and universities have actively entered the distance education market by offering a variety of virtual-based programs and courses. In addition, other colleges and universities have begun to form academic alliances spanning entire states and geographic regions. Finally, accredited "for-profit" organizations have arisen to compete with non-profit institutions for the nontraditional student market.

The factors listed above have resulted in the creation of a rapidly changing environment within the higher educational realm. One of the fundamental premises of organizational theory is that, to remain competitive, an organization should utilize that structure which best allows it to respond to changes in its respective environment (Birnbaum, 1988). According to Wind (1995), higher education is presented with one of four options for the future: 1) life as usual, with no substantial changes to the university in general; 2) a reengineering of the major processes of the university with the retention of the existing overall design; 3) the reinvention of the university organizational model; or 4) the elimination of the university due to obsolescence.

Historically, the organization and administration of higher educational institutions has followed the classical theoretical models as delineated by Birnbaum (1988). However, if higher educational institutions will be required to "reengineer" or "reinvent" themselves as posited by Wind to remain competitive in the foreseeable future, than new and novel approaches to organizational theory, such as the metaphorical technique developed by Morgan (1986, 1997) may prove instrumental in allowing these institutions to best adapt and respond to the turbulence which characterizes the higher educational environment of the present and future.

Generally speaking, the purpose of this investigation was twofold: 1) to determine the organizational models of select colleges and universities representing non-profit and for-profit "virtual" universities" and 2) to determine the appropriateness of these models with respect to responsiveness and competitiveness in today's rapidly changing higher educational environment.

More specifically, the primary research questions that were addressed were as follows:

1) What organizational models and forms of governance are being followed by the virtual universities of today?
2) Do these models and processes allow the respective institutions to adequately respond to the changing demands of the higher educational market?
3) Are the subject institutions adequately described by classical organizational theory?
4) Is there evidence of an emergent organizational model or metaphor with which to describe these institutions?

This investigation examined the organizational structure and administration of three so called "virtual" universities: Purdue University, whose main campus is located in West Lafeyette, Indiana; Western Governors University (WGU), with administrative offices in Salt Lake City, Utah; and the University of Phoenix, with headquarters in Phoenix, Arizona. Purdue University and WGU provided examples of virtual non-profit universities within traditional and multi-institutional settings, respectively. The University of Phoenix provided an example of the growing number of for-profit providers in the higher educational market. While by no means exhaustive, this list provided an opportunity to perform an exploratory qualitative investigation into the organizational nature of these virtual institutions.

CLASSICALLY-BASED ORGANIZATIONAL MODELS
OF HIGHER EDUCATIONAL INSTITUTIONS

Traditionally, higher educational institutions have been categorized into one of five established organizational models: the Collegial, Bureaucratic, Political, Anarchical, and Cybernetic systems (Baldridge, Curtis, Ecker, & Riley 1978; Birnbaum, 1988). The Collegial, Bureaucratic, and Political models are based on concepts which were originally applied in the industrial management world. The fourth system, the Anarchical model, was first proposed by Cohen and March (1974) as a means of describing the prominent role of organizational culture in decision making. Finally, the Cybernetic model is premised upon Birnbaum's (1988) argument that organizational coordination is accomplished through cybernetic controls; that is, through self-correcting mechanisms that monitor organizational functions and provide negative feedback to participants when things are not going well (pp. 33-34). Furthermore, in recognition that, in many higher educational institutions, separate administrative and academic decision-making entities may exist, Blau (1964) proposed a bifurcated model of organizational structure consisting of a bureaucratic administrative sphere, and a collegial academic sphere.

METAPHORICAL ORGANIZATIONAL THEORY

Classical organizational theory has tended to categorize a particular institution into one of the aforementioned models. However, in his landmark book *Images of Organization* (1986), Morgan proposed that organizations be viewed metaphorically since they are, in actuality, "complex and paradoxical phenomena that can be understood in many different ways" (p. 13). To facilitate this process, Morgan suggested various metaphors to be used in a diagnostic reading and critical evaluation of an organization. Among the metaphors applied by Morgan are those of the machine, the organism, the brain, culture, political system, and flux and transformation. More recently, Morgan has introduced the concept of "imaginization" (1997) as a means of infusing "the process of organizing with a spirit of imagination that takes us beyond bureaucratic boxes" (p. xxix). Morgan thus views imaginization as a "new kind of organizational theory: one that can evolve, develop, and change in a fluid, self-organizing way" (p. xxx).

METHODOLOGY

A review of the current literature showed that little work had been done with respect to the organization and administration of "virtual" universities. Consequently, the present study was considered to be an investigation into a relatively unexplored area of higher education. This factor, along with the innovative nature of the subjects themselves, and the application of the equally novel techniques of metaphorical analysis and imaginization, led to the conclusion that this study would be best served by a qualitative approach. This investigation thus utilized the data collection techniques of document analysis and elite interviewing as a means of answering the research questions listed earlier. To facilitate the selections of subject for this study, a comprehensive listing of virtual universities was first compiled from such sources as the Internet University webpage (http://www.caso.com/iu.html) and Duffy (1997). The resultant listings were then categorized into one of three groupings: 1) distance education within traditional institutions, 2)

non-profit multi-institutional virtual universities, and 3) for-profit virtual universities. An example from each category was then selected based on such criteria as number of students participating in virtual education, innovativeness in the distance learning, and prominence of the institution with respect to others in their respective categories.

FINDINGS

The organization of each of the institutions may be summarized as follows:

Purdue University

Purdue University is a state-controlled, coeducational institution with the main campus located in West Lafayette, Indiana, and four offsite campuses located throughout the state. With respect to organizational theory, certain aspects of classical organizational theory would appear to apply to Purdue. For example, the centralized administrative offices represented by the Board of Trustees, President, Vice Presidents, and Chancellors is an excellent example of classic bureaucratic administrative structure. In addition, the Chancellor-Vice-Chancellor-Dean hierarchies found at each of the four remote campuses may be best described by the classical bifurcated administrative/academic organizational model. However, elements of the machine metaphor are also evident in the administrative hierarchies, while the relationship of the main and remote campuses, along Purdue's adoption of the "Excellence 21" Total Quality Management initiative (http://www.purdue.edu), is reminiscent of the organism metaphor, which views the organization as an "open system" which must achieve an appropriate response to its environment to survive. Finally, the spider plant metaphor was deemed as being applicable to Purdue, where the central campus located in West Lafeyette was viewed as representing the "central pot" of the plant, and the remote campuses were considered as being the "offshoot plants". Furthermore, according to this analogy, the central campus maintains "cord dialogue" via telecommunications with the offshoot campuses, in much the same way that the central pot of a spider plant is connected to its offshoot plants. According to Morgan (1997), the spider plant metaphor has "great relevance for decentralization in business and government" (p. 88).

Western Governors University (WGU)

The concept of the Western Governors University, or WGU, arose in June, 1995, when the governors of eighteen western states agreed to use technology to forge an academic alliance between the member states, Guam, and Puerto Rico. To accomplish this, WGU links higher educational providers and corporations from these western states into a multi-institutional virtual university, whose Board of Trustees are elected by the governors of the participating states. The administrative offices are located in Salt Lake City, Utah, while the academic offices are located in Aurora, Colorado. The administrative and academic offices interact through bi-monthly conference calls, staff retreats, and various other telecommunications.

In addition, the multitude of non-profit and for-profit educational providers located throughout the participating states report directly to the academic offices in Colorado, and have virtually no interaction with the administrative offices in Utah. This complete separation of administrative and academic functions would appear to fit the most literal definition of a bifurcated organization. Finally, the academic providers are granted full autonomy by WGU with respect to curriculum and individual mission statements. To this effect WGU acts as an academic "broker" who makes available to potential students a listing, via its online "SmartCatalog," of courses and programs being offered by the participating providers (http://www.wgu.edu). WGU thus markets itself as a true "virtual" organization in the sense that is lacks any definitive geographical boundaries. Since much of classical organizational theory is predicated upon the notion of an organization with definitive boundaries, the metaphorical method seemed most appropriate for such an innovative and diffuse organization as WGU. Indeed, the metaphorical method was developed specifically for an organization that can "evolve, develop, and change in a fluid, self-organizing way" (Morgan, 1997, p.xxx). To this effect, the brain metaphor, which is used to describe diffuse organizations whose "microprocessing facilities create the possibility of organizing without having an organization in physical terms" (Morgan, 1986, p. 84) seemed to be quite applicable to the organizational structure of WGU.

University of Phoenix

In contrast to both Purdue University and WGU, the University of Phoenix (UOP) is a for-profit organization wholly owned by the Apollo Group, a publicly-traded company. Founded in 1978, the

institution has a current enrollment of over 42,000 students worldwide, and claims to have trained over 370,000 participants since its inception (http://www.uophx.edu). Courses are available through nineteen campuses and numerous learning centers located throughout twelve states and Puerto Rico. At UOP, the Board of Directors, which is comprised of both businessmen and academics, sets policies and business strategies, and then delegates the operational aspects of the university to the President. Furthermore, the Executive Vice President oversees campus operations, while the Provost is responsible for academic matters. The geographically dispersed campuses and learning centers are each headed by regional Vice Presidents/Directors, who report directly to the Executive Vice President. Each campus is granted a limited degree of autonomy; however, each is required to comply with a standard set of corporate policies as delineated by the headquarters in Phoenix, and their conformance is continuously monitored by upper management. With respect to organizational structure and management, UOP would appear to be a hybrid of both Purdue and WGU. For example, UOP shares with Purdue a strong centralized headquarters connected to remotely located offshoots, and the implementation of TQM as a means of ensuring institutional competitiveness, . Both may be thus be accurately described by the organism and spider plant metaphors. Conversely, UOP shares with WGU a division of administrative and academic functions, and a great reliance on technology. Thus, the classical bifurcated and brain metaphor analogies would seem to apply to both WGU and UOP. Finally, all three institutions would seem to be accurately described as "coalitions", which are typically defined as a fluid alliance of various factions designed to allow a rapid, effective organizational response to environmental change or turbulence.

CONCLUSIONS

All three of the institutions examined during this study appeared to share certain organizational traits, including a centralized executive board which determined overall policies, various levels of decentralization through remotely located campuses who have been granted varying levels of autonomy, and a reliance on technology for the delivery of education and the maintenance of organizational operations. In all three cases, the metaphorical approach to organizational analysis, which is based on the premise that organizations are, in reality, a complex mixture of
interactions which can be understood in many different ways, proved to be of the greatest utility in discerning the organizational structures of these "virtual" institutions. To test the validity of this assertion, it is recommended that future work be done on a more extensive number of "virtual" institutions, and that the applicability of both the metaphors described here and any emergent organizational metaphors be explored further.

REFERENCES

Baldridge, J. V., Curtis, D. V., Ecker, G., & Riley, G. L. (1978). *Policy making and effective leadership.* San Francisco: Jossey-Bass.

Birnbaum, R. (1988). *How colleges work: The cybernetics of academic organization and leadership.* San Francisco: Jossey-Bass.

Blau, P. M. (1964). *Exchange and power in social life.* New York: Wiley.

Dixon, P. (1996). *Virtual college: A quick guide to all you need to know to get the degrees you want with computer, t.v., video, audio, and other learning distance tools.* Princeton, NJ: Peterson's Education, Inc.

Dolence, M. G., & Norris, D. M. (1995). *Transforming higher education: A vision for learning in the 21st century.* Ann Arbor, MI: Society for College and University Planning.

Morgan, G. (1986). *Images of organization.* Newbury Park: Sage Publications.

Morgan, G. (1997). *Imaginization: New mindsets for seeing, organizing, and managing.* Thousand Oaks: Sage Publications.

Twigg, C. A. (1994). The changing definition of learning. *EDUCOM Review, 29*(4), 23-25.

Van Dusen, G. C. (1997). *The virtual campus: Technology and reform in higher education.* ASHE/ERIC Higher Education Report (25), No. 5.

Wind, J. (Ed.). (1995). *The virtual university (*SEI Conference paper C-5). Philadelphia: University of Pennsylvania, The Wharton School, The SEI Center for Advanced Studies in Management. [Online]. Available internet: http://hops.wharton.upenn.edu/SEI/ wrkshop/html.

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Refereed Papers

DESCRIBING RN-BSN EDUCATION FROM THE LEARNER'S PERSPECTIVE: A FOCUS GROUP STUDY

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ABSTRACT

Using focus group methodology, this study described the concerns and priorities of female RN (Registered Nurse) students enrolled in five different baccalaureate degree completion programs. The study also explored the influences of baccalaureate education on the nursing practice patterns of the RN participants. The participants, typical of adult learners, worked full or part-time and were responsible for multiple role demands.

The RNs were concerned about flexible and creative curriculum designs. They wanted to be respected for their previous life experiences and educational endeavors. Feeling valued by faculty was important to the participants as were the friendships established within the learner cohort. The study identified that accurate and consistent academic advisement was of vital concern to the students. Support for students unfamiliar with information management and current software technologies were important programming considerations. Learning to use library services, managing electronic mail, and accessing the Internet were critical student needs.

The study offers focus group methodology as a research technique that may be incorporated into a comprehensive needs assessment or outcome evaluation. Results of this focus group study serve to assist faculties and administrators in better understanding the concerns and priorities of the RN-BSN student, a specific type of adult learner.

INTRODUCTION

Presently, there are three educational routes to obtaining the status necessary for entry into practice as a Registered Nurse. These three instructional pathways include baccalaureate level preparation, associate degree studies and hospital-based diploma education. Once a student graduates from any of these three program types, the student becomes eligible to sit for the RN national licensure examination. Currently, the Bachelor of Science in nursing (BSN) degree is advocated by many nurses and professional organizations as the most appropriate level of entry into nursing. In part due to the position of many professional nursing organizations, as well as in response to changes in the health care arena, enrollments have been steadily increasing in RN-BSN programs with a total enrollment of 25,536 students in 1994 (Center for Research in Nursing Education & Community Health, 1996).

Typically, returning RNs are considered adult learners given their age, life experiences, and responsibilities. Lee (1988) noted that some of the issues faced by returning nurses are similar to those faced by other mature students in higher education. These returning nurses are older, have previous education and experience, are working full time for financial reasons and "are often overwhelmed with combined responsibilities of work, family and school" (Lee, 1988, p. 309).

The review of the literature identified several dominant themes specific to the experience of RN-BSN education. These themes interconnected to portray RN-BSN education as a complicated tapestry comprised of much more than classroom and clinical learning experiences. The constructs underlying this particular body of literature include: how women acquire and use knowledge; the professional socialization of the RN-BSN student; program improvement and responsiveness; role strain; and oppression and

anger. Each of these themes connected to pose interesting theoretical perspectives for designing this focus group study.

This study used focus group methodology (Krueger, 1994, 1998a, 1998b, 1998c; Morgan, 1997) to describe the experience of RN-BSN education from the perspective of the RN student. The study illustrates how focus group methodology may be used as a strategy for describing student needs and perspectives. The findings suggest that this methodology may be used to develop a program evaluation tool or to describe student concerns as part of a needs assessment.

METHODOLOGY

Focus group methodology is essentially a group interview. This technique relies upon interaction between the group members with the researcher moderating the group process and the direction of the topics (Morgan, 1997). Five to nine RN-BSN students who had no more than four classes remaining until BSN degree completion attended each group. Each focus group took place at a different university or college to explore the commonalties of the RN-BSN educational experience regardless of the particular educational program in which a student was enrolled.

THE RESEARCH QUESTIONS
The specific research questions were as follows:

* What are the concerns of RN learners as they progress through their BSN education?
* What do RN-BSN students consider as educational, personal or professional priorities?
* In what ways has baccalaureate education influenced the nursing practice patterns of RN students?

In this study, "concern" was conceptually defined as a point of importance for the RN student that is associated with worry or anxiety. The term "priority" or "priorities" was used to refer to aspects of RN-BSN education regarded by the RN learner as important, imperative or essential. "Nursing practice patterns" were conceptually interpreted as any type of nursing care provided directly or indirectly to a client.

SAMPLE CHARACTERISTICS
The purposively selected sample consisted of women actively enrolled in five different RN-BSN programs, employed as professional nurses within a part-time or full-time capacity, and near degree completion. The nursing programs were at private institutions located within a large metropolitan region. Four of the schools had a religious affiliation while the fifth program was nonsectarian. Men were excluded from the study sample given possible differences in concerns and priorities related to RN-BSN education based upon gender influences. Since men comprise only 11.4% of nursing graduates (Center for Research in Nursing Education & Community Health, 1996) nursing is a predominately female profession.

INTERVIEW FORMAT
The researcher served as the group moderator and a research assistant recorded observations to enhance data analysis. Each session lasted no longer than two hours, including a light meal and early social conversation. This focus group study utilized an established questioning sequence (Krueger, 1994, 1998a, 1998b, 1998c; Morgan, 1997) that was based upon findings from the review of the literature. A concluding summation provided the RN-BSN learners with an opportunity to refute, clarify or elaborate upon the interpretations drawn by the researcher during the interview. Immediately following each focus group, the researcher and the assistant shared their perceptions and notes.

DATA ANALYSIS
The data was thematically analyzed using the strategies outlined by Juliana et al. (1997). The focus group discussions were audiotape recorded and were transcribed verbatim. Subthemes were clustered within the data and themes were identified. An audit trail was developed which tracked the origin of each participant comment. Member checks and an expert check were used to confirm the accuracy of the findings and to check and confirm the validity of the identified themes and subthemes.
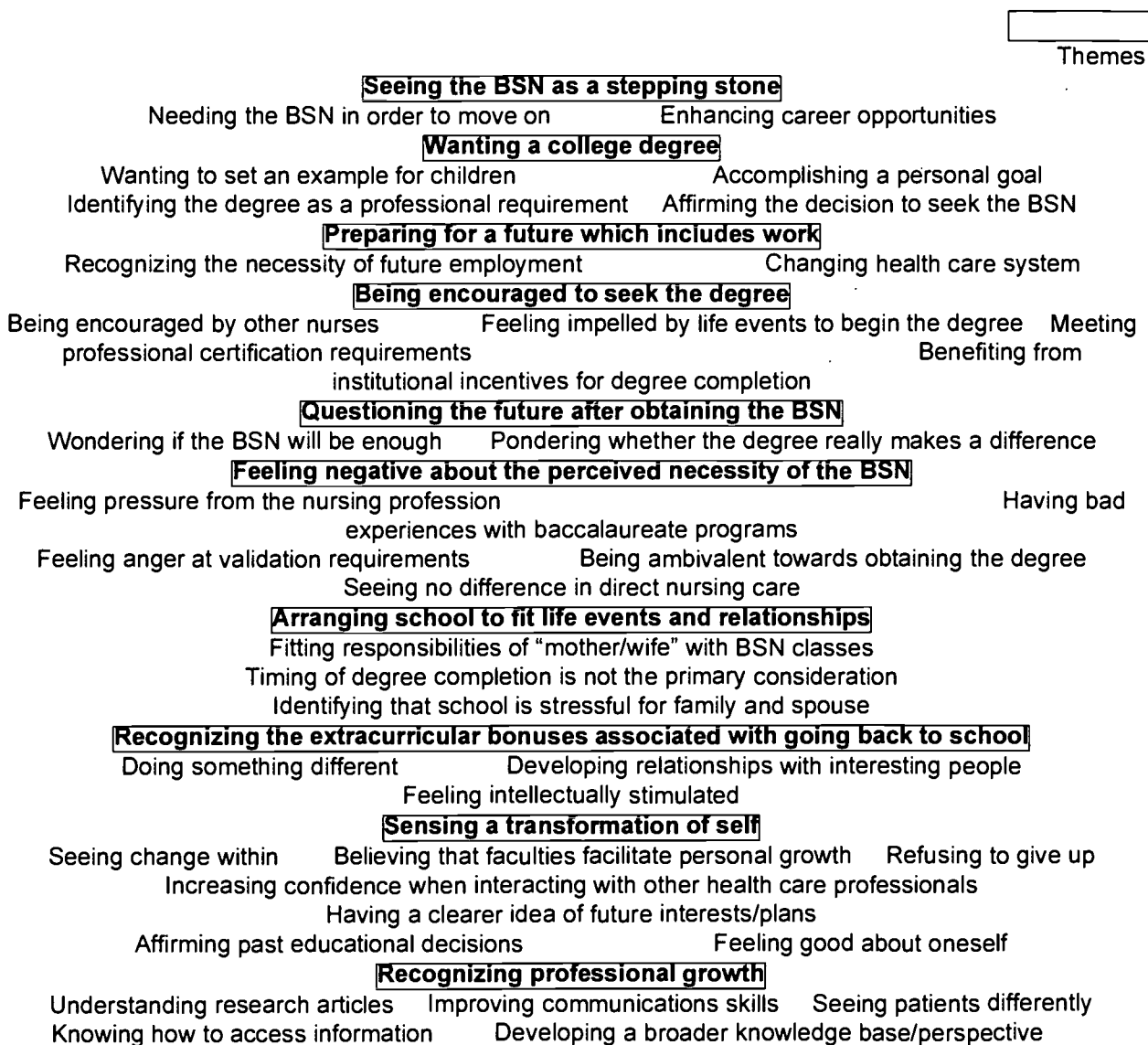
RESULTS

The results of this study described the concerns and priorities of the RN-BSN participants. The data analysis does not provide a tally of participant responses; rather, it describes the whole of the participant responses. The themes and subthemes are directly connected to the data and exhaustively describe RN-BSN education from the perspective of the focus group participants.

DEMOGRAPHICS

This focus group study included a total of thirty-five participants the majority of whom were Caucasian, employed as staff nurses, and married with children. The majority of the participants had completed their basic nursing education in a hospital based diploma program. The RN-BSN participants had graduated from their basic nursing programs within the time frame of 1964 to 1993 with half of the participants having completed their basic education before 1987. All participants earned a self-reported cumulative grade point average of over 3.0.

THEMES AND SUBTHEMES

A total of eighteen themes are identified. Each theme is identified with its relevant clustered subthemes (Figure 1).

Themes

Seeing the BSN as a stepping stone
Needing the BSN in order to move on   Enhancing career opportunities

Wanting a college degree
Wanting to set an example for children   Accomplishing a personal goal
Identifying the degree as a professional requirement   Affirming the decision to seek the BSN

Preparing for a future which includes work
Recognizing the necessity of future employment   Changing health care system

Being encouraged to seek the degree
Being encouraged by other nurses   Feeling impelled by life events to begin the degree   Meeting professional certification requirements   Benefiting from institutional incentives for degree completion

Questioning the future after obtaining the BSN
Wondering if the BSN will be enough   Pondering whether the degree really makes a difference

Feeling negative about the perceived necessity of the BSN
Feeling pressure from the nursing profession   Having bad experiences with baccalaureate programs
Feeling anger at validation requirements   Being ambivalent towards obtaining the degree
Seeing no difference in direct nursing care

Arranging school to fit life events and relationships
Fitting responsibilities of "mother/wife" with BSN classes
Timing of degree completion is not the primary consideration
Identifying that school is stressful for family and spouse

Recognizing the extracurricular bonuses associated with going back to school
Doing something different   Developing relationships with interesting people
Feeling intellectually stimulated

Sensing a transformation of self
Seeing change within   Believing that faculties facilitate personal growth   Refusing to give up
Increasing confidence when interacting with other health care professionals
Having a clearer idea of future interests/plans
Affirming past educational decisions   Feeling good about oneself

Recognizing professional growth
Understanding research articles   Improving communications skills   Seeing patients differently
Knowing how to access information   Developing a broader knowledge base/perspective

Developing leadership skills   Finding that the "job" of nursing became a career

Transitioning to baccalaureate nursing
Considering the BSN as the appropriate level of entry into nursing
Recognizing a "rift" between BSN nurses and others
Moving from a concern with tasks

Identifying helpful program characteristics
Designing curriculums flexibly   Valuing small class sizes
Interesting course materials and activities
Working with students to accept previously earned credits
Keeping the generic BSNs separate from the RN-BSNs

Experiencing anxiety within an RN-BSN program
Writing research papers   Lacking computer/technology skills
Experiencing unfamiliar clinical settings
Juggling act of multiple role demands   Lacking self-confidence

Feeling concerned about tuition reimbursement
Meeting with obstacles in the tuition reimbursement process
Working around tuition reimbursement dollar limitations
Having to pay for courses out of pocket

Feeling valued
Recognizing that RN-BSN students have multiple roles/demands
Feeling accepted as nursing professionals
Seeing that support persons and faculty members are accessible
Enhancing current expertise through relevant courses
Finding responsive administrators

Preparing for graduate studies
Experiencing independence when completing assignments   Writing papers

Encountering obstacles
Experiencing a lack of consistent and expert advisement   Arranging clinical experiences
Finding outdated library materials
Communicating in a disorganized fashion created difficulties for students
Finding a lack of peer support and understanding
Needing to formally validate previously learned information
Securing time off from work to accommodate clinical and class

Making suggestions for improvement
Protecting faculty when criticizing programs   Reviewing possible opportunities post-BSN
Being free to choose core requirement courses
Communicating more effectively about available student services
Developing standardization to the curriculum   Providing instruction specific to APA
Insuring that computer courses provide relevant software instruction and information
acquisition skills
Making certain course material is more practice based
Needing to expose students to a variety of faculty

Figure 1. Major themes with clustered subthemes developed from the data indicators.

CONCLUSIONS

This focus group study revealed that RN-BSN students are concerned with many of the same issues that are important to the generic adult learner enrolled in higher education. They initially lacked self-confidence and recognized that their family and work responsibilities would make school even more challenging. As they experienced success in their classroom and clinical experiences, they felt more confident.

The participants in this study were concerned about meeting their responsibilities as mothers, employees, and as spouses. These participants have prioritized their obligations as mother and parent and have attempted to fit school into their lives rather than fitting their lives into school. Decisions regarding courses, clinical experiences, and credits were made within the limitations imposed by their family and work lives. While they were willing to compromise to a certain extent, the participants frequently made decisions to stop schooling, drop courses, or reduce credits in order to insure that family responsibilities were met.

The focus group findings confirmed that anger, resentment, and disillusionment played a part in the process of RN-BSN education. Participants felt resentment when they were required to validate their nursing expertise through standardized examination as a means to obtaining college credit for their basic, non-credited nursing courses. Also of interest, although the participants did not identify changes in their direct care of patients, they did identify changes in their indirect nursing care practice patterns. Specifically, they described an increased willingness on their part to become involved in professional activities that they had previously not valued.

One area in which some participants were quite dissatisfied was academic advisement and curriculum planning. It was interesting to note that while academic advisement was an important issue to these students, they were uncomfortable addressing their concerns with faculty advisors. The lack of comfort with using group processes or administrative channels to effect change suggests that RN-BSN students may need support and mentoring in this area of group process and leadership. Additionally, it is worth noting that students are more vulnerable to errors in academic advisement when they are unfamiliar with school catalogs, policies, and procedures. Throughout the focus group sessions, participants emphasized their inability to be available for meetings outside of their credited class time. Simultaneously, the students perceived that academic advisement was critical to RN-BSN program success.

IMPLICATIONS FOR HIGHER EDUCATION

The research findings have implications for both educators and administrators within higher education settings. It is important to insure that effective and accessible academic advisement services are available to RN-BSN students. Academic advisors must be knowledgeable about the design of the curriculum, including course prerequisites, course sequences, and scheduling patterns. All student advisement sessions should be accurately documented so as to insure consistency in advisement regardless of the particular advisor. To improve the convenience of academic services, on-line services should be explored. Regularly updated web pages and electronic mail provide forms of communication that are easily accessible to the student regardless of the time of day. Electronic mail also provides an effective form of documentation. Learning to access such services is an important skill for students that can be utilized in other areas of professional nursing practice. Advisement programs should be available during non-traditional academic hours to accommodate evening and weekend class schedules and should be provided in non-traditional, convenient locations when necessary.

Educators should recognize that participants felt overwhelmed and underprepared for writing papers and completing assignments because they were unskilled with word processing, electronic mail, searches, and formatting papers. Non-credited classes covering these content areas may be viable opportunities for some students. Also,when selecting specific software requirements for assignments within a class, faculty need to make certain that there is some type of learning opportunity or tutoring assistance available to students who have not been exposed to that particular software program. Once students have been formally exposed to a particular software product, the content should be reinforced throughout the curriculum so that students develop increasingly expert skills with popular software programs.

Faculties and administrators should continue to provide flexible programs that are offered in a variety of scheduling options. This demand for flexibility was emphasized throughout the focus group sessions. The participants appreciated courses that permitted them to reduce the number of times they needed to be present on campus. This interest in reducing the time on campus must be tempered with a recognition that students value relationships with other students and faculty members. Such relationships may better flourish when there is opportunity for students and faculty to interact on a personal level and on a consistent basis through campus classroom activities.

When designing creative programs and curricular options, higher education administrators must be mindful of the costs associated with these changes. Several of the study participants pointed out that employer tuition assistance was inadequate to cover the expenses of nursing courses given the relatively high costs associated with clinical courses. The RNs were reluctant to apply for educational loans and frequently had to make difficult choices between family expenses and school expenses. Continued increases in tuition coupled with reductions in tuition assistance programs may make RN-BSN prohibitively expensive for many students.

Designing support services and educational programs that meet the needs of adult learners is imperative to the future success of higher education. The results of this focus group study serve to assist faculties and administrators in better understanding the concerns and priorities of the female RN-BSN student. The study illustrates how focus group methodology may be used as a strategy for describing student needs and experiences.

REFERENCES

Center for Research in Nursing Education and Community Health. (1996). *Nursing data review 1996.* (Pub. No. 19-6851). New York: National League for Nursing Press.

Juliana, C., Orehowsky, S., Smith-Regojo, P., Sikora, S., Smith, P., Stein, D., Wagner, D., & Wolf, Z. (1997). Interventions used by staff nurses to manage "difficult" patients. *Holistic Nursing Practice, 11*(4), 1-26.

Krueger, R. A. (1994). *Focus groups: A practical guide for applied research* (2nd ed.). Thousand Oaks, CA: SAGE Publications.

Krueger, R. A. (1998a). *Developing questions for focus groups.* (Vol. 3. in D. L. Morgan & R. A. Krueger (Eds.). *The focus group kit.* Thousand Oaks, CA: Sage.

Krueger, R. A. (1998b). *Moderating focus groups.* (Vol. 4 in D. L. Morgan & R. A. Krueger (Eds.). *The focus group kit.* Thousand Oaks, CA: Sage.

Krueger, R. A. (1998c). *Analyzing and reporting focus group results.* (Vol. 6 in D. L. Morgan & R. A. Krueger (Eds.). *The focus group kit.* Thousand Oaks, CA: Sage.

Lee, E. J. (1988). Analysis of coping methods reported by returning RNs. *Journal of Nursing Education, 27*(7), 309-313.

Morgan, D. L. (1997). *Focus groups as qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.

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