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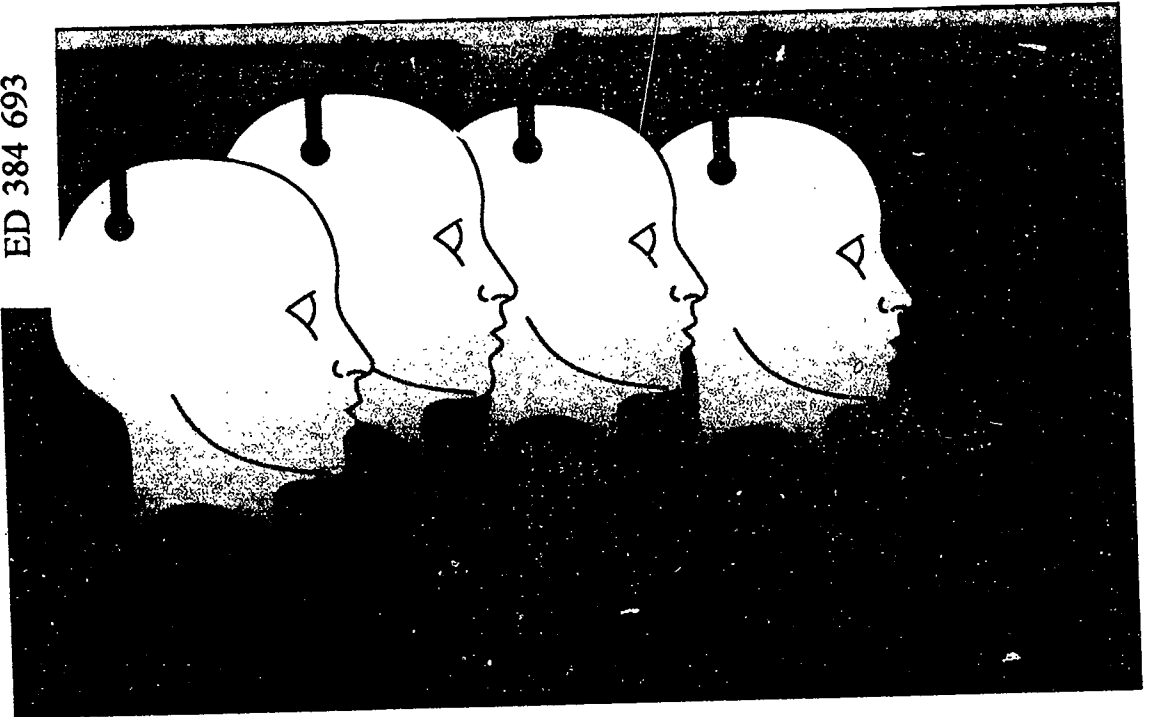
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ABSTRACT

This monograph is part of the study materials for the one-semester distance education unit, Adults Learning: The Changing Workplace A, in the Open Campus Program at Deakin University (Australia). It explores four complex and interrelated issues: how vocational educators view their own practice, the characteristics and aspirations that distinguish adult learners, an overview of learning theories drawn from psychology, and an expanded view of human learning. Section 1 views adult education in a social context. Section 2 provides an overview of three alternative approaches by which one can understand how vocational educators view their practice. It attempts to ground current practice in various views of the relationship between theory and practice as a basis for linking how one acts with how one views the world. Section 3 focuses on the concept of adulthood, exploring what it means to stand in life as a mature human being and what it means to engage in learning activities as an adult. Section 4 presents an overview of established learning theories drawn from the field of psychology. Psychological views of learning that have emerged over the past century are discussed in the context of two types of theories--behavioral and cognitive--each reflecting a particular approach to science with corresponding implications for how instruction is conceived. Section 5 introduces a number of themes that contribute to an expanded or enriched view of human learning. Focus is on reconceptualizing the learning process and reconstructing instructional events so that inherently human qualities can be recognized and nurtured within vocational education practice. Six readings follow: "Vocational Education in the 1990s" (D. Weir); "Emancipatory Vocational Education" (M. Rehm); "Training and Development Programs in Vocational Teacher Education Departments" (J. Leach); "Vocation as the Quest for Authentic Existence" (K. B. Homan); "Critical Adult Education" (D. Little); and "Praxis and Training" (D. Little). A 13-item annotated bibliography is appended. (YLB)

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ADULT LEARNING IN VOCATIONAL EDUCATION

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EEE700 ADULTS LEARNING: THE CHANGING WORKPLACE A
**ADULT LEARNING IN
VOCATIONAL EDUCATION**

DAVID LITTLE, JEAN McALLISTER AND ROBERT PRIEBE



Deakin
University

This book forms part of EEE700 *Adults learning: The changing workplace A* which is one of the units offered by the School of Education in Deakin University's Open-Campus Program. It has been prepared for the *Adults learning: The changing workplace A* team, whose members are:

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CONTENTS

SERIES INTRODUCTION	5}
ADULT LEARNING IN VOCATIONAL EDUCATION	7}
ADULT VOCATIONAL EDUCATION IN A SOCIAL CONTEXT	9}
HOW VOCATIONAL EDUCATORS VIEW THEIR PRACTICE	14}
THE COMMONSENSE VIEW	15
THE APPLIED SCIENCE VIEW	17
THE PRAXIS VIEW	18
CONCLUSION	20
ADULT LEARNERS	22}
MOTIVATIONAL ORIENTATIONS	23
THE ADULT'S EXPERIENTIAL BASE	25
THE ADULT'S SELF-CONCEPT	26
THE ADULT'S MARGIN FOR LEARNING	26
PHYSIOLOGICAL CHANGES OF ADULTHOOD	27
CONCLUSION	27
ESTABLISHED VIEWS OF LEARNING	29}
AN INTRODUCTION TO PSYCHOLOGICAL VIEWS OF LEARNING	30
THE FAMILY OF BEHAVIOURIST THEORIES	32
THE FAMILY OF COGNITIVE-FIELD THEORIES	37
CONCLUSION	42
TOWARD A PRAXIS VIEW OF LEARNING	44}
MUTUAL UNDERSTANDING	45
MEANING AND SPEECH	47
PURPOSE OF LEARNING	49
SOCIAL LEARNING	51
LATENT LEARNING	51
USING KNOWLEDGE	53
CONCLUSION	54
REFERENCES	55
READINGS	59}
1 VOCATIONAL EDUCATION IN THE 1990s—MORE OR LESS? D. WEIR	61
2 EMANCIPATORY VOCATIONAL EDUCATION: PEDAGOGY FOR THE WORK OF INDIVIDUALS AND SOCIETY M. REHM	70
3 TRAINING AND DEVELOPMENT PROGRAMS IN VOCATIONAL TEACHER EDUCATION DEPARTMENTS: A PRELIMINARY INVESTIGATION J. LEACH	85
4 VOCATION AS THE QUEST FOR AUTHENTIC EXISTENCE K.B. HOMAN	93

5	CRITICAL ADULT EDUCATION: A RESPONSE TO CONTEMPORARY SOCIAL CRISIS	
	D. LITTLE	103
6	PRAXIS AND TRAINING	
	D. LITTLE	121
<hr/>		
	ANNOTATED BIBLIOGRAPHY	133 >
<hr/>		
	ACKNOWLEDGMENTS	136 >
<hr/>		
	ABOUT THE AUTHORS	137 >
<hr/>		

SERIES INTRODUCTION

The nature and purpose of education in the workplace has been the subject of much debate in Australia in recent years. While the vagaries of local and international competition have led many firms to reconsider the role of their workforce and the training requirements this entails, governments have been equally keen to adapt existing education systems to the perceived needs of industry. Leading union bodies have been distinguished in this debate by their pro-active role, outlining the path by which a reconstructed industrial climate can win the nation a new place in the world economy.

The series of monographs of which this volume is a part explores the approaches to learning currently modeled within industry. In the process the question inevitably arises as to whether existing orientations and practices are in the best interests of the various stakeholders in the workplace.

The arguments developed in these monographs address themselves to a range of contemporary issues in industrial education. To date, prevailing approaches have rested upon narrow, instrumentalist notions of learning; in their different ways, the writers have set out to challenge this orthodoxy. In doing so, they highlight the silences—on questions of gender, class or ethnicity—that underpin the behaviourist outlook still dominant in the world of training.

In preparing this series of monographs, the course team has sought to address issues that are of fundamental concern to those involved in the complex and demanding field of workplace learning. It is hoped that, in its own modest way, the pedagogy we have developed can serve to exemplify a different notion of what industrial education might become.

ADULT LEARNING IN VOCATIONAL EDUCATION

SECTION 1

ADULT VOCATIONAL EDUCATION IN A SOCIAL CONTEXT

In order to capture its nature and role, adult vocational education must be understood in the broader context of education as a whole. As one of the major forces which shapes the way in which any society is maintained and transformed, education permeates all of the primary societal institutions including government, the economy, schooling, work, religion, sports, community and family life. Arrangements for learning are created and administered by most societal institutions for the precise reason that education has a profound influence on the maintenance and development of the forms of life of a society. This influence tends to be overlooked in a narrow, conventional view in which education is seen as a configuration of arrangements where selected individuals learn specified things for a particular purpose, without the societal viewpoint that accommodates the interconnectedness of various societal institutions and their functions.

Recently, a growing awareness of the enormity of social change and its implications—seen by many as a state of crisis—has resulted in a re-examination of education's social functions. The roots of the social crisis are believed to be within the present-day culture, in which power and money have attained a disproportionately high value in society while other values such as solidarity, reverence, honesty, integrity and charity have been significantly displaced in the minds and hearts of humankind. Evidence of this cultural imbalance can be seen in the contemporary arrangement of societal institutions in terms of their relative influence: the state and the economy (representing power and money) have eclipsed those institutions associated with moral and aesthetic values such as the family, religion and the community (Gibson 1986; Little in press). Further evidence is to be seen in the diverse manifestations of pathologies in human action where, in the drive to acquire material success and to achieve power over others, or as expressions of frustration in these pursuits, people engage in illegal,

immoral and inhumane acts including violence to themselves, to other people, to animals and to the environment. The concern here is that education has acquiesced to the role of perpetuating in an unquestioning fashion the current hierarchy of social values.

Society can be understood as having two functions: to produce the necessities of life (goods and services) through the institutions of work and government; and to foster humane, just and equitable social arrangements through such institutions as the school, family and church (Kosik 1976). An example of the crisis in contemporary industrialised societies is their overemphasis on producing goods and services at the expense of their fair and just distribution. While it is readily accepted that social change is inevitable, the great challenge in education is to facilitate that change in a desirable direction as opposed to accepting whatever change occurs, or trying to resist the inevitable. An approach to education that recognises the nature of the social crisis and the potential of society's members to influence the direction of social change is *critical education*. To some extent, the discussion on adult learning that follows should be viewed in the context of critical education—in other words, in the light of facilitating development of human capability to influence social change in accordance with the goal of a more fair, just and humane society.

Viewed from a critical perspective, established institutions in contemporary Western industrialised societies promote widespread public acceptance and perpetuation of the prevailing worldview with its overemphasis on efficiency of production. This preoccupation has become entrenched in our societies as established cultural tradition. The values associated with this tradition foster a societal condition in which an imbalance in human values and priorities, notably a pre-eminence of instrumental reason, has created disparities in human relationships and inequities in material and social wellbeing. So far in its history, the tendency in education has been to place primary emphasis on individual learning that ensures the maintenance of existing forms of societal life, while failing to encourage the human potential that would nurture the advancement of society along humane and equitable lines.

In contemporary society, where the motivating force of money and power lies at the heart of established cultural tradition, an individual's designated role within the labour market is evaluated in the coin of personal success and social worth. When people are introduced to one another, it is usual for two essential pieces of information to be exchanged—names and occupations—as a prerequisite to further interaction, and the relative assessment of one another's occupational roles in terms of prestige and income will probably shape the form and substance of the ensuing interaction. Although sociologists distinguish between the 'job' for which one is paid and 'work' or 'vocation' which represent activities in which we invest

our exclusively personal skill, craft, creativity and judgment, the contemporary worldview has blurred this distinction toward an implicit acceptance of the notion that occupation and work are one and the same (Homan 1986).

In apparent disregard for the expanded nature of work as the source of personal identity, self-esteem and social involvement, vocational education is commonly viewed in the narrow sense of training in preparation for a productive occupational role, with an almost exclusive focus on the acquisition of technical knowledge and skills to satisfy needed contributions to the economy. This restricted view exposes an implicit social distinction between education and training as they relate to higher and lower status occupations, as well as an overriding concern for satisfying the aims of the economy through the application of science and technology. No apparent shift from this conception is evident in most of the currently advocated approaches to improving vocational education. Some propose more highly specialised institutional training with state of the art facilities; some advocate greater emphasis on liberalising vocational education in formal settings with the inclusion of traditional arts and science content, leaving specialised technical skills to be acquired in the workplace; still others recommend inclusion of extensive life skills training in existing vocational programs (Rehm 1989 and Weir 1987). Implicit in these views and their variants is a commitment to the extension and enhancement of society's ability to produce and distribute goods and services with increasing efficiency, bringing to bear the most advanced scientific knowledge available, all within the context of the prevailing worldview. Vocational education with this orientation contributes almost exclusively to a drive for increasing efficiency in production.

To enrich the foundational orientation of adult vocational education so that it can contribute to both the production of goods and services as well as their fair, humane and equitable distribution requires an explicit reconceptualisation of work with its social as well as technical dimensions. The functions of an ideal vocational education are to develop the latter fully, but also to nurture the potential for learners to participate through their work in the transformation of society toward more fair and humane social arrangements. Such a critical vocational education would, in addition to ensuring mastery of required technical knowledge and skills, provide the conditions for learners to:

... produce and critique meanings such as self realization, alienation, and regard for others; connect work subjects to a variety of issues such as family and the environment; examine their own beliefs regarding the work they hope to do and its impact on society; and study the employment structures and ideologies that pervade modern life. (Rehm 1989, p. 118)

Our intention in this monograph is to explore the subject of adult learning as a basis for employing a more critical perspective in the conduct of vocational education. The problem we try to address is how to shape the practices affecting the vocational development of adults in order to accommodate better the kinds of concerns expressed by Rehm. How can vocational education be reconceptualised to go beyond its present preoccupation with technical skills and knowledge? And what can our views of learning contribute to this broader mission of vocational education for adults?

Recognising that the present condition of education is largely a direct reflection of the prevailing worldview in industrialised societies, to effect a major shift in how we conceptualise vocational education is no simple matter. As we mentioned earlier, education is inextricably linked to all facets of society, and educational changes cannot be approached without due consideration for the ensuing effects on other societal elements. However, this is not to downplay the need for or the feasibility of initiating educational change from within the institution. On the contrary, it is our view that certain improvements to the theory and practice of vocational education can only be effected from the inside—that is, by those engaged in the planning and conduct of vocational education services.

In some ways it is dysfunctional and possibly misleading to break down a practice into its constituent parts as a means of analysing a particular component; the inherent danger is that we may lose the holistic conception of what constitutes or contributes to practice. However, in our attempts to recast the practice of adult vocational educators from a perspective more consistent with critical education we have chosen to focus on one dimension—adult learning—which we view as central or foundational to all other aspects of our practice.

In Section 2 of this monograph we provide an overview of three alternative approaches by which we can understand how vocational educators view their practice. We attempt to ground current practice in various views of the relationship between theory and practice as a basis for linking how we act with how we view the world. The assumption here is that our actions as vocational educators (and as conscious, thinking individuals) are mainly determined by more general views that we hold about the world and the way in which we act and react within it. Essential to this discussion is how the relationship between theory and practice is perceived by vocational educators and how these various perceptions influence and guide us in our practice.

In Section 3 we focus on the concept of adulthood, exploring what it means to stand in life as a mature human being, and more particularly, what it means to engage in learning activities as an adult. An underlying view

here is that, in the past, too much of adult educational practice has been based inappropriately on knowledge drawn from educational research and experiences with children, with insufficient attention paid to the characteristics and aspirations that distinguish adults.

An overview of established learning theories drawn from the field of psychology is presented in Section 4. This section begins with a discussion of the relationship between learning and instruction to clarify their associated but separate features. Psychological views of learning that have emerged over the past century are discussed in the context of two broad families, each reflecting a particular approach to science with corresponding implications for how instruction is conceived. Illustrations are provided to assist vocational educators in examining their practices in light of the two mainstream approaches to psychological learning theory.

In Section 5 we introduce a number of themes which contribute to an expanded or enriched view of human learning. Drawn from fields such as communications, sociology and anthropology, these themes enhance the view of humans as thinking, purposeful beings, actively engaged in the formation of culture. The focus of this section is on reconceptualising the learning process and reconstructing instructional events so that inherently human qualities can be recognised and nurtured within vocational educational practice. Ultimately, vocational educators can play a more meaningful role in the reproduction of society toward more fair, humane and equitable arrangements.

SECTION 2

HOW VOCATIONAL EDUCATORS VIEW THEIR PRACTICE

As a foundation for exploring the subject of adult learning in vocational education, it would be helpful to establish some understanding of the practices of individuals engaged in this field. Possibly, to a greater extent than any other branch of education, vocational education is an extraordinarily diverse field involving institutional, employment-based and individual training initiatives. While the involvement of post-secondary educational institutions (e.g. technical institutes, community colleges and polytechnics) may appear to represent the most prominent interest in adult vocational education, in the Western world by far the most extensive investment occurs outside formal educational institutions in business, industry, labour unions, the military and a host of public service or governmental agencies. In the United States, for instance, business and industry alone spend between \$30 and \$40 billion each year developing their employees, an amount roughly equal to the total educational budget for all of the post-secondary institutions in that country, and they deal with more learners (Leach 1989; Eurich 1985). The escalation of technological growth and its impact on the workplace signal a continual rise in occupationally related training needs, forcing increased demands for expanded learning opportunities on all sectors of society.

In this rapidly developing and increasingly complex scenario, it is indeed a challenge to try to capture in a succinct fashion the established and emerging practices employed in the provision of learning opportunities for adults engaged in their vocational development. Since the focus here is on adult learning, we will avoid any in-depth exploration of program or instructional alternatives or the growing range of delivery arrangements and their associated hardware and software resources. Instead, in trying to impose some structure and organisation on a field which is seemingly impossible to categorise, we have chosen to approach the issue of how vocational educators view their practice by discussing the manner in which they associate theory and practice. We will attempt to show how the various

theory-practice views influence, if not determine, the ways in which vocational learning opportunities are provided.

The commonsense view

If vocational educators were asked to identify the single most important feature that distinguishes them from other educators, in all likelihood they would respond by saying that they are practical people. While they may acknowledge some shared characteristics with those engaged in liberal or general education, vocational educators view their roles as uniquely oriented to practical matters of the most serious nature; theirs is the responsibility of teaching people how to fill what is often seen as one of the most important functions within their lifespan—an occupational role. By nature, vocational educators must be practical people for it is this very quality that they must develop in learners to enable them to take their rightful positions in the workplace; it is this practicality that makes the wheels go round, that keeps the minds and machines of business and industry churning out the goods and services commonly associated with progress. In this hard-nosed setting there is limited space for fuzzy-minded theoreticians and freethinkers who are unable to contribute directly to efficient and productive workplace practices. The philosophical and the curious are better accommodated in the ivory towers of the universities or possibly the research laboratories; they would only clutter up and confuse the purposeful order of the productive workplace. Practical matters require practical people who are often attracted to vocational education through natural or self-selection. It is often assumed that individuals who are more comfortable working with ideas or theoretical issues would be persuaded in the direction of academic pursuits; conversely, individuals with a bent for practical problem solving and more functional skill development are expected and encouraged to pursue more technical interests in their career development.

If vocational educators were asked to account for their choice of such a practical orientation, a common rationale would probably be that as practitioners they are distinguished primarily by their commonsense. They are more active than passive, they are hands-on people who like to make things work and they take pride in accomplishment; progress to them is very measurable. Much of what they have learned has been gained through direct example and experience; the pain of past errors and the sweat of long hours of practice and persistence are their proud credentials. They see themselves as self-made individuals who have earned recognition in the workplace as valuable contributors and who have reached a level of proficiency which entitles them to expert status that carries with it the

honour and responsibility for the ongoing development of the occupation. The time and commitment that they have invested in practice over the years have qualified them as true practitioners. It is no coincidence that, in the parlance of labour unions seniority is construed in terms of years of service as a dues-paying member, for this is the hallmark of experience and commitment.

Within this commonsense view of practice there is a clear notion of how expertise is developed. Effective learning is seen to occur in practical settings in the field under the watchful guidance of a mentor who models efficient and effective role performance. The role of a learner is first to observe and clarify proper role performance as demonstrated by veteran practitioners. At the appropriate time the learner makes initial attempts to perform the task under close supervision, and through a series of trials gradually acquires both the job skills and appropriate attitudes in the context of a personal relationship with the mentor. While the mentor possesses a rich fund of knowledge through experience in the occupation, the knowledge itself is not seen as a distinct body of information to be applied, but rather as an intimate part of the task to be performed. In fact in most cases, experienced practitioners themselves are not fully aware of the knowledge they possess. Over time and extended use, their knowledge has become embedded so intimately within their practice that the two have become virtually indistinguishable; theory and practice have become interwoven and are seen as a whole. Because of its implicit status, theory is not seen as something that is applied but rather as commonsense that is gradually acquired in learning how to perform competently increasingly complex tasks.

This commonsense view is widely held among vocational educators. Institutional and industry-based instructors are selected primarily on the basis of proven competence in their technical fields. In other words, it is their demonstrated technical competence and their years of practical experience that fit them or perhaps entitle them to the responsibility of guiding new entrants to the field. There is an unquestioned assumption here that the ability to 'teach' is a natural extension of an individual's competence in an occupational field. Throughout much of adult education and particularly in those parts of the field concerned with occupational preparation, it is widely assumed that the wealth of knowledge and skill acquired by competent practitioners can be effectively and almost automatically transferred to learners through a modelling relationship that involves not only the imitation of task performance but also the emulation of a practitioner. Clearly, understanding the inner workings of this modelling relationship is perceived as less important than having acquired the skills and abilities to be transmitted through the modelling process. The key to this view of education is experience, and the more experience that is

acquired the more competent a practitioner becomes, finally approaching a point of saturation where so much experience has been stored up that the only moral thing to do is to share it with those who have less.

The applied science view

The commonsense view of vocational development is commonly criticised for its seemingly conscious avoidance of theory. While experience is generally recognised as an essential component in any educational undertaking, there is widespread suspicion even among vocational educators that it cannot stand alone. Experience has its greatest value in informing practice from the perspective of the past; to learn from experience requires looking back to reflect. But retrospection alone cannot offer a view of what lies ahead; regardless of how carefully it is examined, it can only reveal what has passed. It does not include an analysis which explicitly uncovers the generic aspects of practice that explain causes and effects and would allow for their prediction and control.

With the eruption of science in the eighteenth century, a radical transformation of humankind's understanding of the world began to occur. In earlier times, prior to the Protestant Reformation, knowledge was stored and distributed under the auspices of the church. Separate bodies of knowledge as we know them today did not exist: legal knowledge was not the preserve of lawyers, artistic knowledge was not the special purview of artists, nor was political and industrial knowledge situated outside the authority of the church as it presently is. Rather, in these earlier times legal, artistic, political and technical knowledge were all embedded in moral theory that was taught and monitored by the church. As a consequence of the scientific revolution, these other bodies of knowledge were separated from moral theory and developed, taught and applied by people outside the church.

The development of science as a way of knowing and acting is the hallmark of the industrial age. Through the process of science, laws governing nature were discovered that provided unparalleled opportunities for influencing nature toward the provision of material goods. One of the central ideas in science is that theoreticians engaging in science discover theory which can then be applied to the problems experienced in various endeavours such as business, industry, agriculture and so forth. The key notion within this applied science view is that theory drives practice—that is to say, theoreticians inform practitioners through the provision of scientific laws that explain and make possible the prediction and control of day-to-day technical activities.

Based on an applied science view, vocational education is organised to accommodate the separate acquisition of theory and its application. In this view, theory is initially acquired in a formalised classroom arrangement where fundamental scientific laws and relationships can be introduced and explained. Once the theory has been efficiently acquired in the formalised situation, the next step is to learn how to apply it, under the guidance of an instructor, in either real work situations located on the job site or simulated work situations arranged in shops or laboratories. The essence of this approach is the idea that a specialised body of knowledge developed by scientists in a given area contains the fundamental laws that should govern the practice of those in the field and that practitioners can look to these scientists for further developments in their practice.

The praxis view

Thus far, two established ways of thinking about the relationship between theory and practice have been considered. In the commonsense view, theory is not immediately recognisable as something distinct from practice, in that it has been developed through experience and as such is often not seen to play a foundational role. In this sense, the value of formal theory is not really recognised. Looking at the relationship between theory and practice from the applied science view, we tend to think of theory as a tried and true way of doing something that some bright person has discovered and that can be taught to someone else. In this sense, theory is thought to drive practice and instruction becomes a matter of motivating learners such that they will routinely put appropriate theory into practice as they are confronted with various problem situations in the workplace. This view of theory driving practice is the one accepted by most people who see themselves engaging in the conduct of science.

Another way that we can think about these views on theory and practice is in relation to the sites in which they are located. In the case of the commonsense view, the central location of origin is the workplace or at least a simulation of the workplace where, as mentioned earlier, expertise is cultivated through modelling and practice. Probably the best illustration of the commonsense view can be found in traditional apprenticeship models emanating from the earlier guild systems in which novices are indentured to work under the direction of seasoned artisans, learning their crafts solely through supervised applications on the job. In the applied science view, the separation of theory and practice requires a corresponding separation of learning sites where theory is typically treated in a classroom environment and practice is dealt with in a shop or laboratory setting, or possibly in an

actual work setting. In many contemporary institutional training arrangements we can see evidence of a shift from the commonsense view, and its preoccupation with on-the-job training, to an applied science model where even in cases like apprenticeship training, there is a conscious split between theoretical and practical instruction as represented by somewhat balanced requirements for classroom and shop or workplace instruction.

Praxis is an alternative version of the theory–practice relationship, the roots of which are to be found in philosophy (prior to the emergence of science) and which has resurfaced in the social sciences. On this view, theory and practice are like two forces in close interaction with each other; each time a theory is applied in a practice situation, which is in some way atypical, the standard practice must be adjusted or modified, resulting in new knowledge to enrich both the theory and subsequent practice. The idea behind the concept of praxis is that knowledge is always in an incomplete or unfinished state and that people (both theoreticians and practitioners) play a vital role in creating it, not just discovering it. So theory or knowledge does not represent some timeless, law-like thing that specialised people (e.g. scientists) search for, but rather, a growing and constantly emerging thing that both theorists and practitioners go about creating through their work.

This view is remarkable in that it broadens the role and responsibility for the development of knowledge beyond specialised theoreticians to include people who are typically considered to be on the receiving end of the theory–practice relationship. For example, in both the commonsense and applied science approaches to vocational education, learners are considered to be passive beings who are largely devoid of expertise and scientific knowledge and therefore incapable of contributing anything worthwhile to the further development of theory or practice, not unlike the typical role of the subject of scientific study. In the praxis view the relationship between the researcher and subjects (or the instructor and learners) is a dynamic one in which mutual interaction occurs.

There is a particular type of logic that supports the special view of the theory–practice relationship found in praxis. It is based on the idea that at any given moment whatever is accepted as real, true or right will continue to emerge and develop further as a result of tension-filled relationships or actively engaged forces which, over time, lead to qualitative change. Qualitative change is change that allows for more complex solutions which preserve the best of the old solutions while surpassing them with new ones that include previously unknown or unacknowledged factors affecting the problem. Inherent in the logic of praxis is the notion that theory and practice will continue to advance most effectively through attempts to mediate conflicts or contradictions.

An illustration of a praxis view can be drawn from a large multinational corporation which manufactures heavy equipment for earth-moving projects. Typical of modern, large-scale manufacturing, equipment design is largely the function of the corporation's research and development division. However, in the case of this particular manufacturer, there is an expectation that each sales and service depot in the field will identify annually a minimum of ten deficiencies on each major product line based on customer complaints and recurring service and repair requirements. Consistent with the notion of praxis, practitioners play a direct role in the continual modification of theory, thereby contributing new knowledge which is possible only through field applications.

In the evolution of society, actively engaged forces and the tensions between them are thought to account for ongoing change, which is a far richer view than the more commonly held one where the search is for an enduring solution or ultimate truth (which, of course, we never reach). Praxis is the means to capture the untapped power of thought and action that is released as practitioners make changes to theory to reflect the encounter of these actively engaged forces. To take the point one step further, thought and action could be a great deal more powerful if planned learning experiences were to include a provision for learners to learn about praxis.

The notion of praxis and its associated logic can be illustrated by examining the way in which the tensions between individuals and the organisations in which they work are mediated, and how this mediation leads to changes both in the individuals and in the organisation as a whole. From the mediation of personal biography and acquired experiences in organisational life and reflection upon those experiences, individuals acquire knowledge, skills and values through learning; these learning outcomes are reinvested into the organisation through the various ways people enact their organisational roles. An organisation learns as it is reproduced and transformed through the mediation of two actively engaged forces: on the one hand, its existing culture reflected in its established protocols and practices, and on the other hand the efforts of individuals to reshape their roles within the organisation. The meeting of these two actively engaged forces, from a praxis view, exposes the potential for them mutually to modify each other and, in the process, produce qualitative change.

Conclusion

It is worth noting that the particular views of theory and practice introduced in the preceding discussion do not represent an exhaustive treatment

either from an educational or a philosophical perspective. Rather, these views were selected for the purpose of providing a basic and admittedly general introduction to one approach and to thinking about how opportunities for adult learning can be shaped. This classification is useful for both novice and seasoned vocational educators as a basis for reflection on their own experiences (as learners or educators) in attempting to understand more fully the essence of those experiences.

While the three views have been presented here as separate and distinct ways of thinking and acting, and while they might appear in somewhat of a simple-to-complex or historically derived sequence, this in fact may be oversimplified or misleading. As practitioners responding to and acting within complex and changing environments, it is rarely possible to identify with one particular mode of existence. Instead, we tend to adopt a variety of stances based on the configuration of experiences we encounter. As such, different theories hold more relevance than others depending on the nature of our experiences. Nor is it entirely appropriate to think of these views in historical terms or in some order of priority. All of us employ a commonsense approach in numerous parts of our lives just as we recognise the value of scientific theory in analysing particular types of problems. Although probably less apparent, praxis too has undoubtedly played an important part in our personal and occupational development (this is in fact the quality that most readily distinguishes the expert craftsperson). The use of praxis, however, has been less prominent than the other two views in the design of formal educational programs. The point to be made with respect to developing an understanding of adult learning is that we must be conscious of the theoretical orientations on which we base the arrangement of learning opportunities.

SECTION 3

ADULT LEARNERS

'Adult' or 'adulthood' is difficult to define inasmuch as no particular arrangement of criteria, including age, legal designation, social independence, occupancy of a productive social role or other factors adequately represents the population of individuals who might participate in adult learning endeavours. Thinking about adults as learners is probably best done in terms of the notion of development, that can be portrayed as the quest of individuals both to survive in the present while simultaneously positively influencing the direction in which their own personal circumstances, their own social networks and their own society are evolving.

The capacity to survive involves adapting to the requirements of individual life and collective life such as the family, the community, the workplace and the institution that provide life's necessities. Adapting to these requirements means making simple and complex choices involving competing practical and moral issues, for example:

- 1 purchasing an environmentally safe household product or taking advantage of the sale price on a conventional product;
- 2 taking a student loan to attend university full-time or maintaining a job and taking courses on a part-time basis;
- 3 taking a vacation trip to visit elderly parents or reducing debts;
- 4 volunteering to coach a neighbourhood sports team or keeping time available to work overtime for extra income;
- 5 taking extra time to complete a special job at work or leaving on schedule in order to do an important errand over the lunch period; or
- 6 becoming a union shop steward or taking a supervisory training course to enhance the prospect of a promotion.

The continuing need to grow and develop involves expressing our unique potential to make a personal contribution to ongoing societal change. We can do this by offering, through communication with other human beings, a personal critique of those existing patterns of social life such as human assessments based on class, gender, ethnicity and ability; conventional

perceptions of sexuality, abortion, animal protection and environmental conservation; and views on the relative rights of people and property.

Much contemporary research in developmental psychology is based on the assumption that individuals progress sequentially through defined stages of age-related development. Some prominent theories of developmental stages are psychosexual development (Freud 1949), psychosocial development (Erikson 1982), ego-development (Loevinger 1976), intellectual development (Perry 1970), cognitive development (Piaget 1970) and moral development (Kohlberg 1982). Recently, theorists have questioned the predictability of orderly progress through these stages in that individuals do not always pass through them at a predictable stage of life; furthermore, societal change is occurring at such a rate that life stages and phases are being redefined during our lifetime. When societal change is set alongside aspects of adult development such as personality, intellect and morality, a new characterisation of the adult emerges (Evans 1985). During a lifetime, adults are faced with an expanding range of choices affecting the social roles they might fulfil, when they might take on different roles, how they might fulfil them and how to go about leaving and re-entering those roles. Traditional family roles are changing with the trend toward both parents working outside the home; single, unmarried individuals are becoming parents, people are marrying and delaying childbearing until later in life; people are blending part-time work and education as a preferred life pattern; and transition through two or more distinct careers is becoming more common, as is divorce and remarriage. This expanded range of options calls for concomitant advances in the kind of knowledge and the level of mental functions that adults need in order to accommodate stages of individual development and the societal influences that surround developmental events.

Individual development in the context of social life and societal change might be seen as the source of a group of attributes that characterise adults as learners and have varying implications for the practice of vocational education. These interrelated characteristics include but are not limited to the adult's motivation to learn, the repertoire of experience which an adult brings to a learning experience, the adult's self-concept, the adult's margin for learning and the physiological changes that accompany progression through adulthood (Knowles 1980).

Motivational orientations

Over a lifespan, humans experience periods of stability between developmental transitions; it is primarily during these transitions that adults are

most motivated to learn. The motivation of adults in institutionally sponsored learning experiences reveals itself at three levels: motivation to attend a learning event, motivation to engage in learning activities and motivation to persist until desired outcomes are achieved.

A body of knowledge exists to explain that no single factor, but rather a combination of factors, draws adults to attend institutionally sponsored learning events. Houle's (1961) typology identifies three central motivational orientations: goal orientation, activity orientation and learning orientation—that is, depending upon the nature of the needs and/or pressures an individual is experiencing at the time, the desire to learn in an instructional setting may be prompted primarily by a need to solve a problem (e.g. to perform basic automobile maintenance) or to satisfy a particular skill (or occupational credential) requirement demanded by an employer. At the same time, the expectation of social contact with others who share a common interest may represent an additional inducement to attend; and the prospect of experiencing the enjoyment of discovery that often accompanies learning adds yet another dimension of interest. It is unusual for only one of these factors to account for an adult's participation in a learning event. Boshier and Collins (1982) expanded this typology into six factors that motivate attendance at adult education offerings: social contact, social stimulation, professional advancement, social service, external expectations and cognitive interest. For each adult participant, these factors cluster in a particular hierarchy.

The limitation of this knowledge lies in its having been derived from surveying only those adults who have been drawn to institutional learning events, a group that excludes roughly eighty per cent of the total adult population in Canada and in many industrialised countries. Demographic studies profile adults who participate in educational offerings as being predominantly above the national average in educational attainment and socioeconomic status. These participation patterns are a concern in the administration of adult vocational education as programs are developed and appropriate learners sought and selected.

There are implications here for policy development in terms of how a state views the social functions of adult education. Rubenson (1983) analysed the Canadian context in terms of the relationship between prevailing assumptions about the value of using adult education to reduce the economic, political, social and cultural inequalities in society, and the kind of policies that determine the nature and extent of support provided for adult education. He proposed that, with limited resources, the state and other agencies are at present responding primarily to demands for adult education, but making little attempt to explore the learning needs of adults who are unable for economic, political, social or cultural reasons to articulate their needs as demands.

Pre-adult learners can generally be persuaded to engage and persist in learning the subject matter of their school curriculum despite its lack of apparent relevance to their everyday lives in the present and foreseeable future. Most adults, on the other hand, can be motivated to engage and persist in learning activities only when the learning outcomes are seen to be relevant and confined to a relatively immediate utility. This dimension of adult motivation has implications for instructional processes in vocational education in that learners will require some inducement or clarification to recognise the value of learning outcomes with technical and social dimensions as well as learning activities that are designed to develop the higher mental functions that will enrich their vocational lives.

The adult's experiential base

Through lived experience in a world characterised by socially constructed patterns of language, activities of work and leisure, and informal and formal social relationships, adults have acquired a well-organised set of personal meanings, values and skills. Through the process of development, adults acquire modes of attending, perceiving, remembering and thinking that are qualitatively different from those of children. The combination of the outcomes of individual experience and advanced mental processes has the effect of creating, defining and limiting their view of the world.

One implication for instructors to be derived from this characteristic is that our ability to communicate effectively and focus learning experiences meaningfully is enhanced to the degree that learners' experiences are available to some extent to both the instructor and the other learners in the group. This is accomplished at the outset of any program by having each learner introduce herself or himself with some biographical information about job, family, goals, aspirations and significant related experiences.

Another implication for instruction stems from the notion that each adult learner already possesses to some degree the rudiments of advanced levels of mental functioning that are the basis for leading their development through instruction. Adults are more heterogeneous than children in their level of mental functioning and thus more sensitivity is required on the part of the instructor in order to locate each person's particular position within a given stage of mental development. The challenge for the instructor is to locate this position by offering problem-solving opportunities that represent a level of difficulty that is within the learner's reach yet stretches her or his development. In so doing, the instructor can lead rather than validate development, thereby maximising each learner's particular position within a stage of development, and at the same time confirming the person's capacity to learn how to learn (Wertsch 1985).

The adult's self-concept

A central feature of the worldview of most adults is a 'natural' social order in which individuals are not related to one another on an equal basis; rather, we expect to find ourselves situated socially 'above' or 'below' other people depending upon the situation. Some examples of these frequently taken-for-granted relationships include:

- 1 in the family setting, parents holding authority over children;
- 2 in the workplace, supervisors and managers having power over rank and file employees;
- 3 in the legal system, lawyers and judges dominating plaintiffs and defendants;
- 4 in communities, the wealthy being seen to have status above the poor; and
- 5 among the less progressive, men assuming superiority over women.

Similarly, in a conventional educational setting, those who teach are often thought to be vested with power over those who learn. In an adult educational setting this principle tends to arouse antagonism in that adult learners have derived a certain degree of autonomy from their life experiences, which include occupancy of a variety of social roles outside the learning environment. As practical people, they can respect the knowledge and skill distinction between themselves and an instructor as well as reasonable institutional policies and protocols, however, they will resist an artificially imposed power disparity. In vocational education, the curriculum of knowledge and skills is enhanced by administrative and instructional processes in which the disparity of power relationships is reduced. Knowles (1980), for example, recommends that forty per cent of the time in an educational program be spent negotiating decisions about what to learn and how to go about learning as a means of validating the preconceived learning needs and expectations of learners.

The adult's margin for learning

Along the course of adult development, adults enact a combination of social roles that include son or daughter, spouse, parent, worker, citizen, homemaker, leisurite and learner (Super 1980). In contrast to the continuity of other accepted roles, the social role of learner in a formalised setting is, for most adults, intermittent or transitory, and thus occupies a subsidiary place in the established priorities. To relate adult social roles and instruction, the adult can be seen as carrying a 'load' (usual requirements of fulfilling the

responsibilities of multiple social roles), with a certain amount of 'power' (physical, social, mental and economic abilities, and time) to do so (McClusky 1963). Margin is the surplus power available to a person beyond that required to meet the demands imposed by self and society. The margin available to adults in an instructional setting must be anticipated and weighed by an instructor in selecting the scope of the program content and the types of instructional procedures appropriate for a specific group of adult learners.

Physiological changes of adulthood

Physical abilities decline with age, but the need to learn new things continues over the lifespan. Nearly every adult experiences some kind of physical restriction that can influence learning ability; restrictions which instructional design and management must accommodate. The major physiological changes associated with age are diminished visual and auditory acuity, and increased neuromuscular reaction time. We view the physiological effects of aging as imposing no significant limitation on the capacity to learn, however, the speed of learning may be reduced (Cropley 1977). Programs should be planned, and instruction designed and managed, in consideration of the anticipated limitations of the learning speed of the learners in a group.

Conclusion

With information, technology, social roles and social conditions changing at such a dramatic pace, the need for adults to engage in active, continuing learning projects is growing at a comparable rate. Vocational education must reflect the spectrum of learning needs that includes both the technical and social aspects of occupational roles.

When we undertake to develop and implement vocational education programs for adults, a major task is that of trying to conceptualise the potential group of learners so that their needs, abilities and other personal and social attributes are accommodated. Teachers in the primary and secondary school system have a much easier time getting a 'fix' on their prospective learners—developmental psychologists can characterise the average Grade 4 student with relative accuracy. Coupled with the conventional aim of schooling toward standardisation of educational processes and outcomes, teachers are provided with a fairly reliable basis for their practice. Adult learners present a far more diverse set of characteristics

which must be considered by program planners and instructors. The planner's responsibility is to anticipate the characteristics of a group of potential learners so that the nature and scope of the program can be expected to fit their needs, expectations and abilities. Instructors meet the actual learners face to face, and the success of the learning experience will depend upon how effectively their characteristics can be uncovered, and how flexibly the instruction can be managed to accommodate them.

The instructor establishes the physical and social climate of the learning environment and selects learning activities that will facilitate achievement of the program's intended outcomes. It is important for each learner to have a strong sense that a program was a satisfying experience, as well as having mastered the objectives of the course. Achievement of these two goals will be fostered to the extent that the instructional processes can provide for the learners' acknowledged and unacknowledged reasons for participating in the event, optimise the learners' prior experiences, value learners' personal worth and self-determination, recognise the competing demands for learners' time and attention, and adjust for limitations in participants' learning speed.

These legitimate concerns about adult learner characteristics must be set in the context of a conception of how learning itself occurs. What specifically distinguishes learning in a formalised instructional setting is the deliberate selection of learning activities designed to facilitate learning based on the way it is perceived to occur. Although a great deal of evidence has been accumulated and interpreted in making inferences about how learning takes place, it remains a point of contention among researchers as to precisely what is going on inside people while they are in the process of learning something. The following section will examine some of the different ways theorists have interpreted evidence to create particular views of learning.

SECTION 4

ESTABLISHED VIEWS OF LEARNING

Because people so often tend to see learning and instruction as more or less the same process, we begin this section by attempting to clarify the distinction between them. This distinction is necessary because the role of the instructor is central in facilitating the achievement of program outcomes—that is, for learning to occur. If instruction is to be an effective process, it must be grounded in an understanding of how human learning occurs and some notions of how instructional arrangements can facilitate the process of learning.

Learning is commonly thought to be a process which takes place within an individual and that may be intentional or unintentional on the learner's part. The result or outcome of learning is generally considered to be a more or less permanent change in human consciousness, where consciousness includes the mental activities of attending, perceiving, remembering and thinking as well as the feelings and actions associated with these mental activities. Learning is thought to result from the integration of mental development with social experience. In other words, as our personal (particularly mental) capacities develop, we are able to engage or interact with the world around us in ways which are increasingly meaningful to us; the more developed our capacities, the more we are able to reflect on our experiences and draw upon them as a basis for further thought and action.

Instruction, on the other hand, is seen as a process or a set of arrangements external to the learner in which the environment is deliberately shaped by an instructor during a particular learning experience for the purpose of guiding and enhancing the learning process with respect to predetermined learning outcomes. While instructors can modify an instructional environment (supposedly to enhance learning), they can only guide the learning process but they cannot control it directly as it is largely under the individual learner's control—separate and distinct from the instructional process.

It must be recognised that not all learning occurs in formal instructional settings. A great deal of unplanned learning occurs purely by chance in informal, everyday life setting as we interact with our world. While this

incidental learning tends to be occasional and unsystematic, it is nevertheless an important and essential feature of what it means to be human. The value of intentional learning efforts in formalised instructional situations is that the element of chance is reduced to a minimum. These instructional arrangements come into being when an organisation purposely creates situations in which the achievement of certain learning outcomes by specific people is under the direction and continuing supervision of an instructor with the intention of maximising the likelihood that learning will occur. These arrangements can be characterised as ones in which:

- 1 there is intention on the part of the learner to learn, and intention on the part of the instructor to provide instruction;
- 2 there is continuous supervision of the learning activities by the instructor;
- 3 there is continuous two-way communication between the learner and instructor;
- 4 the material to be learned is presented by the instructor in a form considered to be appropriate to the needs and interests of the learners; and
- 5 the duration of the instructor-learner relationship is pre-established and understood by both parties.

Formalised arrangements to facilitate learning are, in fact, distinguished by the deliberate order and intentionality imposed on the instructor-learner relationship.

As instructors and course developers, we base our decisions about the creation and management of an instructional arrangement on our views of how learning occurs. The field of psychology generated the earliest and probably still the most prevalent views of learning, but these views have recently been advanced by synthesising them with knowledge gained from research in other disciplines such as communications, philosophy, political science and sociology, to name just a few. A contemporary conceptualisation of how learning occurs leaves room for continued advancements. A preliminary examination of the major psychological learning paradigms is presented now as a point of departure for a more expanded conception of learning.

An introduction to psychological views of learning

It is not our intention here to provide an exhaustive treatment of the wide range of psychologically based learning theories accessible today. Such a discussion is well beyond the purpose or the capacity of this monograph.

Rather, what follows is a very brief introduction to the established families of learning theory that have emerged in the field of educational psychology over the past century. More in-depth treatments of these theories, their development and their major proponents are available in most general textbooks on learning theory.

The development of theories about learning has been a major preoccupation of educational psychologists since around the turn of the century. An extensive body of research has emerged to address issues such as how the learning process occurs, considerations which enhance or impede learning, different types or levels of learning, individual and societal forces on learning, and various problems which appear to limit learning potential, to list only a few. Without delving into the numerous branches and subsets of educational psychology, we are attempting to provide a very general structure as a possible initial step in trying to understand this extremely broad and diverse field. We caution that the following discussion of 'families' of learning theories represents only one of a number of ways in which the diverse collection of theories can be viewed. It is presented primarily for the purpose of illustrating some of the central themes that learning theorists have explored, the different positions taken on these themes, and ultimately how adherence to particular views impacts on how we conceptualise instruction.

The approach we have taken in presenting this overview is to group learning theories into two general categories or families. We are mindful of the dangers inherent in employing such a classification since there will certainly be conflicting opinions concerning the extent to which a particular theory falls clearly within one family or the other, and similarly, whether all of the major theories can be classified in this manner. Obviously, this two-family classification represents somewhat of an oversimplification, and as we discuss some of the more up-to-date learning theories in both groups it becomes quite apparent that some of them extend beyond the bounds of one family to merge with the other. We should remember that classifications are artificial things; they are not real or law-like, but despite their limitations they can be useful if they help us to perceive order in an otherwise seemingly unordered situation.

The approach to classifying learning theories used here is the one advanced by Morris Bigge in his textbook *Learning Theories for Teachers* (1982), where he discusses two general families: behaviourist theory and cognitive-field theory. What primarily distinguishes the two families is their perceptions of human learners. In behaviourist theory, humans are viewed as neutral or passive beings who function largely in reaction to their environment. In other words, what they learn is primarily a direct response to environmental forces acting upon them. In contrast, cognitive-field theorists view humans as self-directed beings who interact with their

environments with intent. As a starting point, we might reduce the complexity of the distinction by saying that the former see humans as reacting to the world and the latter as acting upon the world, bearing in mind that each of these views will be further elaborated in the following subsections.

The family of behaviourist theories

Possibly the most appropriate place for a discussion of any theory is to begin with its philosophical base—that is, the foundational tenets or beliefs on which the theory rests. In other words, what are the major views of people and the world which support or give rise to a given theory or set of theories? The earlier discussion on theory and practice (Section 2) may be useful to help ground or situate the various learning theories introduced here. In the case of behaviourist learning theories, the central view is that the world, as we see and experience it in a physical sense, is real. This view holds that the world and the things in it function according to natural laws and that the forces that bring about observable changes can be explained in terms of cause and effect. For instance, changing soil conditions in a region can be explained by wind or water erosion which can be explained by changing climatic conditions or farming practices which can in turn be explained by other preceding events and so on. Such a worldview is sometimes referred to as *scientific realism*, which suggests that conditions and events of the world can be explained according to natural or scientific laws which, when we are able to discover them, enable us to understand and influence the world. An important element within this general view is that humankind, as a natural part of the world, is also subject to naturalistic laws and that human behaviour is therefore understandable in terms of cause and effect relationships.

Transferring this natural science-based world view into the educational arena would mean that education should be organised and conducted according to relevant scientific laws—that is, the *science of psychology*. A common theme among behaviourists, particularly in the earlier developmental periods of this field, was the commitment to bring a logic and structure to psychology, and its explanation of human behaviour, that would equal the scientific respectability of the natural sciences—that is, with cause and effect relationships that could be observed, measured and replicated in a consistent and predictable manner. In short, there emerged within the behaviourist branch of psychology a view of humankind which was highly consistent with views of the world as explained by the natural sciences.

To portray the behaviourist conception simply, relating to the world

implies receiving signals or cues from the environment around us and then reacting to them. In behaviourist language this cause and effect relationship is depicted by the terms 'stimulus' and 'response'; another name for behaviourist theories is stimulus-response or S-R theories. When environmental cues or stimuli are received through our visual, auditory and other senses, everyone processes them mentally in a manner similar to the way computers deal with inputs in their central processing units; the elicited responses are direct products of the inputs. Through repeated encounters with similar stimuli, individuals establish patterns or habits of response which in time become automatic. This process of habit formation is referred to as conditioning which is essentially controlled by forces external to the learners—that is, by their environment.

From the perspective of learning as habit formation, instruction is seen as the provision of deliberately orchestrated conditions whereby learners are presented with selected stimuli intended to encourage desired results. If appropriate learner behaviours are elicited they are reinforced immediately through an act considered to be satisfying to the learners with the expectation that similar appropriate responses will become habitual in future encounters with the stimuli.

Applications of behaviourist learning principles can be drawn from many everyday situations such as in the training of animals—the family dog, for example. When the new puppy mistakes the living room rug for its toilet area, it is quickly picked up and taken outside or to the newspaper-covered area designated for the purpose. Conversely, when it finds a tree in the alley or some such appropriate place, it is rewarded with pats and praises. Parents too, although often unknowingly, employ a behaviourist rationale in teaching their children the limits of acceptable behaviour, particularly in the early years of childhood. In vocational education, we often apply behaviourist learning principles in promoting attitudinally related competencies such as safety practices, punctuality or other desirable work habits. An overarching principle of behaviourist theory is that learners can be effectively moulded according to some conception of what is 'appropriate behaviour' providing that they are presented with conditions which maximise relevant stimulus-response situations. Since learners are seen as passive or neutral beings, it is ultimately the responsibility of parents, teachers, supervisors and other individuals in modelling positions as well as institutions (e.g. the courts, the church and government) to define the limits and standards of appropriate behaviour.

We must caution that it would be somewhat misleading and simplistic to limit our view of behaviourist theories to the preceding introductory discussion. What we have attempted here is to capture some of the basic or fundamental principles of this diverse family of theories which in itself

contains various sub-branches with many disparate views. To illustrate some of the different camps in the behaviourist family, an introduction to some of the prominent theorists may be useful. Bigge (1982) provides a detailed treatment of the work of B. F. Skinner, Robert Gagne and Albert Bandura to illustrate three of the major subgroups within the behaviourist family of learning theories. We draw on Bigge's analysis in the following discussion.

Probably the best known behaviourist psychologist is B.F. Skinner, a self-proclaimed 'radical behaviourist', whose graphic experiments and teachings a few decades earlier made his name almost synonymous with behaviourist theory. Skinner's work was a major force in popularising the notion of conditioning as the primary means of learning. The simplest form of conditioning is based on natural reactions (or reflexes) which we have to certain phenomena (behaviourists would refer to these reactions as unconditioned responses or 'reflexive behaviour'). Reflexive learning involves substituting other stimuli for the one which originally drew the unconditioned response. However, the type of conditioning to which Skinner devoted most of his attention was what he called 'operant conditioning' where learners were conditioned by the consequences of their responses. When learners are presented with particular stimuli, their appropriate responses are followed by positive reinforcement. The principle here is that if appropriate responses are rewarded, they will become strengthened and more likely to become stamped in as habits.

In this view, teaching involves arranging situations in which learners can readily select the most appropriate responses and, through immediate reinforcement, develop them into habits or patterns. By arranging instruction in small steps, it is assumed that learners acquire an expanding battery of habits upon which further learning can be built. Inherent in this view is the notion that teachers have mapped out a sequence of steps for the learners to follow that will lead them to a desired state of competence. Skinner's research provided the foundation for instructional innovations such as programmed instruction and some early experimentation with teaching machines which were designed to systematise the instructional process and capitalise on the principles of conditioning through reinforcement. Many computer-based instructional programs bear a strong resemblance to Skinner's model.

Robert Gagne is a more contemporary learning theorist who employs behaviourist learning principles in conjunction with some which we associate with the cognitive-field theories. Gagne is concerned with what he refers to as 'the conditions of learning' (the title of his text); he distinguishes between 'internal' conditions which are present within the learner (attention, motivation and previously acquired capacities) and 'external' conditions

which represent features of the learner's environment (the stimuli and how they are presented to the learner).

Gagne's instructional approach is based on an information processing model of learning; he contends that learning will progress to increasingly higher levels if conditions have been arranged so that learners first master prerequisite capacities before moving on to more advanced tasks. In this light, an essential part of instructional design involves analysing a given competency in order to break it down into a sequence of progressively more complex tasks which culminate with the acquisition of the desired competency. To guide this process, Gagne (1985) has developed an eight-stage instructional sequence which progresses through:

- 1 motivating the learners;
- 2 getting the learners to attend to the instruction;
- 3 stimulating recall of related information that was previously learned;
- 4 presenting the new knowledge;
- 5 helping the learners practice remembering it;
- 6 facilitating the generalisation of the new knowledge to other relevant situations;
- 7 practising its application through performance; and
- 8 providing the learners with feedback on their performance.

Gagne's work has found widespread application, particularly in vocational education programs which employ a highly systematic design of instruction. Common examples are competency-based and computer-based programs in which instruction is presented in small units or modules laid out in careful sequences with each module involving a set of conditions similar to those outlined in the preceding paragraph. Probably no other branch of education has adopted systematically designed instruction to the extent that is currently reflected in vocational education. Throughout North America we find a growing number of post-secondary vocational institutions as well as industry-based training initiatives in which information processing models provide the basis for program planning, instructional design and assessment of learner competence. In the last three decades, the marriage between efficient development of technical-procedural skills and vocational development has become so pervasive that growing criticism by vocational educators is emerging in reaction to the perceived depersonalisation and dehumanisation associated with the highly mechanistic nature and preoccupation with efficiency of learning reflected in many contemporary vocational education programs (Rehm 1989; Weir 1987). It appears that the wholesale adoption of what William Spady (1977, p. 9), with reference to competency-based education, has termed 'a band-

wagon in search of a definition' is coming into question even among those who traditionally have been its strongest proponents.

Albert Bandura is another of the more contemporary learning theorists who, like Robert Gagne, probably should not be considered a pure behaviourist in the traditional sense of the word, but rather as someone who has helped bridge the gap between behaviourism and the family of cognitive-field theories. Largely known for his pioneer work in social learning theory, Bandura moves away from the reactionist or responsive conception of learners established by earlier behaviourists and alternatively offers a view in which individuals and their environments exist in a condition of dynamic interaction where each has a continual affect on the other. Consistent with other behaviourists, he acknowledges that our learning is affected by the forces and conditions of the world around us. However, he parts company with main-line behaviourist theory when he goes on to say that individuals also affect their environments.

In Bandura's view, two key elements are *experience* and *expectations*. Experience is significant because it provides the basis on which we become acquainted with environmental stimuli (including those that emanate from people and ourselves) and the consequences of various responses. Through our own experiences as well as the experiences of others (hence the emphasis on *social* learning), we learn to expect certain responses from particular stimuli. This notion of anticipated consequences Bandura terms *insightful expectation* since we develop insights into the consequences associated with particular situations or forces.

Unlike traditional behaviourists, Bandura sees in learning a major role for the process of reflection, for it is through reflecting on our own and others' experience that we develop insights into interactions between individuals and their environments. Reflection enables us to consider possible consequences and, if necessary, change some of our established behaviour patterns. If humans were completely rational beings we would change our behaviour every time we see some danger in the consequences of our actions. Because we are not purely rational in all aspects of our behaviour, however, we often continue along certain patterns even though we are aware to some degree of the consequences. The social factors again emerge since none of us is without influence from the groups to which we belong. Bandura provides a broadened definition of reinforcement which includes direct or external reinforcement from the environment in much the same light as did earlier behaviourist theory, but he goes on to identify vicarious reinforcement which derives from knowledge of the consequences of others' actions, and self-administered reinforcement which is largely the product of reflection.

The major implication of social learning theory is that the process of learning can no longer be recognised purely as an internal set of events that

occurs within us as a reaction to environmental forces beyond our control. Rather, our participation in social organisations (e.g. families, communities, institutions or other informal collectives) provides for a complex set of interactions from which we cannot extricate ourselves; we are simultaneously affected by our social environments while, at the same time, we participate in their creation. Returning briefly to the previous discussion on theory and practice, we can detect in Bandura's work a sense of movement beyond the applied science view to a position more consistent with the notions of praxis.

Reflecting for a moment on the central themes of Bandura, Gagne and Skinner, it becomes apparent that within the family of behaviourist theories there has been a shift away from the earlier hardline of conditioning, although some of the principles (e.g. reinforcement) have been retained. On other issues (e.g. insight, reflection, interpretation of meaning and social interaction) there exists considerable disagreement among theorists in this family.

The order in which the preceding examples were presented was not intended to reflect a picture of the historical evolution of this field. Rather, the three theorists were chosen to illustrate some of the major camps which exist within the family of behaviourist theorists, all of which have had and continue to have a significant impact on educational practice. Of the three psychologists, B.F. Skinner is probably most readily associated with traditional behaviourist theory. The remaining two, Robert Gagne and Albert Bandura, should be seen as theorists who retain some of the behaviourist principles as essential elements within broader theories which are intended to account for factors that extend beyond the bounds of stimulus-response conditioning to embrace dimensions of the family of cognitive-field theories. It will be useful to bear in mind the common basis as well as some of the disparate views associated with behaviourist theory as a means of comparing and contrasting the two major families of psychological theories. We will return to this issue following the subsection on cognitive-field theories.

The family of cognitive-field theories

In contrast to the predominantly positivistic views held by the behaviourist school of learning theorists, cognitive-field learning theories take the position that reality and truth are *relative* phenomena. That is, reality is what each of us perceives and understands at a given time, recognising that we may have different perceptions and understandings, shaped by our lived experience and our needs and goals. Remember when the reality known as

the universe was confined to the limits of our own solar system. Today, that reality includes the strong possibility that intelligent life exists in solar systems billions of light years beyond our own. Similarly, truth is not seen as an indisputable and eternal phenomenon that is out there available to be discovered; rather, because it comes from human experience, it represents only the best understanding that competent people can reach at any given time, accepting that what we are given to believe to be true today may well emerge at some time in the future as a richer conception when more information is available and its interpreters have acquired different insights. For example, there was a time when women were believed to be genetically inferior to men; within this century, this view has undergone dramatic revision and ensuing social practices have altered accordingly. Psychologists who hold a relativist worldview reject the existence of an objective reality or universal truth, since both are seen to rely on the meanings that people attribute to their experiences as they interact purposefully with their physical and social environment.

Cognitive-field learning theorists are trying to find out how people come to understand themselves and the world around them through their interactions with it. For these educational psychologists, there is a uniqueness that characterises each learner which comes from the special way he or she engages in purposeful interaction with that portion of the environment being attended to at any time. The term *life space* is used to capture this unique way of being in the world—it conveys the special quality that applies to individuals when they are engaged in the psychological events of thinking, dreaming, hoping, acting and learning. This notion accounts for the different ways that individuals make sense out of any physical or social situation because it takes into account each person's different past experiences, present circumstances, needs and aspirations for the future. All of these personal characteristics come into play when an individual is perceiving and interacting with a situation such as a learning experience in the present. This concept of 'everything depends upon everything else' is the essence of the term *field* in cognitive-field theories.

The notion of *purposefulness* or *intent* implies that each person is goal directed with respect to particular things about her or his life that are seen to be worthy of care. These things include, of course, the essential human needs for food, shelter and safety, but go beyond to include the priorities to which individuals give particular attention (e.g. career aspirations, pursuit of prestige, protection of values, ideals and interests, concerns for personal appearance, regard for conditions in the immediate personal environment and a host of other issues that are personal considerations). Furthermore, the nature of different environmental situations, as individuals encounter them over time, will alter the arrangement of these considerations in terms

of priorities. In other words, a person's primary concerns will be different when in a job setting than when playing in a football game, or having just discovered that her or his new car has been stolen. Similarly, a wealthy individual would hold a different set of concerns over the theft of the car than a person who could barely afford its purchase in the first place. Which of the elements in any given situation are perceived and how they are perceived vary in relation to the person's need to preserve and enhance her or his developing self. What this means is that one cannot assume that any two situations will be psychologically consistent for any individual, nor that any situation will be the same psychologically for one person as it will be for another.

Although we have only touched on a few of the major themes of cognitive-field theories, they can be seen to have important implications for learning and teaching. From this perspective, learning is concerned with *insights* which are connections or patterns of relationships among the elements of a situation that enable one to 'see' how to solve a problem. Insights, also described as *cognitive structures*, are acquired or changed through interaction with the physical and social environment, acknowledging that those interactions are unique to each individual in terms of the way he or she interprets the environment—the meanings which exist for that individual. Insights have a personal dimension in that they must be seen by the learner to be significant in pointing to a course of action that will lead to that person's goals. By emphasising the discovery of meaning as the essence of learning, we preserve its holistic quality in which motivation, knowledge and creativity are inseparable in both its process and outcome.

Meaning is discovered through the accumulation and rational organisation of insights, worldview, expectations and patterns of thinking. In this process, one learns to see differences among the members of categories of things (trees are composed of spruce, fir, oak, aspen, willow, maple and so on); to see common characteristics among things that link them within a category (carbon monoxide, freon, dioxins, oil and insecticides are all environmental pollutants); and to establish functional relationships among categories that suggest potential strategies for effective action in the direction of one's goals. The challenge for teaching is to accommodate the uniquely personal nature of everyone's life space, a stance which implies that a learning situation will be perceived and interpreted differently by each learner interacting with it. Another important feature of the learning situation is the life space of the teacher. For both the teacher and the learners, different forces are operating with respect to personal goals and interests. What may be an inducement for one may present a barrier for another. What may capture the interest and attention of one may be irrelevant to and ignored by another. In many ways, the life spaces of adult learners can be

predicted to be infinitely more complex and diverse than would be encountered in a class of children. The concept of life space must be a primary concern of teachers in designing and implementing learning opportunities.

A prominent learning and developmental psychologist in the family of cognitive-field theorists is Jerome Bruner, whose name is associated with the notion of *discovery learning*. His research has focused on how individuals take in information from the environment and what they do with it in the process of translating it into new insights or understandings that they can use in acting competently in relation to their goals. Bruner sees cognitive development as the construction of a model of the world which enables an individual to make sense of the environment and to move toward her or his personal goals within it. In light of the accelerating rate of societal and technological change, he believes that education needs to place more emphasis on encouraging learners to develop generic strategies for solving problems—*learning how to learn*—rather than expanding the curriculum solely in quantitative terms. By creating learning environments that foster the self-direction of learners as they explore a situation or problem and then arrange, rearrange and transform evidence so that they can gain new insights, they experience a sense of achievement in making their own discoveries that becomes an internal source of motivation for further learning, even beyond the formal setting. Rather than equating feedback on success and failure with a system of extrinsic rewards, learners who are encouraged to try out hunches and intuition use feedback as informative guidance. In this way learners are fully engaged in an active role in the learning process, and the problem-solving strategies they construct are more transferable because they have personal meaning and value in terms of the learners' own purposes and intentions.

An important branch of the family of cognitive-field learning theorists is the group who have taken a *humanistic* approach to personality, behaviour and learning. Carl Rogers (1969) is probably the most prominent of this group and his principles, although initially oriented to counselling, were realigned as a basis for learner-centred teaching. Abraham Maslow's (1954) *hierarchy of human needs* is another key contribution to humanistic psychology. These psychologists reject the dehumanising stance of behaviourists who equate people with automatons that can be shaped into functional members of a better society if 'experts' decide what is to be learned and control behaviour change by scientifically manipulating the external learning environment. Humanists place a high value on each individual's innate need to achieve personal worth, dignity and creativity, and believe that from the nurturing of this potential a better society will evolve. Building on the foundations of cognitive-field theory which emphasises the individual nature of perceptions and meanings in human experience, humanists

feature human needs for self-actualisation as the primary influence on people's choices of behaviour, and the energy that directs and supports learning. For each person, the view of self develops from direct experiences with the environment and impressions gained from the actions of other people. When the values derived from these two sources are inconsistent, a person experiences conflict and confusion, because perceptions of and reactions to the environment are governed by a person's self-image.

These principles are important concerns in education, for if learners are to function in a healthy, creative manner their personal worth must be seen to be valued in the learning environment. Humanistic teachers keep their exercise of power and control to a minimum, adopting the role of learning facilitator which is characterised by three essential attributes.

First, facilitators must be *sensitive*, which means trying to see reality in the way each learner is seeing it. This requires a great deal of listening effort which is difficult for many teachers who are accustomed to an expository approach to instruction. Listening validates learners' opinions and feelings, disposing them to reveal their ideas, questions and concerns to the group and, more importantly, to themselves. As learners verbalise their interpretation of the meaning of new information to a nonjudgmental human audience, they are actually testing the logic of their way of connecting ideas by hearing themselves; most of the time, logical discrepancies will be recognised by the learners themselves. Second, facilitators are *accepting*, which means conveying confidence in the personal worth of each learner. This is achieved by signalling an assumption of social equality in the setting so that learners are encouraged to express their perceptions and understandings without inhibition. A climate of acceptance allows learners to go about learning in their own ways and styles, with guidance and direction available rather than imposed. Third, facilitators are *real* or *genuine*, which means that they model unselfconscious behaviour in their conduct in the learning situation. This implies presenting oneself authentically without the barrier of a mask associated with a role or an image, which has the effect of obscuring the real person and limiting the possibility of achieving the learners' trust.

Most adults approach formalised learning experiences expecting the same bureaucratic, highly regimented, authoritarian milieu that they associate with schooling or the workplace. They are frequently taken aback when they discover the very different climate in an adult learning setting that invites them to be themselves as they engage in the various learning activities. Adult educators recognise the importance of a relaxed, informal, nonthreatening social atmosphere in which interactions reinforce the individual worth and self-determination of learners and ensure maximum congruence between experience and self-image.

Whereas the behaviourist view of learners emphasises their uniformity which points to the efficacy of standardised teaching approaches, cognitive-field psychology features the individual differences among learners that require shaping learning situations to foster these differences. Here, an individual way of perceiving and appropriating reality is a valued quality in learners, and is seen to be the source of true creativity. The self-motivation which is generated by successive acts of discovery is believed to be the fuel that will sustain individuals' curiosity and drive for learning throughout life.

Conclusion

In this brief overview, we have introduced two major families of educational psychology, illustrated by a few key theorists who represent variations of thought within each family. At first encounter, the oppositional world views that underpin the two groups would seem to preclude any potential for collaboration or reconciliation of positions. Readers will be disappointed if they expect an evaluation of the two, presenting one as the more appropriate basis for vocational program planning and instruction. Acknowledging the best of the applied science perspective, we must have some faith in existing knowledge with respect to reality and truth if we are to perceive any order in the universe. This knowledge base provides the starting point for the sundry choices we make in our routine and professional activities. What is important, from the praxis perspective, is that we do not conceive this knowledge as being complete or unchangeable, as history has shown repeatedly the evolving character of natural and behavioural 'laws'. The earth is not flat; the atom can be split; mental illness is not caused by evil spirits; and we have only begun to fathom the workings of the human mind. Reality and truth will continue to emerge as the contradictions arising from the application of theory in practice are mediated.

Useful implications for learning in vocational education are to be drawn from both schools of educational psychology. Clearly, some aspects of human learning can be generalised and translated into standardised approaches to instruction. There is considerable evidence to support people's capacity to acquire elementary mental skills and to adopt some attitudinally related behaviours relatively efficiently through the use of behaviourist models of instruction. On the other hand, there is considerable evidence that factors existing within individual learners that have developed and continue to be shaped by lived experience, including formalised learning experiences, have a great deal of significance in the learning process. These factors influence not only what is learned and how readily

it is learned, but also what value the new learning is perceived to have for the person and how the learning experience affects the person's self-image and capacity to continue learning independently.

It is apparent that educators are attempting to reconcile, through their practice, aspects of both behaviourist and cognitive-field theories. Caught as they are between organisational imperatives of instructional efficiency and resource conservation on the one hand, and their own understanding of the relevance of intrinsic learner characteristics on the other hand, program planners and instructors are creating models of vocational education in institutions and employer-based settings that mediate diverse learning principles.

SECTION 5

TOWARD A PRAXIS VIEW OF LEARNING

Since the turn of the century, the views of learning advanced by educational psychologists have provided one of the driving forces that have shaped the development of formal education as we know it in the Western world. The application of these views, particularly in elementary and secondary education but also to some extent in various adult educational settings, have had a direct impact on almost all facets of 'schooling'—instructional strategies, curriculum development models, learner assessment programs, counselling services and teacher-learner interactions, to mention only a few immediately obvious examples. The principles of psychologically based learning theories have become so entrenched in education that teachers and learners alike have almost universally accepted them as standard practice. We see these principles transferred to the home and workplace where reinforcement, modelling and feedback, incorporating to some extent concern for individual self-worth and self-determination, are applied as faithfully as in classrooms to the point that they have assumed the status of unquestioned traditions.

In recognising the need to develop a richer and more up-to-date view of learning, we do not devalue the contributions to our knowledge of learning from educational psychology; until recently educational psychologists were almost the only formal group engaged in any concerted research endeavours concerning the subject of learning. Most of what we currently know on the subject is owed to them, and without their contributions it is conceivable that we could still be viewing learning from a commonsense perspective.

As we could see in the discussion of the more recent psychological theories (in both families) in the previous section, there has been a discernable move toward extending their perspectives beyond the limits of the applied science view. As this widening of horizons around the continued development of learning theory occurs, we find a number of other disciplines and fields of study from which some forward-looking views of learning are

emerging. What is exciting about these developments is the potential they hold for reconceptualising learning more in line with a praxis view. What follows is an introduction to six themes, each of which enriches in some way the established psychological views of learning, and offers as well, implications for the instruction of adults (Thomas & Ploman 1985).

Mutual understanding

Since instruction is a particular type of communication, it makes sense that a discussion of principles of learning and instruction should begin with communication theory. Until very recently, the established model for explaining communication was one where a sender was seen to communicate a specific type of message through a specific channel to a receiver. This SMCR (sender-message-channel-receiver) approach is based on the idea that effective communication requires that the sender:

- 1 crafts the message carefully to ensure that meaning is clearly articulated;
- 2 selects and employs an appropriate channel based on the nature of the message and the characteristics of the intended receivers; and
- 3 obtains confirmation from the receivers as to whether they received the message (feedback).

The key assumption here is that if a message is logically honed and transmitted in an appropriate fashion, the receivers will automatically hear the message. Feedback from the receivers allows the sender to determine whether, or to what extent, the message has been received and, if necessary, to resend the message in a more appropriate form. The nickname for this model is the 'hypodermic needle' which conveys the one-way feature of the process. This model has been used far and wide, most notably to underpin the efforts of the US Agency for International Development (USAID) in its efforts to export agricultural technology.

Within the last few years, researchers associated with USAID have developed an alternative view of communications referred to as the convergence model (Rogers & Kincaid 1981). This model of communication is based on the notion that the sender and the receiver come together or converge to negotiate temporary states of each others' meanings. The parties' meanings are thought to originate in the reference group or community to which each belongs and to reflect the established cultural traditions of the group. This is not to say that individuals do not influence a group's meanings, but rather that meanings reside within the group and are initially transferred to individuals who, upon receiving the meaning, may in turn influence the group meaning.

From this perspective, the notion of feedback is replaced with one of *feedforward* where before and during message transmission the sender anticipates the receiver's reference group with the idea in mind of adjusting the message to some degree to reflect the receiver's meaning. By the same token the receiver, when responding to the sender, must take into consideration the sender's meaning which is also embedded in a reference group. Now what were originally thought to be senders and receivers become *transceivers* in that both parties to the communication send and receive simultaneously while making adjustments to accommodate the other party's meanings. The reason this view has been named the convergence model is that transceivers (formerly called senders and receivers) play an active role as they attempt to fuse meanings of both and thereby approach a richer understanding as a result of the process. The message itself is constantly emerging, always holding potential for further development. This is a remarkable view of communication, wherein progress toward fuller understanding is unlimited.

The fundamental assumption here is that there is a potential in communications for the content of the message to be influenced not only by the person originating it, but also by the intended transceiver. This illustrates a mutual modification of theory and practice, in that the person originating information (the theorist) 'hears'—by interpreting verbal and extraverbal cues—the other transceiver's (practitioner's) reaction to the message as it is being conveyed (*feedforward*), and adjusts the message to reflect the other's input, rather than trying to adjust the other transceiver's views to fit the message. The originator tentatively tries out the message in advance to intended transceivers in order to see how it might be accepted. The notion of *feedforward* contains the opportunity of changing the message to accommodate not only individual transceivers, but also their reference group, thus enhancing the potential for mutual understanding. This potential is not inherent in the idea of feedback which is limited to confirming after the fact—after the message in its original form has been sent—that the receivers have heard it to some degree.

Perspectives on instruction could be enriched by adopting the assumption that senders (instructors) often stand to change as much if not more than receivers (learners). Were the imperative of the convergence model—always to negotiate in advance with the group the part of the message which the intended receivers would be interested in hearing and how it must be reconstructed to reflect these interests—to be followed, every message would hold the potential for developing into something more complex. This is quite a different situation from the one in which the sender hones the message, selects the proper channel, sends it and obtains feedback.

When we hear educators speak of 'delivering programs' or 'presenting instruction', it conveys the impression that learning is accomplished by simply receiving a commodity, that the instructor's role is to deliver and the learner's is to receive. In this conception there is no growth potential for instructors because presumably they already possess the appropriate knowledge, but in the convergence model instructors must step down from their traditionally elevated position to interact with learners as co-inquirers and codevelopers. Adult vocational education settings offer particularly rich opportunities for developing convergence-style interactions since the learners can readily draw from their experience and various role orientations to contribute to the ongoing development of new meanings. In this light, instructors can no longer be seen as providers nor can learners be characterised as detached consumers; the convergence model, with its goal of mutual understanding, offers a dynamic view of the growth of knowledge as well as a view of people in a more active role in the production of knowledge.

Meaning and speech

For a group of individuals (e.g. those in an organisation, institution or community) to collaborate in the pursuit of common purposes they must operate within a shared reality or worldview, which requires that they develop relationships with people or things through the use of language by naming people, goals, processes and things. In using language to establish common agreement, there is always a tension between meaning and speech which reflects the limitations of language to capture meaning that is multidimensional. From one perspective, this tension-filled relationship between what is meant and what is said can be viewed as an inherent weakness or inadequacy in speech which must be overcome through the achievement of increased precision. This view is predicated on the notion that there is a universal meaning out there that is attainable. From another perspective, the incongruence of meaning and speech is the source of constant and unlimited evolution of meaning itself. The tension-filled relationship between what is meant and what is said is seen as an inexhaustible resource for enriching social reality through the process of exploring and uncovering people's meanings. On this view, the inherent strength in the gap between speech and meaning is the potential it offers for enhancing the way social relationships are structured and facilitating the ongoing development of any social group through language clarification.

Individuals take on the values and vision of an organisation in order to play a part in it. The organisational view they adopt becomes part of the

structure of their minds through the influence of the language being used, and modelling on the part of other organisational members. Returning to the point about praxis as the tension-filled relationship between theory and practice, this relationship can be viewed in an additional way. Not only is theory never a perfect fit with practice, but what people mean is also never fully or accurately expressed by what they say. The words used to describe and prescribe an organisation's practices are rarely congruent with the meaning inherent in its vision and values. By examining strategically the language used in an organisation by people engaged in their practice, the meaning of current practices can be uncovered. In this way opportunities are created to improve those practices as well as the vision and values that guide them.

Sociologists have argued that social reality is shaped by the language used to describe it (Berger & Luckmann 1967). In other words, how we talk about something illustrates how we perceive it, and in turn influences how we interact with it. This construction of reality is an ongoing process in which people participate, rather than accepting it passively as impersonal and impervious to individuals' influence. There are several instructional processes for facilitating this ongoing construction of organisational reality such as action science (Argyris, Putnam & Smith 1989), action learning (Revans 1982), activity learning (Wertsch 1985), reflective practice (Schön 1987) and action research (Kemmis & McTaggart 1988). These instructional processes occur in small groups where people periodically examine their practice through an analysis of the language they are using. These processes are somewhat different from the ones used in typical instructional sessions in that the goal is to create new practices from existing ones, not to learn previously identified new skills. This exploration often turns up differences between what individuals mean and the language they use to describe their practice. The difference that is uncovered becomes the basis for establishing new practices that overcome some of the tension between theory (what is meant) and practice (what is done, coordinated through language).

In the context of instruction, conventional language for describing educational outcomes and processes is replete with words drawn from the jargon of production and systems theory. We speak of 'stand-alone modules', 'modular mobility', 'training treatments', 'feedback', 'pilot testing', 'designing delivery systems' and 'grade point averages', all of which shape perceptions that lead us to take an overtechnicised approach to instruction and learning. There is no apparent place within the limitations of the technical metaphor for individual variations in learning patterns, mutual understanding, feedforward or the quest for personal identity. Only recently are groups within the community of vocational educators beginning to re-examine their language as a first step toward reconstructing the values, practices and social relationships that characterise it.

The challenge for instruction in employment-based settings is to provide periodic opportunities for employees to step back from their practice and, as a group, reflect on it through an analysis of the everyday language they use to coordinate their practices; it can be viewed as a form of participatory evaluation. There are positive implications for motivating learners to enhance production when they learn about the role that they can play in the reconstruction of their practice.

Purpose of learning

The view here is that people learn for two reasons: first, they need to survive by adjusting to the demands of the social environment in which they live—fulfilling a variety of social roles in a manner that is consistent with established cultural traditions; and second, they need to create an individual identity that gives personal meaning to their life (Hall 1985). When we look at formal educational offerings it becomes apparent that they reflect both of these purposes. For example, within the school curriculum we can identify numerous planned learning experiences in which children learn the conventions of society which are necessary for them to negotiate their way in the culture but, in addition, they are also provided with opportunities to develop their unique talents and interests that contribute to their personal identity. There has not always been an adequate balance between these two needs, and until fairly recently the prevailing bias in education has expressed itself in a heavy emphasis on social integration with only marginal concern for the development of personal identity.

The need to survive through both adapting to society and developing a personal identity continues throughout adult life. The process by which individuals establish or enhance a self-identity is one in which they come to identify with the society and recognise themselves as members within it. This link between individual identity and social role conventions is forged through a system of ideas and beliefs that is transmitted as individuals are integrated into the society. Although socialisation presents the world to individuals so that certain ways of understanding it and one's place in it are internalised, the process must also encourage individual members to participate in the constant reshaping of this view of the world and their places in it. These two requirements of the socialisation process at first may seem to oppose each other when, in actuality, mediation of the tension between them is the basis for societal change through communication among its members.

From a vocational perspective, these needs can be illustrated in the context of the culture of an occupational area. Both the occupational area

and the individuals that engage in it must learn in order to ensure that their ongoing development occurs, and so we can say that learning occurs at both the level of the occupational community and the individual level. In order for an occupational community to maintain itself, certain common attitudes and capacities must be acquired by its members. In addition, the occupational community must also learn in the sense that it must change the way it makes its contribution in order to cope with an ever-changing world. It is important when planning and implementing learning opportunities to reflect upon the dual requirements of socialising people into their occupation and thereby shaping their view of its role in society, while at the same time allowing space for individuals to pursue their identity. The central issue for the vocational instructor is the role the individual plays in influencing the culture of an occupational community, so that in its reproduction it continues to evolve and resists becoming a rigid pattern that stifles rather than promotes its own and its members' development.

Instructional situations can be arranged to facilitate the constant striving of learners to influence the culture of their occupational community; learning opportunities can be planned to incorporate not only strategies that serve the practicality of occupational and individual survival but also creative experiences that extend learners' participation in the ongoing development and critique of the culture of the occupational community. Individuals' need to survive motivates them to work on the maintenance of occupational conventions while the need for personal identity impels them to make a contribution to the further development of the occupational community to which they belong.

Incorporating this dual orientation represents a transformation in the perspective of vocational educators which transcends the traditional overemphasis of the integration of individuals in society with little or no regard for the development of their personal identity or their unique potential to contribute to the reproduction of society. Contrary to the conventional pattern of theory driving practice, a praxis view is employed where theory and practice are thought mutually to modify each other in the direction of more equitable social arrangements. Traditional patterns of one-way communication in which leaders or authorities in the occupational community prescribe the basis of occupational socialisation are superseded by the convergence model with its two-way orientation and its focus on mutual understanding. By incorporating both the need for survival as well as the quest for personal identity as the motivational basis for designing learning opportunities, members of the occupational community are able not only to acquire and refine the skills necessary for maintaining the organisation but also to pursue the enhancement of their own identity and in so doing contribute to the reproduction and ongoing development of the organisation in the direction of social justice and equitability.

Social learning

A principle of learning is that individuals learn initially from the outside or external environment—that is, people always inherit the knowledge that their reference groups possess and value. As individuals come into the world, initially everything they learn comes from imitating their parents and older siblings. It is only when they have the social skills that allow them to survive that they begin the process of questioning them (Wertsch 1985). The same process can be seen occurring in organisations where newcomers first learn organisational customs and traditions in order to survive and perform their functional roles. After this initial external learning experience, members can begin constructive questioning of these customs. What is apparent is that learning is a developmental process which occurs first on an external basis and is then followed on an internal basis; initially people learn in order to function within a group and then consider and rework internally this initial learning so that it reflects their own individual contribution.

In the vocational education programs offered in the workplace, initially the organisation's objectives take precedence as the basis for developing the program; the starting point for the development of instruction is the identification of capacities and dispositions to be acquired that reflect the organisation's (employer's) interests. Typical instructional initiatives tend to stop here and include only these objectives with minimal, if any, regard for potential contributions by learners. In more progressive organisations, however, after this introductory aspect of the instructional process, learners can be given opportunities to internalise what is to be learned and in so doing bring to bear their unique potential for shaping and adding further meaning to the objectives so that they reflect more expansive outcomes. During the management of the instructional process, instructors can apply the convergence model of communication to facilitate learners' internalisation—that is, they originally learn what is intended by the organisation and then subject it to their own interpretation. The learners' unique way of understanding what is to be learned holds potential for enhancing the organisation's objectives; this potential can be realised if there is a communication process that provides for collaborative assessment of the value of what the learners are offering.

Latent learning

Learning is an active process through which people consciously pay attention, perceive things, remember them and think about them. In addition

to this conscious effort, there is another aspect or dimension of learning that occurs at the preconscious or latent level. This latent dimension of learning can be characterised as a 'wandering' process which conveys the notion of learning as a journey in the sense that, in addition to an immediately purposeful or practical use of learning, there are also learning efforts that reflect purposes other than the purely practical (e.g. curiosity, sensuality and adventure) (Ariyaratne 1985). Although these tend to be downplayed, they are in reality an integral part of any learning endeavour that supports and enriches practical learning. One of many perspectives on latent learning is expressed by a prominent educator in this way: the unintended consequences of learning blend with the intended so as to make them virtually indistinguishable, and often the result of learning occurs once, twice and sometimes thrice removed from the instructional setting (see Cremin 1976).

Returning to the analogy of a journey, it is the detours and the unplanned side trips and stops that inevitably produce the awe and wonder that motivates us to further travels. Wandering is seen as a process by which we broaden our experiences in a manner that opens up possibilities for adaptation in the future as human life continues to evolve through time in unpredictable ways. These sensual or holistic forms of thinking are the wellsprings of the creative activity so necessary for effective production. What is important here is that latent learning must not be constrained in the zeal to pursue active learning. What needs to be learned must be learned without undue rigidity in fixing the time required to accomplish the outcome, since these two levels of learning, between them, account for the total learning process.

The instructional principle inherent in latent learning is that the tendency to measure active learning on the basis of its efficiency must be tempered by a concern that latent learning is not snuffed out thereby desensualising and desiccating the learning process. Instructional situations must be shaped so that learners can wander off the prescribed path of active learning in order that they may return to it with a richer understanding. These opportunities for wandering can be conceived as occurring in the spaces between the neatly designed 'boxes' in our instructional plans.

A climate that facilitates latent learning is created in the instructional process through tact. Tact is the sensitive application of thoughtfulness in action, often consisting in holding back, waiting for the teachable moment. A tactful stance can be developed through acquiring the disposition to apprehend a feel for the situation, a receptivity to the varied modes of human expression, conveying a thoughtfulness that involves the awareness of the total being of the learner, mind and body; it is an active sensitivity for what is unique and special about the other person. Its components are attunement to subjectivity, subtle influence, holding back, situational

confidence, improvisational gift-giving and openness to the learner's experience (Van Manen 1990). Tact complements the practical systematic approach to instruction; through tact instructors can respond to the unique and sometimes baffling ways in which learners respond to the intended outcomes that were systematically planned and designed for a program.

For learning outcomes that are largely technical in nature, individualised instruction sets the stage for mediating the need for active and latent learning. With the technical aspect of instruction embedded in instructional modules, instructors are freed to provide the tact required to ensure an opportunity for latent learning to occur. Focusing on individual learning allows instructors to optimise linkages between what learners learn in formalised instructional situations (what they learn in the shop, laboratory or job settings with the instructor); and how all of these learnings are connected to what they learn by wandering through everyday life.

Using knowledge

In the applied science conception of theory and practice, knowledge is seen as existing out there waiting to be discovered, and when it is discovered, it is then made available to others; in this limited view, theory drives practice, leaving practitioners dependent on scientists to uncover and then articulate theories for the field of practice to use in dealing with day-to-day problems. A major limitation of this applied science view is that when practitioners encounter new problems, they must wait for theoreticians to identify and refine appropriate theories for their use (Schön 1985).

When instruction is perceived as praxis, where the theoretician and practitioner are interdependent (mutually modifying each other through mediation and thereby creating new meaning), it becomes evident that significant learning can occur only when knowledge is put to use. If human beings have the potential to enhance the state of knowledge every time they use it, the reciprocal influence of theory and practice would be a worthwhile aspiration for every learning opportunity. If knowledge has the potential to evolve each time it is put to use in a practical situation, and if all individuals can potentially play a role in this process, settings for learning need to be restructured so that the separation of the world of practice from the world of theory is minimised enabling learners to move readily back and forth between these two worlds. This requires major renovations in current relationships between formalised classroom situations, shop instruction and everyday practice, as well as relationships between instructors and learners. When theory is taught in the classroom setting, achievement should be assessed primarily by the learner's ability to put the theory to use

in the instructional situation and subsequently in everyday practice, rather than by objective tests. Furthermore, minimum time should elapse between learning the theory in the classroom setting and applying it directly in a supervised setting for practice. This principle is evident in major efforts being initiated by program planners in such diverse areas of vocational education as industry, international development and teacher education who are applying a praxis view of the relationship between theory and practice in the creation of learning opportunities.

Conclusion

Adult vocational education faces the exciting prospect of making a leading contribution to the evolution of modern industrialised society, which at this point in history is distinguished by its extraordinary achievements in the development and application of technology but where evidence reveals regrettable neglect of human and social values. This imbalance dominates established cultural tradition in which human action is promoted and rewarded on the basis of efficiency and productivity, subordinating the pursuit of just and equitable ways of relating with other societal members and with the environment. The mission of vocational education is to actualise both technical and social outcomes of occupational preparation so that individuals will be able through their work to penetrate and challenge the dysfunctional aspects of established cultural tradition. Translating this mission into a plan of action requires a shift from the conventional over-emphasis on the technical dimension of occupational preparation to an enriched and revitalised practice that rationalises technical and social learning outcomes.

In our view, this reconceptualisation must be rooted in the notion of praxis as a forward-looking way in which to relate theory and practice, recognising that human beings have the capacity to influence societal evolution, and providing impetus for the mobilisation of these human capacities to alleviate contemporary social crisis. Praxis opens up possibilities through adult vocational education to enable individuals in their work to mediate technical progress and desirable social change. A reconfigured role relationship between formal institutional and employer-based settings for learning emerges when the theory to be learned in the formal setting is recast to include both social and technical components, and a fluid, dynamic movement of learners is maintained between the two settings such that learners can enrich their experience of productive work by mediating their theory and practice in a desirable direction.

In the instructor-learner interface, vocational education must be

enacted from a contemporary view of its adult participants which captures social and psychological development as the essence of their general characteristics and the manner in which they learn, while at the same time acknowledging the uniqueness of individual learners. From this conception of learners, and the amplified view of the meaning of work, a set of principles emerges which have implications for the way in which programs are planned and instruction is designed and implemented, including cues for establishing and maintaining a stimulating social climate to foster learning. When these principles are employed in each planned learning experience, a potential exists for enriching the outcomes of vocational education for the individual, the organisation, the occupational community and society.

References

- Argyris, C., Putnam, R. & Smith, D.M. (1987), *Action Science*, Jossey-Bass, San Francisco.
- Ariyarante, A.T. (1985), 'Learning in Sarvodaya', in A. Thomas & E.W. Ploman (eds), *Learning and Development*, Ontario Institute for Studies in Education Press, Toronto.
- Bandura, A. (1977), *Social Learning Theory*, Prentice Hall, Englewood Cliffs, NJ.
- Berger, P.L. & Luckmann, T. (1967), *The Social Construction of Reality*, Penguin, London.
- Bigge, M.L. (1982), *Learning Theories for Teachers*, 4th edn, Harper & Row, New York.
- Boshier, R. & Collins, J. (1985), 'The Houle typology after twenty-two years: A large scale empirical test', *Adult Education Quarterly*, vol. 35, pp. 113-39.
- Bruner, Jerome S. (1966), *Toward a Theory of Instruction*, Harvard University Press, Cambridge, Mass.
- Cervero, R.M. (in press), 'Relationships between theory and practice', in J.M. Peters & P. Jarvis (eds), *Adult Education as a Field of Study: Its Evolution, Achievements and Future*, Jossey-Bass, San Francisco.
- Cremin, L. (1976), *Public Education*, Basic Books, New York.
- Cropley, A.J. (1977), *Lifelong Education: A Psychological Analysis*, Pergamon, Toronto.
- Erikson, E. (1982), *The Lifecycle Completed*, Norton, New York.
- Eurich, N. (1985), *Corporate Classrooms*, Princeton University Press, New Jersey.

- Evans, N. (1985), *Post-Education Society: Recognizing Adults as Learners*, Croom Helm, London.
- Freud, S. (1949), *An Outline of Psychoanalysis*, trans. J. Strachey, Hogarth, London.
- Gagne, R.M. (1985), *The Conditions of Learning*, 4th edn, Holt, Rinehart & Winston, New York.
- Gibson, R. (1986), *Critical Theory and Education*, Hodder & Stoughton, London.
- Hall, E.T. (1985), 'Unstated features of the cultural context of learning', in A. Thomas & E.W. Ploman (eds), *Learning and Development*, Ontario Institute for Studies in Education Press, Toronto.
- Homan, K.B. (1986), 'Vocation as the quest for authentic existence', *The Career Development Quarterly*, September, pp. 14-23.
- Houle, C. (1961), *The Inquiring Mind*, The University of Wisconsin Press, Madison, Wis.
- Kemmis, S. & McTaggart, R. (1988), *The Action Research Planner*, 3rd edn, Deakin University Press, Geelong, Victoria.
- Knowles, M.S. (1980), *The Modern Practice of Adult Education*, 2nd edn, Cambridge Books, New York.
- Kohlberg, L.G. (1982), 'Moral development', in J.M. Broughton & D.J. Freeman-Moir (eds), *The Cognitive Developmental Psychology of James Mark Baldwin: Current Theory and Research in Genetic Epistemology*, Ablex, Norwood, NJ.
- Kosik, K. (1976), *Dialectics of the Concrete*, Reidel, Dordrecht.
- Leach, J.A. (1989), 'Training and development programs in vocational teacher education departments: A preliminary investigation', *Journal of Studies in Technical Careers*, vol. 11, no. 4, pp. 325-32.
- Little, D. (in press), 'Critical adult education: A response to contemporary social crisis', *The Canadian Journal for the Study of Adult Education*.
- Loevenger, J. (1976), *Ego Development: Conceptions and Theories*, Jossey-Bass, San Francisco.
- Maslow, A.H. (1954), *Motivation and Personality*, Harper & Brothers, New York.
- McClusky, H. (1963), 'The course of the adult lifespan', in W. Hallenbeck (ed.), *Psychology of Adults, Adult Education Theory and Method*, Adult Education Association of the USA, Washington, DC.
- Perry, W.G. jr (1970), *Forms of Intellectual and Ethical Development in the College Years*, Holt, Rinehart & Winston, New York.
- Piaget, J. (1970), *Genetic Epistemology*, trans. E. Duckworth, Columbia University Press, New York.

- Rehm, M. (1989), 'Participatory vocational education: Pedagogy for the work of individuals and society', *Journal of Education*, vol. 171, no. 3, pp. 109-22.
- Revans, R. (1982), *The Origins and Growth of Action Learning*, Chartwell-Bratt, Bromley, Kent.
- Rogers, C.R. (1969), *Freedom to Learn*, Charles E. Merrill, Columbus, OH.
- Rogers, E.K. & Kincaid, D.J. (1981), *Communication Networks*, The Free Press, New York.
- Rubenson, K. (1983), 'Adult education and quality of life', *Learning*, vol. 3, no. 4, pp. 6-8.
- Schön, D.A. (1987), *Educating the Reflective Practitioner*, Jossey-Bass, San Francisco.
- Schön, D. (1985), 'Towards a new epistemology of practice: A response to the crisis of professional knowledge', in A. Thomas & E. W. Ploman (eds), *Learning and Development*, Ontario Institute for Studies in Education Press, Toronto.
- Skinner, B.F. (1953), *Science and Human Behaviour*, Macmillan, New York.
- Spady, W.G. (1977), 'Competency-based education: A bandwagon in search of a definition', *Educational Researcher*, vol. 2, no. 1, pp. 9-14.
- Super, D. (1980), 'A lifespan, life space approach to career development', *Journal of Vocational Behaviour*, vol. 16.
- Thomas, A., Ploman, E.W. (eds) (1985), *Learning and Development*, Ontario Institute for Studies in Education Press, Toronto.
- Van Manen, M. (1990), *Researching Lived Experience*, Althouse Press, London, ON.
- Weir, D. (1987), 'Vocational education in the 1990's: More or less?', *Journal of Vocational Education*, vol. 4, no. 1, pp. 39-47.
- Wertsch, J.V. (1985), *Vygotsky and the Social Formation of Mind*, Harvard University Press, Cambridge, Mass.

READINGS

1

VOCATIONAL EDUCATION IN THE 1990s—MORE OR LESS?

D. WEIR

D. Weir, 'Vocational education in the 1990s—more or less?', *Journal of Vocational and Technical Education*, vol. 4, no. 1, 1987, pp. 39–47.

Synopsis

As the demands of the labor market change, so too does the nature of vocational education. After a period when "vocational" seemed to mean "occupational," it is now becoming closer to the term "liberal." Recent developments in Scottish vocational education provide an interesting case study in this shift in definition. In particular, the new methodologies in use across the whole of education indicate that the distinction between vocational and general education is no longer valid. That, in turn, provides an opportunity to demonstrate how all education is vocational in the ancient sense of that term.

From a British point of view, vocational education around the world seems trapped between the goals of liberal education as "[developing] a person able to make independent decisions as an adult" and the goals of vocational training as "training for one role considered useful by one society, under masters whose authority, based on experience, cannot be questioned" (Evans, 1981, p. 1).

An analysis of the practice of vocational education over the decades of this century would suggest that vocational educators have tried to defend themselves against attacks for being too labor-market oriented. This defense has been conducted by emphasizing the distinction between education and training when instead different interpretations of the term "vocational" might have proved to be a better means of defense.

The use of the term "vocation" was originally associated with the "callings" of the Church, the Law, and Medicine, which also were the major subjects of the ancient universities. As the diversity of work roles expanded in societies moving from a predominantly agrarian economy and as the variety of employment increased, the term was expanded to denote most professions and all community tasks which had an element of service in them. But increasingly in this century, "vocational" in the educational sense has become associated with the preparation for work in general, despite the fact that many jobs have no sense of "calling" in them and the jobholders are not obliged to demonstrate their vocation outside paid employment. Such education should be more properly called "occupational" and if vocational education wishes

to lose that description, it should broaden its curriculum and increase even further the development of skills which involve more than merely earning a wage.

Having made that distinction, then the claim for a fourth objective for vocational education, i.e., "To increase the ability of workers to improve the quality of work and of the work place" (Evans, 1981, p. 11), makes sense if applied to the whole of life and not just to the working portion of life alone.

From there it is easy to accept that vocational education is a full and complete part of liberal education as defined above. The difference thus between liberal and vocational education is not a major difference in philosophy but simply a difference in content and vehicles for learning.

Vocational education under this model may be concerned with automobiles or cookies, and it may take place more in a work placement or community setting than in a school or college; but it will nevertheless be part of liberal education, because it uses processes of learning which are student-centered and has goals which are concerned for the autonomy and independence of the learner.

New Labor Markets

Not only would using the same processes and goals in vocational education as in the rest of liberal education move us nearer to parity of esteem between academic and vocational studies, but it would also help to ensure that students who major in vocational courses are capable of adapting to the significant changes in life styles and work patterns which are embedded in the concept "post-industrial society."

As work becomes ostensibly more specialized, there is a change in the pyramid of job status with fewer jobs which require high levels of intelligence and training and more jobs which require minimum training. All jobs do, however, require judgment and decision-making; and increasingly, job success requires an adaptability and flexibility across skill areas which is not commonly acquired in conventional training programs. In other words a vocational education system which points its students at a specific range of employment is not only misjudging the fluidity of contemporary labor markets but it is also denying them the opportunity to develop the adaptive behavior which will help them to survive in those labor markets. It is for this reason, among others, that the Japanese have little or no vocational education in their high schools, reasoning that "What we want is good people: we can make anybody an engineer. But the best engineer in the world needs to be able to work with others to be effective" (Institute of Manpower Studies, 1984, p. 45).

Encouraging young people to aspire to jobs in manufacturing industries and giving them education which focuses on the skills required by these industries made sense when these industries had stable or rising demands for labor. But now that these industries are contracting or automating, such education makes little sense. And even when jobs still exist in such "smokestack"

industries, the skill requirements are quite different. To return to the distinction between "occupational" and vocational," it could be said that old industries demanded occupational skills, such as the technical competence required by the jobs therein, while new and renewed industries require labor with vocational skills, such as the ability to make decisions, to relate well to other people, to work as a team, and to have breadth of education. These skills are more likely to lead to high quality of life even when income is derived from routine or boring jobs. Under those circumstances, an automotive course in high school should be for the purpose of taking advantage of young people's interests in autos as a means of motivating them to learn useful life skills as much as helping them decide whether to enter the auto repair or auto manufacturing industries.

Let us remember, the jobs that are likely to occupy the most people in the future are clerks and secretaries, janitors and sextons, restaurant workers, and health professionals. These are the major jobs in the future in terms of sheer numbers. High technology will consume no more than 9 or 10 percent of the employable work force (Lindeman, 1984, p. 2). The technical skills demanded in most of these jobs are not sufficient in themselves to justify major occupational education programs, but adding "human skill" elements makes it clear how vocational education can be married with liberal education.

Worries About Change

Human and interpersonal skills must be given priority when the 1990s post-industrial labor market and reduction in the working week both require from education a more balanced, independent-minded student output. That shift in emphasis will cause a number of tensions.

1. Some students will be concerned that the new approaches to vocational education will be too challenging, since making relationships is more threatening than making machine parts. People talk back.
2. Parents will be concerned that the successes of schools will not be assessable in familiar terms such as numbers of certificates and diplomas or numbers of students placed in jobs. Human skills are less visible than technical skills.
3. Teachers will be concerned that new approaches require new skills and may doubt their ability to teach this way or to get on well with young people. Some may even lose their jobs.
4. Schools as institutions will be concerned that conventional models for ensuring conformity and achieving control, such as tracking, will not be applicable when all courses use common processes and one key process is stimulating cooperation rather than competition. The needs of children will be greater than the needs of schools.

5. Employers may be concerned, as schools will be, that the "competitive edge" will be taken off their managerial styles by having to consult their workers.
6. Organized labor may be concerned that, in a time of change, young people with today's new skills offer themselves for work and displace union members with yesterday's skills.

These problems are magnified significantly during any economic recession. Employers in both public and private sectors cut expenditures, labor suffers rising unemployment, and workers with low skills or little seniority rejoin youth in disproportionate numbers in the ranks of the jobless. The pinch is also felt by the schools, where voters demand, in the one public institution whose budget they can limit directly, an end to the frills—that is, to all but the traditional core program. (Dollar, 1983, p. 159).

Nevertheless, it is precisely in a time of economic recession that change is required not only to restore the nation's relative position in the international economy but also because, on this occasion, a return to full employment in its historic sense is not possible and the public wealth will have to be directed to "quality of life" as much as to "quality of work."

The Scottish Example

The British, and particularly Scottish, experience in the last 10 years provides a case study of how any vocational education system may journey from occupationally-based education and training, with its connotations of hierarchy and conformity, toward a more liberal system. Although the path toward a liberal system is occasionally blocked when government shrinks from the consequences of its own policies, the road ahead seems clear enough, and the signposts are specific.

At school level the Scottish philosophy is described by the Consultative Committee on the Curriculum (1977) as follows:

Our recommendation is therefore that all pupils should undertake study in each of seven areas: English, mathematical studies, physical education, moral and religious education, science and technology, social studies, and the creative arts. We consider that the study undertaken in these compulsory areas should take up about two thirds of the pupils' curriculum. For the remaining time, pupils should be free to choose two or three additional subjects (para. 5.21)

Arising from this report there is now a curriculum based on theories of "balance" in which no particular emphasis, such as academic or vocational, dominates. It is a curriculum in which all pupils experience the full range of modes of learning and study.

Beyond the minimum leaving age of 16, about half of all young Scots progress to full time or part-time study in colleges of further education whose major focus is preparing young people for work, i.e., occupational education. They too have recently embarked upon radical change, described as follows (Scottish Education Department, 1983):

There must be established a number of aims which will give direction to what is provided. . . (para.2.7).

The first cluster of aims is concerned with the development of knowledge and understanding of oneself, of one's community and of the environment. . . (para. 2.8).

The second cluster of aims is concerned with skills. . . (para. 2.9).

The third cluster of aims is concerned with attitudes, values and motives which prompt people to act in particular ways or make particular decisions . . . (para. 2.10).

In setting down these clusters of aims it must be remembered that within this age group, traditionally, there has occurred some divergence between academic and practical lines of study, between education and training, as young people begin vocational or pre-professional specialisation. It can be argued, on the other hand, that at this stage there should be no abandonment of broadly-based education, and where specialisation is necessary it should be sought through appropriate emphases. . . (para. 2.12).

This report is being implemented currently as an attempt to shift further education from an occupational to a vocational bias. The broad goal is to extend the provision for personal development in response to the new dynamism of the labor market and the realities of unemployment.

For the young unemployed, the Manpower Services Commission (MSC), which has responsibilities for employment and training throughout Britain, is also promoting its own programme of change (Manpower Services Commission, 1982), as follows:

- (a) because their future employment destination is *uncertain*, more than job-or firm-specific training is required;
- (b) because the context of work is changing and more and more people are involved in *processes*, rather than the repeated performance of a single task, training has increasingly to meet the needs of a variety of industries, firms and occupations;
- (c) because the labour market is highly *competitive*, basic knowledge of the world of work, job search and other skills is essential;
- (d) because young people may well experience spells of unemployment, personal and life skills are needed to help them survive and benefit from change;
- (e) last, but not least, because young people have their own expectations and aspirations, opportunities must be designed for their benefit as well as those of the economy (para.2.5).

This MSC provisions has been in existence for some years and from 1986 has offered two years of work experience, education, and training for all who enter, or aspire to enter the labor market at 16. The program will be primarily vocational, not occupational.

While each of the schemes described above caters to a different target group and is delivered through different contexts, thus making it possible to reach all young people with a relevant form of provision, they are coherent in attempting to avoid unnecessary and arbitrary distinctions between the academic and vocational aspects of the curriculum. This new-found belief in the overall coherence of curriculum and consequent rejection of narrow occupational education is represented in two statements. The first (Department of Education and Science, 1979) concerns purpose:

The content of subjects that make up the curriculum and the styles of learning employed indicate the school's thinking about the need to stimulate and encourage its pupils to acquire not only personal, social, and intellectual skills but also certain attitudes.

The second (Scottish Education Department, 1984) *concerns method:*

Teachers should therefore seem opportunities for:

- promoting learning through activity by students;
- using a problem-solving approach to learning;
- enabling students to apply skills in different contexts (para. 6.1);

The emphasis is being placed on the participation of learners in the learning process, on their interaction with their teachers and with each other and on the use of a variety of resources for learning (para 6.5).

From this Scottish case it is possible to see how, in the 1990s, national vocational education systems can be both more and less vocational. *More* because all education is stimulated to adopt the "experience-based," "out-of-school," and "relevant to work and life," characteristics which typify true vocational education. *Less* because when the whole curriculum exhibits these characteristics, any choice of school subjects will equip young people with a range of skills which are suited to survival in the labor market; thus the specific occupational subjects are no longer justifiable in terms of their distinctiveness.

A System Whose Time Has Passed

Our education systems over the last 100 years have been based on industrial models. Breaking the day down into fixed and short segments of time; using didactic methods which encouraged passivity and conformity among students; having systems of management which were bureaucratic, autocratic and hierarchical; these were the characteristics of most of schooling and much of industry. When these models prevailed, it was little wonder that some vocational educators strongly supported occupational education with its activity-based methods and its potential for job satisfaction and upward mobility through the acquisition of skill or managerial competence. As Professor Evans implied in 1981, such education existed because it provided motivating experiences which kept students in school, reduced unemployment, gave non-academic students' feelings of achievement, gave non-professional work a status, increased quality of opportunity, and so on.

But an economy which depends on manufacturing industry is becoming a concept of the past. It has been claimed that by the year 2010 only 4 or 5 percent of the labor force will be in manufacturing industry. The modern economy in both its reliance upon high tech industry to provide wealth and its service and knowledge industries to provide employment requires a different labor force. That labor force is required to work infinitely varied work patterns, to exercise initiative and take decisions, to participate in running companies in a variety of ways ranging from quality circles to co-ownership. The whole of education is then also required to change, using methods designed to develop such a labor force. Many of these methods such as Experience-Based Career

Education (EBCE) are used by today's vocational educators but need to be taken across the whole curriculum under the banner of Learning by Participation (LBP). As that happens, the need for separate occupationally-oriented courses fades and Professor Evans' fears if vocational education were abolished become groundless because the very attractive features of such education would then pervade the whole curriculum and all programs would be attractive to students.

This shift and the reasons for suggesting it to vocational educators are well summarized by Bruce Dollar (1983), recent Associate Director of the U. S. National Commission on Resources for Youth:

Vocational or vocational-technical education is concerned with providing occupational skills, and is more concerned with giving young people advanced training and thus a headstart in the occupation the student chooses. While an LBP programme may well expose young people to occupations they might choose, it also emphasises the cultivation of more generalised personal skills and the resources such as responsibility, decision making, compassion and cooperation. In fact, an LBP programme may well be seen as an opportunity for youth to be exposed to jobs in institutions they are *not* likely to choose, as a means of deepening young people's understanding of their community. LBP may also be integrated with the academic study of a related field, such as social sciences, and may readily be linked with development in the affective domain, including understanding values, group processes and personal problem-solving - areas that are not usually encompassed by the vocational curriculum (p. 155).

Encouraging as it may be therefore to have occupational education recognized in Federal legislation, recent Scottish experience suggests that even the Carl D. Perkins Act of 1984 is now out-of-date and backward looking. The so-called "new vocationalism" with its greater emphasis on process than content, and its links with the rest of liberal education through concepts such as independence and participation demands recognition and an acknowledgment that previous, more occupational, systems can be phased out. There will still be many different settings for educational programs, matched to student needs; there will still be a great variety of content; but all education from the classics to cartography, from physics to plumbing, will use common processes and methods.

Summary

1. The term "vocational" has been often confused with the term "occupational." A more traditional use of "vocational" would have shown the harmony between vocational and liberal education.

2. "Quality of work" goals which merely reinforce the distinctions between "workers" and "professionals" have been given too much prominence. Quality of work should be merely a sub-set of quality of life.

3. Moving vocational education in a liberalizing direction is also necessary because changes in life styles and labor markets require more breadth and adaptability in adults.

4. Programs of study in school and college will have different titles and different content to maximize the motivation of individual students, but they will use common processes and methods.

5. There will be resistance from yesterday's students to pointing vocational education in this new direction but the resistance can be countered by showing how the changes are required for economic and social health and are not in an academic direction which would disadvantage today's students, but in a practical direction which will advantage all tomorrow's students.

6. Scotland particularly, but also the rest of Britain, offers an insight of a radical change in the curriculum which aims at common learning processes for all students, irrespective of their programme of study. These changes are designed to improve economic performance and quality of life. Early indications are that these changes have been successful, especially for the less able.

7. An industrial training and occupational education focus has served well for 100 years. It is no longer enough to tinker at the edges of that focus on vocational education. New technologies are producing demands for a new-style worker and citizen requiring a totally new focus for vocational education.

8. The net result of the changes recommended here will be to abolish the distinctions between vocational education and other forms of education by bringing the best features of current vocational education into every part of education, while disadvantaging no student. As in the ancient universities, all education will again be vocational.

Note: This paper was originally delivered at a meeting on the History and Philosophy of Vocational Education held at the AVA Convention in Atlanta, Georgia, on December 9, 1985. It has been revised as a result of a stimulating correspondence with Dr. Rupert N. Evans, to whom my thanks are given.

References

- Consultative Committee on the Curriculum. (1977). *The structure of the curriculum*. Edinburgh, Scotland: Her Majesty's Stationery Office.
- Department of Education and Science. (1979). *Aspects of secondary education in England*. London, England: Her Majesty's Stationery Office.
- Dollar, B. The United States. (1983). In H. Chisnal (Ed.) *Learning from work and community experience: Six international models*. Windsor, England: NFER-Nelson, for IMTEC.
- Evans, R. N. (1981, December). *Vocational education and liberation revisited: A fourth objective for vocational education*. Paper delivered at the American Vocational Association Convention, Atlanta, GA.
- Institute of Manpower Studies. (1984). *Competence and competition: Training and education in the Federal Republic of Germany, the United States and Japan*. London, England: National Economic Development Office/Manpower Services Commission.
- Lindeman, V. (1984). *State concerns in the future development of vocational education*. Columbus, OH: National Center for Research in Vocational Education, Occasional Paper No. 98.
- Manpower Services Commission. (1982). *Youth Task Group Report*. London, England: Author.

Scottish Education Department. 9 (1983). *16-18s in Scotland: An action plan*. Edinburgh, Scotland: Author.

Scottish Education Department. (1984). *16+ in Scotland: Guidelines on curriculum and assessment*. Edinburgh, Scotland: Author.

2

EMANCIPATORY VOCATIONAL EDUCATION: PEDAGOGY FOR THE WORK OF INDIVIDUALS AND SOCIETY

M. REHM

M. Rehm, 'Emancipatory vocational education: Pedagogy for the work of individuals and society', *Journal of Education*, vol. 171, no. 3, 1989, pp. 109-23.

Ever since the Smith-Hughes Act brought school-based occupational training into existence in 1917, vocational education has been a target of both praise and blame. In this paper, I first will review and critique the three viewpoints that currently predominate in debates over vocational education: (a) that it should be eliminated because its content is too often trivial and obsolete, (b) that job-specific vocational education must be provided for students who are not going to college, and (c) that it should be provided to all students because it teaches important work concepts, values, and skills. Although the third viewpoint reflects Deweyan ideals of a pragmatic and creative vocational aspect to general education, the review suggests that all three arguments share a common shortcoming. They all fall victim to a narrowly utilitarian view of worker education.

After identifying flaws in each of the three perspectives, I will draw on Julian Rappaport's (1986) empowerment model to demonstrate that the current debate overlooks important opportunities to address vocational life as a personally meaningful and socially liberating area for study. The pedagogical challenge is to develop a vocational education that will take problems such as the meaning and socially constructed nature of work and present them for critical study and creative action. New directions in vocational education are needed to prepare enlightened, emancipated workers.

Debates about vocational education are critical because they are played out in everyday reality in the lives of numerous students. As John Goodlad (1984) claims, "We begin to see two worlds of schooling, partly overlapping, one preparing for college and the other for jobs" (p. 144). Because society does not value the knowledge of the job preparation world (e.g., Goodlad, 1984; Oakes, 1985), vocational programs exert serious consequences on students' futures.

A Common World for All, Vocational Training for None

One group of reform advocates, often known as "conservatives," insists that no student should take vocational courses and that all students should

undertake traditional studies in history, literature, science, and mathematics. A representative of this position is E.D. Hirsch, Jr. (1988) who argues that American citizens need to achieve "cultural literacy" by learning traditional historical and scientific content. Hirsch reasons that students need to learn a common body of knowledge if they are to have equal opportunities to participate in society. One of Hirsch's criticisms of vocational education is that it rapidly becomes obsolescent as the world changes:

The flaw in utilitarianism is its lack of utility for the modern world. Narrow vocational education, adjusted to the needs of the moment, is made ever obsolete by changing technology. Vocations have multiplied beyond the abilities of the schools to accommodate them. (p. 126)

Diane Ravitch (1985) similarly argues, "Job training will be of less importance in the year 2000 because of the rapid pace of technological change" (p. 305). In short, conservatives maintain that, by becoming culturally literate and intellectually grounded in traditional knowledge, students ultimately will be better prepared to learn specialized jobs later.

Because the conservative ideal is rooted in literary and historical culture, at first glance it might appear to be a nontechnical ray of light in an instrumental school system. Yet the focus on venerated knowledge obscures the fact that the cultural literacy approach also succumbs to the same utilitarianism that it decries in vocational education. While claiming that traditional knowledge is superior, conservatives sometimes express their arguments in the context of "high stakes" such as "making our country more competitive" (Hirsch, 1988, p. 145).

By accepting the role of schooling to prepare students to eventually work in a rapidly changing society, conservatives implicitly accept product and performance ends. However, they fail to recognize Donald Vandenberg's (1988) point that crafts and trades have their own special forms of "high-grade intelligence and superior knowledge at the perceptual and bodily levels. This fact should prevent hasty claims that the theoretical knowledge of the disciplines is inherently more valuable than the practical knowledge of the [arts, crafts, trades and sports]" (p. 76). The fact that conservatives accept the need for excellent producers, while refusing to entertain the possibility that vocational education may offer an appropriate mode for teaching standards of excellence associated with trades, is a contradiction.

Perhaps the most troubling aspect of the conservative argument is the cavalier assumption that knowledge associated with specific vocations has no value. According to Freire (1970, 1985), those in power attempt to mystify reality by making the world appear different from what it is, creating a "false consciousness" and objectifying those who do not fit the dominant patterns. Conservatives thus treat participants in vocational education as deficient and do not attempt to draw alternative voices into the conversation about the role

of schools in preparing workers. This marginalization denies them a voice in a politically situated form of "critical literacy" (Giroux, 1988) and weakens a struggle needed for "achieving the types of schools and economy that serve the broadest needs of our society and citizenry" (Carnoy & Levin, 1986, p. 44).

Empirical evidence does seem to bear out some of the conservatives' specific criticisms. Primary complaints are that vocational education simply does not reduce unemployment, lead to good jobs, or increase earnings (e.g., Grubb & Lazerson, 1981; Spring, 1980; Wise, 1979). But, because the conservative agenda does not promise to train for jobs, it obscures the fact that serious problems render both vocational and academic graduates from high school unprepared to enter the present system of work. According to Grubb and Lazerson (1981), "credentialing" has replaced working "up the ladder," and youthful applicants suffer widespread discrimination because employers do not consider them reliable workers. While Grubb and Lazerson conclude that vocational education in secondary schools is "doomed to ineffectiveness" (1981, p. 125), students who have taken traditional courses are not likely to fare any better if they seek work right after high school.

A serious problem with vocational education which its conservative critics tend to ignore is that it tends to reproduce racial and socioeconomic stratification. Powell, Farrar, and Cohen (1985) point out that vocational students, viewed as less able, get less rigorous instruction:

Even in the most selective programs, many voc/tech students are different from top-track students in one important respect: for them, school has not been a winning experience. They are students who haven't really learned to cope. As a result, "social skills" or "survival skills" have been emphasized—the rules of work and community life that top-track students already know and largely respect. (pp. 130–131)

Even within vocational education there are higher-status courses in home economics, technology, and business and lower-status courses in institutional cooking and building maintenance (Oakes, 1985). Because poor and minorities are disproportionately enrolled in less prestigious vocational courses, Oakes concludes, "Expanded vocational emphasis is likely to continue to sort students along racial and economic lines" (p. 170).

Although it is unfortunate that vocational education erects barriers to the oppressed, even its complete destruction would not change persistent problems rooted in the greater society. Although conservatives like Hirsch would like to see all students gain equal access to valued cultural knowledge, they do not ask some very important questions about widespread inequities that are reflected in, but not necessarily the fault of, vocational education: Is vocational education harmful because it has limited value? Or is it stigmatized because it accepts the marginalized? Why is an institutional cook ascribed low status? Why does stratification occur at all?

Interestingly, many people continue to claim that vocational education is essential despite damaging evidence against it. Grubb and Lazerson (1981) believe that America's attraction to vocational education is embedded in several phenomena: pride in a public school system able to meet individual needs, personal and national images dependent on work and productivity, and the widespread assumption shared by citizens and politicians that vocational education can solve society's economic problems.

Vocational Specialization: A Different World for Different Needs

Strictly opposed to conservatives are those who argue that an academic curriculum unfairly favors the college-bound and that a vocational track of parallel quality to the academic track must begin early in high school. Throughout this paper, this group will be referred to as "vocational specialists." One representative is Rich Unger, a vocational superintendent who writes in the *Vocational Education Journal* (1989), concluding that students succeed in a vocational high school with state-of-the-art facilities and that businesses and industries are eager to hire them:

When will the reformers push the concept of beginning structured vocational training as early as college prep? When will the two forms of education be given equal emphasis? . . . Parents and public who condemn schools for their lack-luster product should be awakened to the respectability of hundreds of occupations for the half of American youth now being given short shrift even as essential jobs go unfilled. (p. 12)

In stark contrast to Oakes's (1985) conclusion that tracking reproduces harmful discrimination, John Bishop (1989) contends that vocational education is especially beneficial to disadvantaged youth if basic skills are not compromised and jobs are obtained. He summarizes research concerning the effects of vocational courses on dropout rates and employment variables: a yearly vocational course during high school increases graduation rates; average monthly earnings are seven to eight percent higher if students enter a training-related job; less than half of graduates do enter training-related jobs; and a curriculum that provides both basic skills and no more than four occupational courses has the best payoff (pp. 14-16). Bishop recommends that emphasis be placed on enabling transition into the labor force, along with counseling, individual employability plans, widescale cooperative education, development of basic skills, and rewards for high achievement.

Because of such blatant loyalty to goals of economic efficiency, Arthur Wise (1979) thinks that the vocational world of schooling is the "quintessence of instrumental education, for through it the student is transformed into the productive worker, and thus one of the major goals of the schools—to prepare

productive citizens—is reached" (p. 111). Yet Bishop and Unger might be credited with an attempt to meet special needs of students who are often denied voice and labeled as misfits. Vocational specialists are properly critical of conservative elitism which unequivocally denounces vocational knowledge, but they reveal a parallel weakness by basing their own rationale primarily on market demands and payoffs. Whereas conservatives look to traditional knowledge for their basis of schooling, vocational specialists look to industry. Neither group seems to recognize that their disagreement offers an excellent opportunity to dialogically struggle with questions at the heart of debate, with a possible outcome of a shared rather than a competing vision.

By calling attention to students who lack the desire and ability to succeed in a system designed for college preparation, vocational specialists also bring the question of student freedom into stark relief. However, at the same time that they declare students must have "freedom to" gain knowledge that will help them in the job market, they do not offer ways for students to gain "freedom from" market-based hegemony. According to John Martin Rich (1986), student freedom depends on determining what constitutes adequate reason, personal responsibility, and caring for others. In a job-oriented school system, these qualities are not likely to be nurtured as much as economic values, and the "free choices" of both vocational and academic students are likely to be biased.

Although conservatives and vocational specialists agree that education should lead to capable workers, a strong economy, democracy, equitable opportunity, and respect for the cultural heritage, they wholeheartedly disagree about the best type of curriculum for achieving these goals. Perhaps this is why a third group offers a "middle ground" and proposes that all students enroll in vocational courses along with academics.

General Vocational Education: A World for All

The National Commission on Secondary Vocational Education articulated a more comprehensive interpretation of vocational education in *The Unfinished Agenda* in 1984. Those who adopt this version might be called the "vocational generalists" because they extend the meaning of vocational education beyond job training. They use the term to include a variety of concepts related to work and personal development. Drawing together ideas from both conservatives and vocational specialists, *The Unfinished Agenda* claims that "All students, whether college bound or not, need a mix of both academic and vocational courses and enough elective options to match their interests and learning styles" (p. 2).

Whereas conservatives and vocational specialists conceive it rather strictly as job training, *The Unfinished Agenda* finds more inclusive pur-

poses for vocational education. The report contends that good vocational programs enable individualized learning, leadership opportunities, cooperation and teamwork, motivation, understanding the "why" and "how" of skills, broad concepts of work and family, career guidance, and leisure skills. While conservatives could claim that many of these outcomes occur from academic classes and do not justify vocational education, benefits specific to the working world might not so easily be gained in traditional courses. *The Unfinished Agenda* points out that field-based experiences offered through vocational education could provide an opportunity to gain valuable insights into the work world. A school-initiated building construction project is used as an example of a creative activity which, the report claims, would convey the interdependence of diverse vocational fields including drafting, marketing, home economics, and horticulture, along with concrete applications of math, English, and science.

Katy Greenwood (1981) is another vocational generalist who defends its traditional work values:

It is vocational education that has the tradition of pride of craft and product. It was vocational education that initially selected its clients on the basis of willingness to work. It is vocational education that has increasingly been able to deliver its promise of rewarding employment for those who complete their programs. (p. 83)

Because Greenwood emphasizes that education is intended to "provide the rationality or understanding of not only the technique of work, but its fundamental role in sustaining the values of our society" (p. 82), she suggests that vocational education has a unique opportunity to stress production rather than consumption and provide cost-efficient ways to meet current needs.

Vocational generalists take exception to proposals that malign vocational education. They point out, and rightly so, that some of its problems stem from outside forces rather than from faults within. They blame the stigma associated with vocational education on several causes: channeling less able students into programs, weak school relationships with business and industry, and failure to integrate work-related experiences with academics. The solution, in their view, is to improve the quality of the programs and especially to develop appropriate connections to the outside world. A qualitative study by George Copa and five colleagues (1986) gave examples of successful outcomes: an agriculture student realized the importance of the environment, a home economics student discovered new personal insights, and an auto mechanics student found academics easier if related to cars. The amazing variety of subjective benefits attests to the multiple outcomes of specialized courses.

At first glance, vocational generalists appear to offer a perfect compromise between conservatives and vocational specialists. They raise the point that many traditions associated with vocational education—such as concrete applications for abstract concepts, pride in craft, the work ethic, and work experiences—are valuable additions to academic courses. In fact, many concepts determined by Hirsch (1988) to be what Americans need to know, such as "labor union" and "wage scale," could conceivably be taught in vocational education. By suggesting that vocational courses yield numerous outcomes, they also refute the stereotype that the only purpose is job training.

Unfortunately, the formal beauty of compromise obscures the fact that most schools still cultivate the personality, sense of discipline, and social identification which ensure job success in an unfair socioeconomic system (Bowles & Gintis, 1976). Vocational generalists fail in the end to demystify social origins and hidden political practices that support the stratification of students and the devaluing of vocational knowledge. Incorporation of ideas such as production and consumption, use of leisure, and pride in work will not automatically improve the status of vocational education. They are likely to be taught in technical ways in a technicist school system that is structured to prepare students to fit easily into existing employment structures. Moreover, one of the particular advantages of general vocational education, cooperative work experience, can easily deteriorate into the teaching of work survival skills (Simon & Dippo, 1987), reproducing and molding students to fit existing configurations of production.

Unfortunately, predominant arguments for and against vocational education often miss the fundamental need for a pedagogy designed to help students care about meaningful work, understand the role that work plays in a nation's humaneness as well as material vitality, and actively critique and create embodiments of value in the world. Social problems that have become daily news include low worker morale, excessive materialism, and inequitable distribution of rewards. What is needed is a pedagogy of enlightenment, one that will provide knowledge and skills so students will be able to perform their work as a means to liberate themselves and society.

Toward an Emancipatory Vocational Education

We must remember that formal schooling is but the foundation for the learning and action that will take place throughout adult life. Even while debates rage over which form of education best provides the foundation, schooling practice must continue to help prepare students for life vocations as workers, family members, and citizens (Dewey, 1916). Such a purpose implies that students should study general ideas related to vocational life such as the structure and nature of work and economics in society, the relation between

work, family, and education, and varieties of work. Particularly in a society such as ours in which work is central to self-esteem and is a primary mode of social participation, school-based exploration of problems and possibilities centered around work and work conditions seems to be essential.

Giroux (1983) notes that students should learn "to weigh the existing society against its own claims" and to "think and act in ways that speak to different societal possibilities and ways of living" (p. 202), which would include focusing on claims and possibilities concerning work. An emancipatory vocational education would not merely provide access to the culture of work but would empower students for the possibility of change. This section will explore empowerment as a pedagogical approach. Julian Rappaport (1986) illustrates a pragmatic model of empowerment intended to provide conditions in which people share diversity and begin to help themselves, build a language and mutual system of beliefs that enable success, and actively work to reach mutual goals in real settings.

Self-Help and Mutual Help: Sharing Language and Beliefs

According to Rappaport (1986), a simple working definition of empowerment is "the force that releases powers of self-cure" (p. 70). Empowerment occurs when cognitive, motivational, and other changes enable people to help themselves gain greater control over the quality of life. Because a pedagogy of empowerment is intended to help students sharpen intellectual and practical understandings so they can help themselves, many forms of knowledge—including knowledge of work—must be set out as problems for reflection and critique. Giroux (1988) describes how history can become liberating memory when its radical potential is revealed. Academic traditions, general work ideas, and specialized job knowledge could translate into liberating memory if used to generate new possibilities and conditions for work.

Rappaport (1986) further believes that empowerment grows more dynamic and vital when diverse individuals share concerns, ideas, beliefs, and language in addressing a common problem. To him, the "self-help" movement best exemplifies a "grass roots" evolution of true power and the establishment of conditions that promote the uncoerced tapping of human potential:

Empowerment is not something that can be given; it must be taken. What those who have it and want to share it can do is to provide the conditions and the language and beliefs that make it possible to be taken by those who are in need of it. (p. 72)

Because the self-help model encourages both individual and social empowerment, members learn from each other and gain a much larger grasp of possibilities for personal and social life.

If diversity is more empowering than homogeneity, one tension in the debate surrounding vocational education is eased. Because an inherent advantage of diversity lies in the combined potential to widen each person's horizon and thus the social view, vocational generalists and conservatives are correct to advocate a heterogeneous "one-world" structure in which students address mutually important issues and topics. As Rappaport notes, beliefs and language must relate to daily life if they are to spark new thoughts and energize new possibilities. Students who belong to diverse socioeconomic and ethnic groups stand to learn many ideas from each other if given opportunities to exchange ideas and discuss mutual problems in the shared society. The question becomes: What language and beliefs ought to be incorporated into a liberating vocational education?

Although this article is not about curriculum development, several points not frequently discussed in educational reform rhetoric will be suggested. One of the interesting paradoxes in the debate over vocational education is that the very meaning of "vocation" is rarely addressed. In the best sense, a vocational direction becomes a "calling" (Rehm, in press) or a meaningful and consequential "work to do" (Green, 1968). Even at minimum, when individuals consider their vocation merely a paid job, vocational life is a predominant human activity. Vocational life itself ought to be a problem for study.

The very nature and meaning of work is also overlooked. Drawing on the writings of Hegel and Marx, George Kovacs (1986) considers work to be "a rational and distinctively human activity that creates the way of life of the human being and, at the same time, transforms the world and human relationships" (p. 196). Kovacs views work as a basic way of human life and meaning:

Work is neither a blind mechanical process nor a form of mere business as a means of distraction from existential boredom and despair; it is a way of self-creation and a mode of forming and transforming the world and nature. The individual is being socialized and educated through the performance of work; he [or she] learns discipline and acquires the regard for the will and needs of others. . . . The nature of work is collaboration. (1986, pp. 196-197)

As an individual encounters the world, Kovacs notes that a variety of human qualities simultaneously develop: discipline, regard for others, discovery and realization of the self, and concrete embodiment of ideals and values. An emancipatory vocational education could encourage students to reflect upon the language and beliefs pertaining to these qualities. Vocational education could become a promising school-based forum in which students relate meanings of work from a critical rather than a technical stance.

Although American ideology bestows work with great importance, the problem is that many individuals find little meaning in their jobs and ex-

perience alienation. As Kovacs (1986) notes, the activities or products of work can "hide" the being of the worker, and work must be interpreted in relation to meanings and goals beyond the work itself. Green (1968) additionally argues that meaningful work often occurs outside of paid occupations; for example, a sense of meaningful work can occur through the simple act of preparing a meal for a loved one or through community activity if there is subjective satisfaction and pride in making a difference. The pedagogical task is to encourage students to build a repertoire of language and beliefs that can interpret such phenomena as work alienation and satisfaction and that can also be used to articulate new ideas and suggestions.

The important goal for educators is to promote conditions in which students themselves use, develop, and critique language and beliefs problematic in work. Giroux (1983) suggests that critical education encourage students to participate in their own learning by: producing and criticizing meanings in the classroom and making their knowledge problematic; making connections within a holistic framework; delving into their own biographies and systems of meaning; clarifying and questioning values; and learning about the structural and ideological forces that influence life. In terms of vocational education, students could produce and critique meanings such as self-realization, alienation, and regard for others; connect work subjects to a variety of issues such as the family and the environment; examine their own beliefs regarding the work they hope to do and its impact on society; and study the employment structures and ideologies that pervade modern life.

Although the conservatives are certainly on target when they complain that vocations have multiplied beyond the ability of schools to train for each of them, it is not so important that students become trained as it is that they become conscious of the nature and conditions of work. Perhaps any work concepts, issues, and problems that are real to students could initiate "generative themes" (Freire, 1970, 1985). Any specific areas taught by vocational specialists (such as auto mechanics or cosmetology) as well as traditional subjects (such as science and literature) offer excellent opportunities for studying language, beliefs, and problems associated with various types of paid and unpaid work. As the vocational generalists indicate, there are unlimited themes that could be selected for study depending on issues pertinent to students, teachers, and society.

Home economics appears to be taking leadership in emancipatory vocational education by promoting pedagogical conditions for critical thinking about the work of the family and the relation between the family and work. Laurie Hittman (1989) describes a Family and Technology course, sponsored by the Wisconsin Department of Public Instruction, as one of a number of opportunities to implement the critical science perspective of the state's home economics curriculum. Because "technology has become a powerful social force" (Hittman, 1989, p. 226) and its effect "should be examined and

critiqued in light of the work of the family" (p. 227), Wisconsin home economics teachers have strived to increase their own and their students' ability to think reflectively and critically. Focusing on "the family's construction of meanings, formation of values, and patterns of thinking" (p. 226), Wisconsin home economics promises an exciting model for emancipatory dialogue concerning the work of the family and its relationship to society.

Experiencing Work in the World

In addition to psychological and cognitive elements of empowerment, Rappaport's (1986) model contains a radical or political element in that individuals are encouraged to change their environment. His model is intended to lead to actions in the surroundings, ultimately creating the political power necessary for widespread change. Rappaport emphasizes that the reality of empowerment depends on speaking and working together:

There are two keys to its success. One is the absolute commitment to an empowerment ideology in *both* language and deed, and the other is a genuine collaboration among the professional community and the members who are viewed, not as clients, but as resources. It contributes to a new culture . . . that only waits to be released by the proper circumstances. (p. 78)

Vocational education must enable students to collaboratively work within their surroundings in order to transform mutually determined problems of the culture. An emancipatory vocational education could provide opportunities for students to test their ideas by actually working to resolve politically situated problems.

As *The Unfinished Agenda* (1984) points out, work experience is a unique aspect of vocational education that deserves greater attention. The question is: What kinds of work experiences will empower students to achieve meaningful vocational lives and a democratic society? Educators must provide occasions for students to work on natural, material, ideological, and social projects that are challenging enough to develop the qualities of work noted by Kovacs (1986). In other words, schooling must provide projects in which students experience for themselves meaningful forms of work that illuminate qualities about themselves, that underscore the nature of collaboration, and that contribute to transforming the world. According to Green (1985), a basic way for developing a humanistic attitude in a technological society is to develop a sense of craft:

We make a serious mistake if we fail to recognize the consciousness of craft and to acknowledge that *it may be in the acquisition of a "sense of craft" that the formation of conscience takes place most clearly*. If we cannot teach children that it matters whether they craft a good sentence, for example, why should we be surprised that they do not craft a good life? (p. 6)

Vocational education has long been associated with craftwork in areas such as engine repair, food preparation, and printing, although work on a poem or science experiment also demands a sense of craft. The implication is that students need to gain experience with a variety of basic forms in the world of ideas, nature, and materials that contribute to consciousness in work.

Whereas crafting enlightens students about standards and values, vocational life as a whole takes place in social, political, and other contexts. Green (1985) adds that moral consciousness in technological society demands an understanding of the qualities that go along with membership as well as the visionary sort of imagination that leads to new beginnings. Thus, work experiences of an emancipatory vocational education must go beyond craftwork, must become located in social and political situations, and must encourage students to use their imaginations to achieve mutually beneficial goals. According to Simon and Dippo (1987), a liberating form of work experience "is defined by its significance in relation to the project of expanding human possibilities" (p. 108). Any type of project parallel to those advocated by vocational generalists could become a critical "work to do" (Green, 1968) if it enabled students to "organize the transformative potential of experience" (Simon & Dippo, 1987, p. 108). For example, a building construction project could be critically viewed from a number of angles: participation in the politics of housing, development of consciousness of various craft standards, contribution to the solution of a housing problem, and study of human values embodied in shelter. Again, even a most specialized topic unit of study will not condemn students to low-status job training if it becomes a basis for significant improvements in personal life and social conditions. The choice of experiences in an emancipatory vocational education would emerge from a mutual vision of transforming critical problems into new possibilities.

Although it is difficult to find actual examples of emancipatory experiences in current vocational education practice, there are indications that the seedlings are being planted. Lotto and Murphy (1987) call for a "radical restructuring" of vocational education to enable students to solve life problems:

To become a curriculum of applied learning rather than occupational skill building for a rather narrow subset of low to mid-prestige jobs, the current structure of occupational service areas must be abandoned and then reorganized around more global concepts. Reorganization could encompass three broad themes: working with technology, working with people, and exploring the world of work. The key point would be a content which was focused upon the application of knowledge to expose students to real-world experiences and problems and to give them an opportunity to apply their knowledge. (p. 51)

Again, it seems that economics is taking leadership in relating the critical perspective to experiential applications. Hittman (1989) gives an example

in which students, involved with the Family and Technology course described in the previous section, mass-produced pizzas in a simulated factory. After the experience, students critiqued the required qualities of the workers, discussed the mindset encouraged by factory jobs, and predicted how this mindset affects family and society. Of course, in-school simulations do not necessarily transform external conditions, and collaborative activities with society's institutions probably would lead to a wider scope of emancipation. Because emancipatory vocational education is currently in the embryonic stage, practical experiments and research are needed to determine if, how, and what types of simulations and collaborative work efforts contribute to the liberation of individuals and society.

Conclusion

Where does this analysis leave the debate about the place of vocational education in secondary schools? Certainly it does not provide a simple answer, but it does underscore several essential features needed for an education that will empower students to enter their vocations with critical thought and creative action. Because work is a basic way of discovery and creation, a variety of student work projects is necessary to engage them in the natural, ideological, material, social, and political dimensions of the world. There are unlimited opportunities in all courses and subjects for students to engage in self-discovery, critical insight, collaborative visions, and creative transformations through everyday work problems.

Vocational education is important because vocational life is important, but it must not be construed merely as an instrument to increase individual and national productivity. Students face significant decisions about what forms of work to perform and how to interact within the sociopolitical structures which condition vocational purpose and opportunity. We must not allow the school's potential to prepare students for liberating forms of work to become lost amidst a storm of debates that depend on rigid and stereotypical definitions of vocational education. Rather, we must imaginatively think of pedagogical patterns by which students will be empowered to transform themselves and the world with meaningful work.

References

- Bishop J. (1989). Making vocational education more effective for at-risk youth. *Vocational Education Journal*, 64, 14-19.
- Bowles, S., & Gintis, H. (1976). *Schooling in capitalist America*. New York: Basic Books.

- Carnoy, M., & Levin H. M. (1986). Educational reform and class conflict. *Journal of Education*, 168, 35-46.
- Copa, G. H., Plihal, J., Scholl, S., Ernst, L., Rehm, M. L., & Copa, P. M. (1986). *Purposes of vocational education in secondary schools of Minnesota—Some insights from current practice*. St. Paul: University of Minnesota Research and Development Center for Vocational Education.
- Dewey, J. (1916). *Democracy and education*. New York: Macmillan.
- Freire, P. (1970). *Pedagogy of the oppressed*. New York: Continuum.
- Freire, P. (1985). *The politics of education*. South Hadley, MA: Bergin & Garvey.
- Giroux, H. A. (1983). *Theory and resistance in education*. South Hadley, MA: Bergin & Garvey.
- Giroux, H. A. (1988). Literacy and the pedagogy of voice and political empowerment. *Educational Theory*, 38, 61-75.
- Goodlad, J. (1984). *A place called school*. New York: McGraw-Hill.
- Green, T. F. (1968). *Work, leisure and the American schools*. New York: Random House.
- Green, T. F. (1985). The formation of conscience in an age of technology. *American Journal of Education*, 94, 1-32.
- Greenwood, K. (1981). Can past values guide vocational educators in the future? In G. I. Swanson (Ed.), *The future of vocational education* (pp. 71-83). Arlington, VA: American Vocational Association.
- Grubb, W. N., & Lazerson, M. (1981). The persistent frustrations of vocational solutions to youth problems. In K. B. Greenwood (Ed.), *Contemporary challenges for vocational education* (pp. 115-128). Arlington, VA: American Vocational Association.
- Hirsch, E. D. (1988). *Cultural literacy*. New York: Vintage Books.
- Hittman, L. (1989). Teacher as researcher: Inservice intervention. In F. H. Hultgren & D. L. Coomer (Eds.), *Alternative modes of inquiry in home economics research* (pp. 220-235). Peoria, IL: Glencoe.
- Kovacs, G. (1986). Phenomenology of work and self-transcendence. *Journal of Value Inquiry*, 20, 195-207.
- Lotto, L. S., & Murphy, J. F. (1987). Access to knowledge and high school vocational education. *Journal of Vocational Education Research*, 12, 39-55.
- National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for educational reform*. Washington, DC: U.S. Government Printing Office.
- National Commission on Secondary Vocational Education. (1984). *The unfinished agenda: The role of vocational education in the high school*. Columbus: Ohio State University, National Center for Research in Vocational Education.
- Oakes, J. (1985). *Keeping track: How schools structure inequality*. New Haven: Yale University Press.
- Powell, A. G., Farrar, E., & Cohen, D. K. (1985). *The shopping mall high school: Winners and losers in the educational marketplace*. Boston: Houghton Mifflin.
- Rappaport, J. (1986). Collaborating for empowerment: Creating the language of mutual help. In H. Boyte & F. Reissman (Eds.), *The new populism: The politics of empowerment* (pp. 64-79). Philadelphia: Temple University Press.
- Ravitch, D. (1985). *The schools we deserve*. New York: Basic Books.
- Rehm, M. L. (in press). Vocation as personal calling: A question for education. *Journal of Educational Thought*.

- Rich, J. M. (1986). Student freedom in the classroom. *Journal of Educational Thought*, 20, 125-133.
- Simon, R. I., & Dipbo, D. (1987). What schools can do: Designing programs for work education that challenge the wisdom of experience. *Journal of Education*, 169, 101-116.
- Spring, J. (1980). *Educating the worker-citizen*. New York: Longman.
- Unger, R. (1989). Down with more-of-the-same reform! *Vocational Education Journal*, 64, 10-12.
- U. S. Department of Education. (1984). *The nation responds: Recent efforts to improve education*. Washington, DC: U.S. Government Printing Office.
- Vandenberg, D. (1988). Knowledge in schooling. *Phenomenology - Pedagogy*, 6, 63-78.
- Wise, A. E. (1979). *Legislated learning*. Berkeley: University of California Press.

3

TRAINING AND DEVELOPMENT PROGRAMS IN VOCATIONAL TEACHER EDUCATION DEPARTMENTS: A PRELIMINARY INVESTIGATION

J. LEACH

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A survey of department heads/chairs from the member institutions of the University Council for Vocational Education provided data on the status of training and development programs in university teacher education programs across the nation. This data is valuable as a base line on training and development programs and will serve as a basis for additional research in curriculum reform in teacher education programs.

Numerous formal systems in place in this country deliver employment related education and training. Among these are labor union apprenticeship programs, the military, proprietary schools, community based organizations, secondary and postsecondary public school vocational education, as well as training offered by business and industry. Graduates of vocational teacher education programs are employed in each of these systems. However, the assumption has been that they gravitate predominantly to the public school vocational education system. Their academic work has, therefore, focused primarily on preparation for working in this system. Recently, however, some question has been raised about the validity of this assumption and, consequently, the appropriateness of the content included and procedures utilized in standard vocational teacher education programs.

Background

Corporate education, training and development is a booming industry. It is arguably the largest provider of adult education in the United

States. An estimated \$30-40 billion is spent annually on formal training in business and industry, equalling the amount spent on education in our colleges and universities (Eurich, 1985). About one-third of the labor force, approximately 36.5 million adults, receive some type of formal training in business and industry each year, with approximately 13 billion hours spent in "corporate classrooms" annually (Gordon, 1986). Corporate education is undeniably a huge enterprise with expansion expected to continue unabated. Employer investment in training and development is projected to increase 25 to 30 percent by 1990 (Galagan, 1987). Considering the fact that approximately 72 percent of the costs of corporate education is associated with training staff salaries (Feuer, 1986; Geber, 1987), the expansion of expenditure in corporate education may also include a concomitant increase in the demand for training and development professionals.

Vocational education has been called upon in many ways to forge partnerships with business and industry and other training systems in an effort to provide effective education and training for both today's and tomorrow's workers. To some extent, university departments of vocational education have been involved with the field of training and development for many years. Many graduates have gained employment and pursued careers in an educational role within the private sector. Others have served as advisors or consultants for education and training programs in business and industry. Numerous research and service activities, although intended primarily for public school audiences, have inherently had at least an indirect impact on the field of training and development.

There appears to be a general consensus among vocational teacher educators, although heretofore unconfirmed, that large numbers of vocational teacher education graduates are entering the training and development field in private business and industry and that even more are leaving the teaching field after a short period of time for positions in the private sector. If this is the case, there are important implications for the field of vocational education, not the least of which is a need for careful examination of the appropriateness and relevance of the curriculum in vocational teacher education programs. However, curriculum modifications and other important decisions regarding vocational teacher education programs need to be based on fact, not opinion only. Despite the obvious importance of training and development programs to the graduates of vocational education, more information is needed regarding such programs as they currently exist in university vocational teacher education departments.

Purpose of the Study

The overall purpose of this study was to examine the current status of training and development programs in university vocational teacher education departments across the nation. More specifically, the following research questions were addressed:

1. Should teacher education reform proposals address the preparation of students for employment in business and industry training and development positions?
2. To what extent have university vocational teacher education departments established programs to prepare professionals for training and development positions in business and industry?
3. How do established training and development programs differ from the more traditional existing vocational teacher education programs?

Research Methodology

Department heads/chairs from the member institutions of the University Council for Vocational Education were surveyed by telephone interview in March 1988. They were asked to provide enrollment data for their institution and program as well as additional information and perceptions concerning the status of training and development programs in university vocational teacher education departments. These institutions were selected because their vocational education departments are considered to be comprehensive in nature (i.e., preparing teachers for most, if not each, of the recognized fields in vocational education). Representatives from 18 of the 19 member institutions were available and participated in the survey. In most cases, follow up telephone calls were required since some of the data and information was not readily available immediately at each institution.

A three part interview guide was developed for use in conducting the interviews. Each part of the interview guide corresponded to one of the research questions cited above and contained a number of additional items related to the major research question. Information collected during the interviews was recorded directly onto the interview guide. After all interviews were completed, the responses to questions included on the interview guide were analyzed and summarized (in most cases as frequencies and percentages).

Findings

Question 1: Should teacher education reform proposals address the preparation of students for employment in business and industry training and development positions?

Response: Approximately 61 percent (11) of the respondents expressed a belief that teacher education reform proposals should address the

preparation of students for employment in business and industry training and development positions. Conversely, almost 40 percent (7) of the respondents indicated a belief that teacher education reform proposals should not address the preparation of students for employment in business and industry training and development positions. They expressed concern that programs designed to prepare students for positions in non-school settings do not need to be addressed and should not be addressed in any reform of teacher education programs.

Respondents indicated that vocational teacher education reform, based primarily on the Holmes Group tenets, has been implemented in four institutions, has been initiated in six other institutions, and is being investigated or discussed in eight others.

Question 2: To what extent have university vocational teacher education departments established programs to prepare professionals for training and development positions in business and industry?

Response: When asked whether their departments have a designated training and development program, almost two-thirds (11) of the respondents indicated that they do and approximately one-third (7) indicated they do not. Three of the seven respondents who indicated their departments do not have a designated training and development program stated that they have proposals in process to establish such programs. Two others have previously submitted proposals to establish a training and development program which were not approved. In these institutions respondents indicated that the proposals were not approved because there is currently a debate over where such a program should be located in the institution.

Of the 11 established training and development programs, two are at the undergraduate level only, five are at the graduate level only, and four enroll both undergraduate and graduate students. Most of these programs are relatively new, with over half of them being established four years ago or less.

Respondents were also asked whether training and development programs exist in other departments or colleges within their institutions. Only one respondent did not have this information. Eleven respondents stated that there is no formal program in training and development elsewhere within their institution, and six indicated there is at least one formal program elsewhere within the institution. These programs are offered in a number of different places; however, most are either in departments within a college of education or a college of business.

An attempt was made during the interview process to determine enrollments in training and development programs and/or to determine how many vocational teacher education students in the more traditional programs are, in fact, preparing for training and development positions

in business and industry. However, in most cases enrollment data of this type were not available. Therefore, respondents were asked to provide approximations regarding enrollments related to this emerging field.

Results show that, in addition to students who are enrolled in designated training and development programs, there are larger numbers of students who express an interest in the training and development field while they are enrolled in traditional vocational areas. Department chairs/heads in fourteen of the institutions surveyed stated that students enrolled in their vocational teacher education programs plan to pursue training positions in private business and industry. Two department chairs/heads indicated that they were unsure and therefore did not respond. Two other chairs stated that they do not have any students enrolled in their vocational teacher education programs who intend to work in the private sector. Other respondents indicated that as many as one-fourth to one-half of their students appear to be interested in the training and development field.

Those surveyed noted repeatedly that it is very difficult to know exactly where students are employed after graduation. The responses varied widely from one institution to another. However, there was general agreement that large numbers (a majority in some cases) of vocational teacher education graduates are entering the training and development field in private business and industry and that many more are leaving the teaching field after a short period of time for positions in the private sector.

Estimates of the percentage of undergraduate and graduate students enrolled in vocational education programs who are employed in training and development positions in the private sector upon graduation were provided by seventeen department chairs/heads. Estimates were provided by eleven institutions for students at the undergraduate level and by six institutions for students at the graduate level. At the undergraduate level, two respondents estimated that 5 to 10 percent entered the private sector upon graduation, four respondents estimated that 20 to 30 percent did so, four respondents estimated that 30 to 40 percent of their students did this, and one estimated that 60 to 70 percent followed that career path. At the graduate level, one respondent estimated that 5 to 10 percent entered the private sector upon graduation, two placed their estimate at 20 to 30 percent, another one estimated 40 to 50 percent, and two respondents felt that over 75 percent of their graduates entered the private sector. Department chairs/heads from the remaining institutions surveyed were unable to provide estimates because they had no information upon which to base them.

Question 3: How do established training and development programs differ from the more traditional vocational teacher education programs?

Response: To further describe the status of training and development programs in university vocational teacher education departments, the respondents were asked a number of specific questions related to the differences or similarities between the training and development program and the traditional vocational teacher education programs.

Respondents were asked whether students enrolled in the training and development program take the same or different courses than vocational teacher education students. Thirteen department chairs/heads responded to this question. At three institutions the students take identical courses. Different courses are taken by each group at four institutions, and at six institutions training and development students take other courses in addition to those taken by vocational teacher education students. In most cases, the respondents noted that it is primarily graduate students who take the additional course work.

Responses on the questions of teacher certification and required practicum experience for training and development students were obtained from 16 department chairs/heads. Only two of the institutions require students who plan to work in private sector training and development positions to complete teacher certification requirements. Fourteen do not have this requirement. Nine institutions require training and development students to complete a practicum or internship experience as part of their degree program. Seven institutions do not have any external experiences as a requirement, but three of the seven offer optional internship opportunities.

With regard to staffing, the faculty who teach training and development courses are typically the same as those who teach in the vocational teacher education program. In no institution was a person hired to teach only training and development students, and all respondents indicated that faculty at their institution have a responsibility to be a part of the larger system.

All 18 department chairs/heads responded to questions regarding private sector involvement in their programs. Seventeen institutions receive guidance on program direction from advisory boards which include private sector representation. All 18 institutions provide internship opportunities for their students in the private sector, and 11 of the institutions regularly receive employment requests for their students from the private sector.

Conclusions

While it was not the intent of the study to provide an in-depth analysis of programs designed to prepare students for training and development positions in business and industry, the findings of this study do

confirm a trend in the field of vocational education. Although usually housed in teacher education programs, a significant number of vocational teacher education programs include a training and development concentration which does not require state certification. This finding leads to some important questions.

A large number of students at both the undergraduate and graduate levels are enrolled in university vocational education departments—students who are intent on, or at least interested in, pursuing training and development positions in business and industry. This migration illustrates a growing linkage between vocational education and business and industry. This linkage, which has been apparent regarding preparation of secondary and postsecondary students for the work force, is now becoming more obvious at the university level regarding preparation of both education (certified) and training (noncertified) professionals.

Preparation of students for training and development positions may or may not be given formal consideration in reform proposals. However, if major changes in the way these students are educated become recognized and implemented, this trend will have a profound impact on the nature of university vocational education programs.

Findings from this study indicate that, although training and development students often take courses different from or in addition to courses taken by their vocational teacher education counterparts—particularly graduate students, the programs are far more similar than dissimilar.

The major conclusion to be drawn from the study regarding the status of training and development programs is that faculty have very little information about where their students are employed; but, more certainly, there is an absence of a conceptual framework to guide program decisions.

Implications

In which university college or department training and development professionals should be prepared is a question not yet completely or uniformly resolved. This stems from an internal struggle regarding which departments should benefit from this growing student population. The question of whether the preparation of training and development professionals for the private sector falls within the legitimate domain of vocational education or of some other domain is not clear. There are a number of reasons which support the locus of the program being in the vocational education area:

1. If the core of training and development is defined in terms of learning processes, then professional preparation for the field belongs in colleges of education with linkages to other relevant disciplines. Since vocational and technical education is the department area within

colleges of education which is linked most closely to business and industry, it is an appropriate and legitimate place for this preparation to occur.

2. It is appropriate for vocational teacher education departments to take on the expanded role of preparing professionals for training and development positions in business and industry due to the nature of the interests of their students.

How vocational teacher education departments respond to this expanded role is a major question. To what extent is the nature of teacher education programs (e.g., content of courses and practice teaching) similar to that required of individuals preparing for entry-level training positions in business and industry? Is it appropriate to mix these two student groups? To what extent are current vocational teacher educators prepared for and willing to work with this new student group?

If the field of vocational education is to be successful in taking advantage of this opportunity depends in large measure on how well these questions are answered and the extent to which appropriate changes are initiated. To take full advantage of this opportunity to meet new educational demands, the field of vocational education must assume more than a fleeting and passive interest. It must adopt a proactive stance, vigorously promoting the programs and working closely with business and industry to monitor their relevance and effectiveness.

REFERENCES

- Eurich, N. P. (1985). *Corporate classrooms*. Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching.
- Feuer, D. (1986). Training budgets. *Training*, 23 (10), 32-43.
- Galagan, P. (1987). Here's the situation. *Training and Development Journal*, 41(7), 20-22.
- Geber, B. (1987). Training budgets still healthy. *Training*, 24(10), 39-58.
- Gordon, J. (1986). Where the training goes. *Training*, 23 (10), 49-62.
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4

VOCATION AS THE QUEST FOR AUTHENTIC EXISTENCE

K. HOMAN

K. Homan, 'Vocation as the quest for authentic existence', *The Career Development Quarterly*, vol. 35, no. 1, 1966, pp. 14-23.

In its early usage the term *vocation* was heavily tied to its cognate source *vocatio*—a summons or a calling. Heavily influenced by Martin Luther's use of *Beruf*—a calling—vocation came to be seen as that particular task or "calling" that the person received from God. This definition prevailed whether one was pursuing an explicitly religious vocation or a so-called secular vocation. Thus, *vocation* idiomatically evolved to its current usage as referring to "the type of work one does or the occupation [one] pursues in earning [one's] livelihood," according to London (1973, p. 116). If such is the case, then what is the relation between work and vocation?

The purpose of this article is to examine the concept of vocation and to demonstrate that vocation is the organizing, existential principle of the concept of work, especially as work is depicted by Green (1968). In this article I present a critical examination of Green's delineation of *job* (what one does for pay), *labor* (activity characterized by necessity and futility), and *work* (the production of an enduring object requiring self-investment, skill, craft, and personal judgment that yields purpose and meaning). I believe that vocation as the quest for authentic existence is the unifying concept that gives grounding to Green's notion of work. The concept of vocation as quest for authentic existence is supported by the existentialist tradition of Heidegger (1949, 1962). Without an understanding of vocation as quest for existence, ideologies of work, such as Green's, are inadequate to the task of answering the existential questions raised in the workaday world.

THE CONCEPT OF VOCATION

Vocation is an important concept because it suggests that the work one does throughout one's lifetime has a unity of purpose. That is, one's

vocation is always relative to oneself; thus, the quality of meaning that is attached to one's work over one's lifetime is relative to the individual. In this sense, I see a difference between vocation and career. *Career* is an umbrella term that covers the parameters of one's occupations. Thus, although one might change from teaching elementary school students to teaching high school students, one maintains a career in teaching. Vocation, on the other hand, reflects the matrix of meaning that one attributes both to one's career and to oneself. I might have a teaching career, for example, but if I do not relate my career as a teacher to the question of the meaning and purpose of who I am, then it is highly unlikely that I have a teaching vocation.

I believe that vocation should be seen as the quest for authentic existence: such an understanding of vocation serves as a useful hermeneutic—that is, a principle that guides one's interpretation—of the current workaday world.

Authentic and Inauthentic Existence

Authentic existence, according to Heidegger (1949, 1962), is a mark of being. More accurately, it is a mark of *Dasein*—being there. *Dasein* is paradigmatic of human being, in that human being's own being (*Dasein*) is its own possibility of being, or not being, at all. The essence of *Dasein* is to be, to exist at all. This necessitates a distinction between existence—which is a question of what a thing is—and *Existenz*—which is a question of who one is. *Existenz* implies an object's consciousness of its own existence which is not implied by the term *existence*. I use *existence* in the sense of *Existenz* in this article.

The fundamental characteristic of *Dasein* is that it is a matter of one's own. One can only exist (be) for oneself. In inauthentic existence I give responsibility for my existence to others: my existence is contingent on others. Inauthentic existence is an attempt to forget that I exist for myself. Authentic existence, however, is being fully aware that I must exist on my own and for myself. There is the recognition that I am the one who exists. I accept existence as my own.

The two fundamental features of *Dasein* are "thrownness" and "fallenness." One is thrown into the world: one is. One also falls away from oneself. One is continually forgetting his or her selfhood (I am this-one-here) by falling into the world and trying to cover over one's own self-responsibility (e.g., I am just a plumber—and nothing more). Thrownness and fallenness are revealed through daily, mundane routine, which is inauthentic existence.

A person responds to the world in either of two modes: anxiety or care. Anxiety is a response to inauthentic existence, in that a person is afraid of no definable object, "falling," of the possibility of not being. Care reflects one's concern to relate oneself to the world and to accept oneself for who one is.

Inauthentic existence may be understood as a life lived in bondage to the illusory security of a dying world. Inauthentic existence is an existence tied to this world, characterized by anxiety and despair. In inauthentic existence one focuses on establishing security, economic and otherwise, in an insecure world. Occupationally, the person experiencing inauthentic existence sees himself or herself performing a job to achieve pragmatic ends (not goals) that offer the illusion of a modicum of security and stability. Such a person continually lives under a cloud of despair, fearing that the world may destroy his or her security and stability and possibly even destroy the self.

A person experiencing inauthentic existence is afraid to actualize his or her freedom for fear that he or she might have to take responsibility for the outcome of that exercise of freedom. Instead, the person burrows into the anonymity of the world in a manner similar to that described by Fromm (1941/1969). Fromm believed that, faced with the question of human freedom, the individual has two choices: (a) to escape from the burden of freedom into new dependencies and submission (often characterized by subjugating oneself to forms of authoritarianism so that one no longer could be held personally responsible for one's life) or (b) to advance toward the fullness of "positive freedom" (i.e., relating spontaneously to the world in love and work without giving up self-independence and self-integrity), which is based on the uniqueness and individuality of human beings.

Authentic existence is antipodal to inauthentic existence; that is, authentic and inauthentic existence are diametrically opposite on a continuum. The fundamental difference is found in the acceptance of the self by the person in the state of authentic existence. The person of authentic existence accepts his or her being thrown into the world, the fact of his or her being. I do not mean to infer that such people accept their situation in the world, simply that they accept their own being and take responsibility for it. A woman who feels that "life has cheated" her, who moves outside of legal bounds to gain an income and blames the forces of society for the way she has turned out is an example of a person experiencing inauthentic existence. The person who accepts the fact of existence with a hope for the future, and who works for growth is an example of someone experiencing authentic existence.

Authentic existence transcends the finite limits of the world by an appreciation for self-transcendence. By facing and accepting the threat of death and of insecurity, the person of authentic existence transcends finitude; he or she accepts finitude and moves on. This acceptance fosters courage to be in the face of anxiety (the threat of nonbeing) and despair (the fear of loss of security in an insecure world). The goal of authentic existence is to be, to be this one here instead of nothing, to be fully human. This implies that inauthentic existence is to be less than human, if humanness is defined by being in the world (*Dasein*). Authentic existence is not the same as self-actualization, because self-actualization infers an ending point and authentic existence does not (Coan, 1974).

The person of authentic existence, therefore, is not in bondage to temporal goals, such as financial security. Insecurity is no ultimate threat to such a person's existence. The person of authentic existence accepts the world and strives to work within the realm of possibilities offered by the world. Such a person accepts responsibility for his or her actions in the world. In this act of acceptance the person transcends temporal limits, because such a person is continually and fully open to the possibilities of the future.

Ellenberger (1968) offered a succinct summary of authentic and inauthentic existence:

Man is not a ready made being. Man will become what he makes of himself and nothing more. Man constructs himself through his choices, because he has the freedom to make vital choices, above all the freedom to choose between an *inauthentic* existence and an *authentic* existence. *Inauthentic* existence is the modality of the man who lives under the tyranny of the plebs, i.e., the crowd, the anonymous collectivity. *Authentic* existence is the modality in which a man assumes responsibility for his existence. . . . In order to pass from inauthentic to authentic existence, a man has to suffer the ordeal of despair and "existential anxiety," i.e., the anxiety of a man facing the limits of his existence with its fullest implications: death, nothingness. p. 18

Relationship of Authentic Existence to Vocation

Each individual's vocation is to be on a quest for authentic existence. The term *quest* is deliberate. To be on a quest is to be on a path of discovery through experience. To be on a quest is to be open. This is fundamentally different from the notion of pursuit. Pursuit implies that one knows precisely what one is looking for, and is chasing after that particular thing. It is not possible to pursue authentic existence, because, by definition, authentic existence is never a tangible thing or a static state of existence. Authentic existence is always coming into being by keeping the future in view and by seeking to transcend finite limits. One is able to be on a quest for authentic existence by seeking to discover it as it comes into being. Of course, the person on a quest for authentic existence must already live in a state of authentic existence to some degree.

One conducts the quest for authentic existence with this vision and purpose: to be fully oneself as a human being. A person having this purpose does not flit about like a gadfly from job to job on the pretext of "finding oneself" or because "I have to be me." To flit like a gadfly is reflective of inauthentic existence, because it is characteristic of inauthentic existence to be unable and unwilling to accept one's being in the world. Talk of "finding myself" and "having to be me" reflect an individual's pursuit of an illusory static security.

Because authentic existence is not static, but always coming into being, vocation is the quest to be human as one's humanness comes into being. Vocation means being continually open to and accepting of the future

through transcendence of self and the world in the present. One's vocation is to be this-one-here; to be in the world. The person of authentic existence accepts the essential limitations of being human (i.e., being thrown into the world) and transcends these limitations through hope and courage. Authentic existence, therefore, is not simplistic optimism nor is it a "pie-in-the-sky" illusion. Authentic existence is the ability to see reality as it is and strive to be who one can become.

Part of one's vocation is to accept existence as being thrown into the world and to accept the fact of finitude, which reaches its consummation in death. This acceptance enables one to live without always urgently pursuing false security in an insecure world, as is the case in inauthentic existence. Accepting one's existence is qualitatively different from resignation of one's existence. In acceptance one embraces one's being as one's own; in resignation, one rejects one's being and moves further into falling away from one's self. Fundamentally, one's vocation is to accept responsibility for oneself and one's being.

As Tillich (1957) suggested, "[One's] freedom is infinite freedom. All the potentialities which constitute [one's] freedom are limited by the opposite pole, [one's] destiny. In nature, destiny has the character of necessity" (p. 32). The vocation of the person in authentic existence is to exercise fully his or her freedom with a vision of who he or she may be over against the threat of necessity and destiny. In authentic existence necessity is not bondage as it is in inauthentic existence; rather, it is a sign of the fact of existence that can be transcended by accepting it for what it is. One's vocation is to accept responsibility for oneself as one comes into being in the world. One's vocation is to accept who one is, not necessarily what one is.

What of persons of inauthentic existence? What is their vocation, or have they none because vocation is the quest for authentic existence? The primary vocation of persons experiencing inauthentic existence is to realize that they have no true vocation in their present state. Vocation is not something one has; it is something one seeks. One conducts a quest for authentic existence. The vocation of the person in a state of inauthentic existence is a quest for authentic existence, a quest to be human.

Not all persons in a state of inauthentic existence will undertake the quest for authentic existence. Many will refuse to accept the finitude that death brings. They will refuse to accept being thrown into the world. Because of falling away from themselves they will refuse to live with hope and courage toward the future and they will remain in bondage to a world of illusion. Such persons have rejected vocation; they experience alienation and estrangement. They are estranged from their ground of being, from other beings, and from themselves. They exist in fallenness. Such persons condemn themselves to mere survival and a meaningless death. As long as they pursue false security in an insecure world they cannot conduct a quest for authentic existence. Their destiny has been their own choice.

VOCATION AND GREEN'S IDEOLOGY OF WORK

In relating my understanding of vocation to the notion of work, I have chosen Green's (1968) ideology because he made useful distinctions between labor, job, and work, with work being the most purposeful and meaningful of the three concepts. I believe, however, that without a foundational concept of vocation, Green's notion of work is incomplete.

In Green's careful distinctions between labor, job, and work, *labor* is mere activity and is characterized by necessity and futility. The goods produced by labor are consumed and have no enduring quality. Labor is the source of alienation and impotence. *Job* is the occupation that one has, what one does for pay. *Work* is an activity and the production of an enduring object. Work requires self-investment, skill, craft, and personal judgment. Work is purposeful and meaningful. Work is distinct from labor and often, especially today, must be discovered independently from one's job. According to Green, the modern dilemma is that a job does not always offer the possibility of work. Thus, one must find a way of enduring the job and discover a work that is independent of the job. Green's category of work falls under the rubric of authentic existence but is not equivalent to it.

Green's category of labor falls under the concept of inauthentic existence. This is well illustrated in Green's (1968) statement: "[The] man is not free whose life is totally absorbed in labor. His energies are spent in response to necessity, under the aegis of forces outside himself, forces that he does not set in motion and cannot control. He is not master of himself so much as he is himself mastered" (p. 19).

Green's category of job may fall into either camp. It may be seen as obligatory and done of necessity (labor), reflecting inauthentic existence. It may also be seen as engendering a work that is purposeful and meaningful to the individual, reflecting authentic existence.

I believe that Green (1968) was correct in his desire "to discard the assumption that a man's work and a man's job are in any respect one," and in his calling for a "radical distinction between the concept of work and job" (p. 80). I further argue that a distinction must also be made between one's work and one's vocation, as I have defined it. I believe that work is an element in the set called vocation; that is, work falls under the overarching concept of vocation as the quest for authentic existence. Why is this so?

Green contended that labor is characterized by necessity and futility and is the source of alienation and impotence. Labor is not a good thing because it fails to tap one's personal resources and is not purposeful and meaningful. Work, however, is a source of potency and hope, it is purposeful and meaningful, and it taps one's personal resources; thus, work is seen as a good thing and is to be preferred to labor. Work is seen as good because it is purposeful, meaningful, taps personal re-

sources, and is a source of potency and hope. But why are these characteristics of work important and why are they to be preferred to the characteristics of labor? Green was unable to answer this question except to infer weakly that people want to be purposeful and meaningful, to tap personal resources, and to live with a sense of potency and hope. This, however, is a circular argument that closes in upon itself, because Green is unable to say why people want the qualities inherent in work except by referring to the qualities themselves (e.g., purposeful, meaningful).

Vocation as the quest for authentic existence is the foundation of the concept of work, because vocation is the quest to be fully human. People want to be human, but some are afraid to exercise their freedom to choose to be human (Fromm, 1941/1969), and subsequently they live lives of inauthentic existence and exist under the bondage of labor. Others, however, exercise their freedom to choose to be human and live into their vocation. People want to be purposeful and meaningful, to tap their personal resources, and to live with potency and hope, because they want to be human and wanting to be fully human is inherent in human being. Therefore, the goal of work is vocation, and the goal of vocation is to be human, to be this one here (*Dasein*).

There is something in the depths of our being that hungers for wholeness and finality. . . . The [person] who loses this sense of his [or her] own personal destiny, and who renounces all hope of having any kind of vocation in life has either lost all hope of happiness or else has entered upon some mysterious vocation that God alone can understand. (Merton, 1955, p. 113)

Authentic existence is something that is hungered for in the depths of one's being, and each individual needs the courage to undertake the quest for it—that is each person's vocation and hope. Not to embark on the quest at all is to fall into inauthentic existence. In work one seeks to express one's vocation and one's vocation calls forth one's work.

Furthermore, one of the implications of this sense of vocation is that one desires to engender the coming into being of others' humanness. Part of one's vocation is found in enabling others to undertake the quest for authentic existence. Green (1968), I think, expressed a similar idea, except that Green's ideas more closely resemble the human potential movement, such as his concern with enabling people to "actualize" their potentialities and capacities through the medium of work. The logical extension of the human potential movement is that society will be transformed by this process of individual actualization. Again, being human is the base, for some self-actualization theorists maintain that to be self-actualized is to be human (Coan, 1974).

Thus, it can be seen that vocation as the quest for authentic existence—to be human—is the existential foundation of Green's ideology of work. The qualities inherent in work are important, because they fulfill each individual's fundamental desire to be human.

APPLICATIONS AND IMPLICATIONS FOR COUNSELING

I make the assumption here that the counselor has embarked on a quest for authentic existence and understands vocation as this quest. For the counselor to embark on a quest requires that the counselor live into his or her vocation.

Part of the counselor's task is to help each person discover his or her own humanness. The counselor is a facilitator, enabling people to begin a quest for authentic existence. In this role the counselor serves as a model so that the client can see the coming into being of humanness as both possibility and reality. Additionally, the counselor helps the person see how vocation brings the client's life to wholeness and hope. The universal dimension of vocation must take into account personal uniqueness and integrity.

Obviously there are many persons who live in a state of inauthentic existence. Such persons need to face the threat of finitude and to confront the threat of loss of security. The counselor's task is to enable them to discover the courage to be in the face of the threat of not being. In accepting being thrown into the world, one can live in full humanness, despite the loss of security, by seeing that one's continually coming into being is not contingent on the temporal conditions of the world. If a counselor can help a client come to this acceptance and this realization, the person will not have to endure his or her job, but instead he or she will view the job with the transcendent vision of vocation.

The counselor needs to help the person understand that the transition from inauthentic to authentic existence is not immediate. Vocation as the quest for authentic existence must be seen as a life work, because authentic existence is always coming into being and never exists in a static state. On one level this task entails helping the person discover a work to do and helping the person discover how this work comes to its own fruition in vocation. One must take account of the modern dilemma—that one's job does not always offer the possibility of work—as Green (1968) depicted it.

So that all of this does not become too nebulous and amorphous, the counselor needs to take care in discussions with the client to "work backward" from labor to job to work and then to vocation. The counselor needs to approach the person at his or her own situation in life and level of being and understanding, and facilitate movement to the quest for authentic existence. This will not be an easy task, but it is a necessary task.

Vocation as the quest for authentic existence is fundamentally a dialectical question of "Who am I and who am I to become?" This question is distinct from the common vocational question of "What can I do?" The former question is dialectical because one is always pressed to ask the question and answer it as one is coming into being; it is a dynamic question. The latter question is a static question because one is objectified: I

am a teacher. I am a plumber. I am a something (but not a someone). This point is particularly relevant in light of Erikson's (1968) fifth stage of the life cycle, in which the person wrestles with identity versus role confusion. The caveat to counselors is that they must be sensitive to the ongoing dialectical development of the whole person and be willing and able to explore with the person those domains of the self that escape the tidiness of Kuder Preference Records, Strong Vocational Interest Blanks, and similar instruments.

Finally, the counselor must help others understand that their quest requires them to be responsible for enabling still other persons to begin and continue their quest for authentic existence. I believe this is extremely important in the teaching and training of a new generation of counselors. Erikson's seventh stage of Generativity versus Stagnation applies here. Generativity involves giving birth to a new creation, and fledgling counselors are such a new creation. Part of the task of counselor educators is to hand on wisdom, to guide, to nurture, to teach, as well as to produce. This is what it means to be a mentor. For me to be human requires that I enable others to be human. This is accomplished through love.

Love is the awareness of the identity of being between persons and the desire to share the fullness of one's being with another. Insofar as I love, I am enabling others to come into being in humanness. To the extent that I am unloving, I thwart my own quest for authentic existence as well as that of others, and I am accountable for these actions. Thus, I can say that vocation as the quest for authentic existence is an expression of love for self and of loving others as I have loved myself. Erikson (1965) called this the virtue of care. I prefer to call it love.

SUMMARY

I have demonstrated that vocation still retains the basic notion of *vocatio*—a calling. Instead of a calling to a particular occupation, I have cast vocation as a calling to a way of being in the world. I have redefined vocation as the quest for authentic existence. This definition is universal in its scope and application: it is not bound by religious connotations and it allows for the particularity of individuals. I believe it also serves as a better hermeneutic of contemporary working experience than the frameworks traditionally used to interpret such experience, especially when this definition is cast as the existential cornerstone of an ideology of work. The quest for authentic existence serves as the existential foundation to Green's concept of work, and this understanding of vocation has important implications for counseling.

REFERENCES

- Coan, R.W. 1974. *The optimal personality. An empirical and theoretical analysis*. New York: Columbia University Press.

- Ellenberger, H.F. (1968). A clinical introduction to psychiatric phenomenology and existential analysis. In R. May (Ed.), *Existence* (pp. 92-124). New York: Simon & Schuster.
- Erikson, E. (1968). *Identity: Youth and crisis*. New York: Norton.
- Fromm, E. (1969). *Escape from freedom*. New York: Avon. (original work published 1941)
- Green, T.F. (1968). *Work, leisure, and the American schools*. New York: Random House.
- Heidegger, M. (1949). *Existence and being*. Chicago: Regnery.
- Heidegger, H. (1962). *Being and time*. New York: Harper.
- London, H.H. (1973). *Principles and techniques of vocational guidance*. Columbus, OH: Merrill.
- Merton, T. (1955). *No man is an island*. Garden City, NJ: Doubleday.
- Ruila, L.M. (1973). *Depth psychology and vocation*. Rome and Chicago: Gregorian University Press and Loyola University Press.
- Tillich, P. (1957). *Systematic theology* Vol. 2. Chicago: University of Chicago Press.
- Van Kamm, A. (1969). *Existential foundations of psychology*. Garden City, NJ: Doubleday.
- Williamson, E.G. (1965). *Vocational counseling*. New York: McGraw-Hill.

5

CRITICAL ADULT EDUCATION: A RESPONSE TO CONTEMPORARY SOCIAL CRISIS

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During the latter half of this century adult educators have witnessed the alarming indications of a society in crisis, while at the same time feeling some sense of responsibility to respond in a manner that would enable adults to engage actively in the transformation of their society in a constructive direction. Adult educators who are committed to the ethos of adult education as a social movement have sought appropriate theoretical foundations for their practice which, for reasons of the prevailing preoccupation with learning efficiency, have been selected primarily from the family of behaviouristic, and cognitive psychological theories. Although the relationship between these theories and the practices of program administration, instruction, educational research, and policy development has led to greater levels of quantitative learning achievement, it has not provided any guidance in terms of assessing the worthwhileness of these endeavours. The view of the relationship between theory and practice that underpins these theories tends to preclude a critique of society in which the role of social structures is seen to perpetuate the status quo, thereby contributing to the current social crisis.

Contemporary society embodies social pathologies such as anomie, alienation, and personality disorders which are manifest in a variety of human and natural phenomena. Humans abuse themselves, their children and others both physically and psychologically; they degrade their culture; and they violate the natural environment - all in the mindless struggle to achieve success as measured in terms of power and money. On a daily basis the media inform us about the increasing incidence of wife battering, child molestation, rape, murder and suicide, denigration of minority groups, family disintegration, substance abuses, wanton cruelty to animals, destruction of the landscape, despoiling of oceans, toxification of lakes and rivers, pollution of the air, and destruction of the upper atmosphere. To our discredit, an apparent immunity to the significance of these conditions has evolved, allowing them to become commonplace and seen as probably beyond the influence of mere educators. We note with some complacency the emergence of institutions within society that are attempting to intervene

in some areas such as homes for battered wives and children, gay liberation associations, animal protection societies, substance abuse centres, cross-cultural education programs, and environmental protection associations; their existence is insufficient, however, to influence on the large scale the broadly based social cause of the problems which lies in the culturally rooted, superordinate human drive for success and the concomitant subordination of human concern for rightness, beauty and comprehensibility.

Societies are maintained and transformed through a variety of social institutions such as government, work, religion, sports, family life and education. Societies create settings for learning and governments and other social agencies administer them for the specific reason of their importance in sustaining and developing the forms of life of a society. The role of adult education in this context is to facilitate learning both for individuals and for society at large: individual learning is aimed at the acquisition of knowledge, skills and dispositions which are applicable in a variety of established institutional roles, while learning in the broader social framework occurs when individuals develop their unique, creative capacities for transforming social roles in preferable directions. Adult education as it is practised in Western industrialized countries supports individual learning to enhance the maintenance of society, at the expense of the actualization of human potential to foster the advancement of society.

This disparity in educational aims and outcomes has become a matter of concern for many adult educators. As an explanation of contemporary society, critical theory shows how the preeminence of instrumental reason has impoverished social interactions and created inequities in material and social wellbeing. Moreover, the universal acceptance of these social conditions and their antecedents is supported by all of society's institutions, including education. The concern of adult educators is directed toward change in the practice of adult education as a basis for penetrating unquestioned vital cultural tradition and creating the milieu for members of society to engage actively in the transformation of society along just, humane and equitable lines.

Critical theories are explanations of why contemporary Western industrialized societies are the way they are, beginning with a description of the intransigence of members of a society respecting the structures and beliefs comprising the fabric of the status quo - *unquestioned vital cultural tradition* - to impede the transformation of society to one characterized by more justice, humanity and equitability. Anchored in the explanation provided by one or another of the critical theories, and the process of dialectics, critical adult education in the sites of program administration, instruction, policy development and educational research could enhance the potential for society to explore and transform their societies inasmuch

as it provides a rich and powerful view of the relationship between theory and practice. *Critical social science* is the generic or meta-methodology for the conduct of critical education research. Each of these concepts will be examined and a view of adult education informed by these concepts then presented.

UNQUESTIONED VITAL CULTURAL TRADITION

The foundation for all forms of social action is a taken-for-granted, unexplored, unproblematic set of structures and beliefs that have evolved over the history of the culture, depicted as the unquestioned vital cultural tradition of a society. Its positive attribute lies in the function of this aggregation of widely understood and accepted background knowledge, assumptions and language patterns in allowing members of a society to enact their social roles and accomplish the day-to-day tasks required for personal and cultural survival. Its negative attribute is visible in the extent to which members of a society hold to its unreflexive, and therefore unquestionable nature, and thus perceive nothing problematic about it or its effects in sustaining an unexamined trajectory in the evolution of the society or its culture.

An assessment of contemporary Western industrialized societies would reveal that enormous progress has been achieved in the creation of material goods and services through the instrumental application of technological knowledge. A predominant feature of the unquestioned vital cultural tradition of these societies is the overriding potency of the human drive toward the achievement of power and money; success in the attainment of these ends is seen as a wholly acceptable basis for attributing value to individuals and groups. This aspect of unquestioned vital cultural tradition has advanced these societies to remarkable heights in their intellectual reproduction, that is, the development and efficient application of scientific knowledge.

The assessment would also reveal that this achievement has been accompanied by a disparate allocation of those goods and services, associated with undesirable forms of social relationships and the relationship between humankind and nature. It can be seen that the enormous progress in the intellectual reproduction of society has occurred at the expense of other, equally essential human drives and values, namely, concerns for the rightness of actions, the beauty of the results of actions, and the comprehensibility of the language of communications.

Unquestioned vital cultural tradition is represented by the concept "lifeworld" which in the schools of hermeneutics and historical relativism is defined as the foundation or context within which individuals engage in communication and which supports the achievement of understanding and

agreement. Habermas (1987)¹ quotes Luhmann to depict the nature of the lifeworld:

Normally we do not have to think about the foundations of our corporate life or the condition of its existence, not to justify actions or expressly to find and display appropriate motives. Problematizing and thematizing are not excluded; they are always possible; but normally this non-actualized possibility already suffices as a basis for interaction. If no one calls it into question, then 'everything's o.k.' (p.417).

The very nature of unquestioned vital cultural tradition resists explication, reflection and critical interpretation. Individuals are not able to stand apart from their lifeworlds; even with the fullest of intention and effort, they cannot consciously appropriate them in their entirety in order to reflect upon them. At best, individuals can seek out and recover only small portions of their lifeworlds at a time, so that examination and adjudication of unquestioned vital cultural tradition can occur incrementally over time.

At the heart of a theory and practice of critical adult education is the reconception of unquestioned vital cultural tradition as a thing to be reflected upon and problematized, acknowledging its value in enabling the maintenance of cultural survival, while recognizing its imperfections and weaknesses and the effects of unthinking adherence to it as an impedance to active participation of individuals and groups in the transformation of social and cultural patterns in a more desirable direction.

CRITICAL THEORY

The majority of contemporary social theory can be grouped according to two fundamental categories: those theories that assume that society is the expression of an underlying natural order and are disposed to manipulate the variables that account for it (structural functionalism, for example Parsons)², and those theories that assume that societies are created and conceptualized and are disposed to encourage diversity (social phenomenology, for example Schutz³, and sociology of knowledge, for example Berger and Luckman⁴). Critical theories take neither of these positions - they envision a social order that is constantly emerging and are disposed toward influencing its emergence in a direction that is more just, humane and equitable, (for example Marx⁵, Giddens⁶, Habermas⁷, Hella⁸, Unger⁹). This disposition is viewed as fundamental to human life and inquiry. Critical theories are theories about modern societies, explaining the deficits that exist in the manner in which society is evolving. Contemporary critical theories dispute the capacities of modern capitalist and socialist societies to sustain material growth in a democratic manner that is fair, just, and

equitable for all members of the society as well as for nature itself¹⁰. The relationship between theory and practice or the way of thinking and acting that is inherent in materialist dialectics is applied in arriving at this explanation within the context of an unquestioned vital cultural tradition as a worldview with sociohistoric features that include material and social inequities and distorted states of human consciousness.

AN EXPLANATION OF CRITICAL THEORY

All critical theories have in common a normative concern with the fate of humankind in technocratic society. What they attempt to explain is how the views of power relationships between the individual and nature, and the individual and society, and how meaning and speech, and theory and practice are reconciled in the evolution of societies. The mediation of these tension-filled relationships is thought to hold the potential for an ever evolving social reality moving toward more just, equitable, and humane social arrangements. There are differences among various critical theories of society. The particular critical theory that most effectively informs critical education explains the deficits in the reproduction of society in terms of the imbalance among ways of knowing that result in distortions of communication between those who dominate and those who are dominated. This theory is the theory of communicative action as developed by Jurgen Habermas¹¹. His theory identifies two forms of human action — action-oriented-to-success (instrumental action) and action-oriented-to-understanding (communicative action). These forms of action are rooted in four distinct but not separate, historically constituted modes of human knowing — purposive-rational, moral-interpretive, aesthetic-expressive, and explicative. Purposive rationality has two dimensions, namely, instrumental rationality in which theoretical knowledge is applied without question in teleological action (the non-communicative use of descriptive knowledge), and explanatory rationality in which descriptive knowledge is created. Moral rationality is a critique along the lines of established cultural values; aesthetic rationality is a non-cognitive, extraverbal offering and critique of alternatives to established values; and explicative rationality is the analysis of language in search of fuller meaning in speech. Explanatory, moral, aesthetic and explicative rationality are the elements of communicative action. The heart of Habermas' critical theory is the overdetermination of instrumental rationality at the expense of communicative rationality as the basis for the deficits in the reproduction of societies in advanced industrial countries.

One distinction among variants of critical theory lies in the focus of some on the false consciousness of certain groups or classes of society that

are dominated by other groups or classes, and those critical theories in which attention is paid to the imbalance existing in human thought (fragmented consciousness) which is reflected in distortions of communication.¹² This is not to suggest that the normative intent of these two classes of critical theory differs, or that the element of instrumental or technicized rationality is absent from either. What is represented in Habermas' theory is a reframing of the problem from one rooted in false consciousness and its extension to conspiracy and struggle, to one embedded in the notion of fragmented consciousness and communicative competencies.

Inherent in the idea of critique is the assumption that knowledge is always in an incomplete state, and that its emergence can be influenced by the active involvement of individuals as social beings in concert with other social beings, organized around cultural patterns. The way in which social beings engage actively in the mediation of tension-filled relationships is materialist dialectics.

MATERIALIST DIALECTICS

Early Greek philosophers defined dialectics as a special auxiliary means of capturing and thinking about our reality. Materialistic dialectics is a tradition of thought and action which is at the heart of critical theories for mediating social change aimed at more equitable, just and humane social arrangements¹³. Many dialectical traditions have evolved since the time of Plato, of which materialist dialectics is a relatively modern form having been shaped by western philosophers during the 20th Century. Materialist dialectics is characterized by a worldview that involves two aspects of reality within which two methods of thinking and two ways of relating thought and action take place. The foundation for this worldview is the assumption that reality is independent of human beings, and yet through their involvement as a part of it, humans can influence the emergence of social reality¹⁴. This, in combination with the notion that humans are socially and historically embodied beings, leads to a presupposition of the ongoing nature of both the realization of truth and the evolution of human reality; as well as the progression of individual and species development.

The two methods of thinking and acting and the two aspects of social reality are proposed as a basis for questioning ideas and patterns of social interaction that exist at a given time and are generally accepted for purposes of sustaining the current social order; the questioning aims to change societal processes and structures by preserving and at the same time superseding the currently acceptable ideas and patterns.

Reality has two aspects: the world of the pseudoconcrete and the world of the concrete. The pseudoconcrete is represented by the form or

the idea of a phenomenon as it can be seen by individuals through the perceptual screens created by the historical moment and the cultural context. This is only a limited portion of any phenomenon, a simplified abstraction of reality. The whole, or the world of the concrete, can be experienced at least in part by looking beyond the limits of form (the idea of the phenomenon) to get to its essence (the concept of the phenomenon), allowing a richer view of the form to emerge. The limitations that are inherent in form (the pseudoconcrete) are functional insofar as they permit the attribution of structure, order and laws to phenomena such that they can be manipulated in the conduct of the day-to-day affairs of individuals and society.

The two kinds of thinking in which humans can engage are routine thinking and dialectical thinking. Routine thinking enables people to deal efficiently with the practical problems that comprise their day-to-day affairs. This analytic thinking or formal logic is shaped by the existing historical and social context, filtering and simplifying experience and disregarding the contradictions and inconsistencies that hint at the existence of the essence of phenomena.

Dialectical thinking is the process by which the contradictions and inconsistencies between what we believe and what we experience in everyday life are explored in an attempt to grasp more of reality, to reach toward essence, thence to a richer, more complex view of forms of life. This process of informal or dialectical logic is based on a view that totality is constantly emerging as the result of actively engaged forces - the simplified idea of the phenomenon and the contradictions and inconsistencies within and surrounding it - whose conflict leads to qualitative social change.

The disadvantage of routine thinking is that, although expedient for solving practical problems, fixation on simplified abstractions of reality tends to accord them the status of concrete reality, and this misconception of total truth for all time leads to the formation of ideologies which resist change. As Ackerman and Parsons once put it, "We exclude — and what we exclude haunts us at the walls we set up. We include — and what we include limps wounded by amputation. And most importantly we must live with all this, we must live with our wounded and our ghosts"¹⁵. By switching to dialectical thinking, a richer perspective is opened that allows for an illumination of the phenomenon or problem not accessible through routine thought. Social situations can be analyzed through dialectical thinking revealing their internal contradictions as apparent opposites which hold a potential for influencing qualitative social change through mediation. The relationship between routine and dialectical thinking can be captured as a journey back and forth between the pseudoconcrete and concrete dimensions of reality.

There are two ways of relating thought and action, or theory and

practice: everyday praxis and revolutionary praxis. Praxis reflects the relationship between thinking and doing. Everyday praxis is employed in goal-directed activity and, in the interests of efficiency, involves a spontaneous tendency to shear a situation of all elements that are peripheral for purposes of the immediate task. This division of the whole through routine thinking creates the simplified phenomenal forms that facilitate focusing on particular tasks required for survival. In necessary everyday praxis the wider reality is neglected or overlooked, as is the existence of the functional, habitual, conceptual filters used to accomplish the simplification of reality, the effect of which is a perpetuation of the gap between form and essence.

It is never possible to disregard entirely evidence of the essence or concept of things; there is always a dim awareness of the whole which although latent can be uncovered by dialectical thinking, allowing individuals to recognize their capacity to alter the world toward a more humanitarian mode of existence. The kind of practical activity of people directed toward the actualization of humankind based on dialectical thinking is known as revolutionary or critical praxis. By revolutionary is meant the ongoing spiritual reproduction of society directed toward improved social arrangements for the production and equitable distribution of material wellbeing. By critical is meant the search, through dialectical thought, for internal contradictions or actively engaged forces that provide the basis for mediations directed towards the spiritual reproduction of society. This search portrays the questioning of unquestioned vital cultural tradition.

The central notion of materialist dialectics is that truth happens rather than being discovered. Reality is in a constant state of emergence that human beings in a social, cultural and historical context can influence or mediate through reason and activity. Said another way, the intellectual reproduction of society guided by positivistic thinking and everyday praxis must be nourished by dialectical thinking and revolutionary praxis in order to effect the spiritual reproduction of society — the actions of social beings grounded in rightness, authenticity, preferability and comprehensibility directed toward the equitable redistribution of materials and services, and the reconstruction of social relations and our relationship with nature, required to produce them.

Critical theory incorporates the power of positivist science that drives the intellectual reproduction of society without resorting to positivism or scientism which would preclude the spiritual reproduction of society. The preservation of the power of positivistic thought and related empiricist method is captured in the view taken by early positivists that science was a way of knowing and acting in addition to existing ethical and aesthetic modalities. Later positivists elevated the status of science to scientism thereby crowding out or fragmenting other ways of knowing and acting¹⁶.

Critical theorists advocate the recovery of those submerged or fragmented ways of knowing and acting through dialectical reasoning and revolutionary praxis.

Within the materialist dialectics view of totality, social evolution is seen to occur as a result of praxis. Human beings are always unfulfilled in that being is who they are and essence is who they could be if they were to actualize their unfulfilled historically constituted dispositions and capacities. Progress is not guaranteed in history; it depends on the productive and reproductive practices of historically acting subjects¹⁷. Returning to the critical theory motif of the dialectical interplay among the individual, society, and nature mentioned earlier, this interplay is thought to be the basis for the constructive mediation of social change. The idea here is that the social and natural world is independent of the individual but not extrinsic. That is, although the world is emerging independently, there are numerous ways in which individuals can influence or mediate it. This dialectical and relational position makes possible an internalist approach to society, from the perspective of the lifeworld of individuals, in which individuals collectively influence society, as well as an externalist approach, from the perspective of the social system, in which society requires individuals to conform in order for it to fulfil its functions.

CRITICAL SOCIAL SCIENCE

The longstanding debate regarding the merits and relationships between quantitative and qualitative research can be resolved through the notion of a critical social science in which the power of empirical analytic and interpretive social science can be preserved while at the same time superseded through the use of both routine thinking (formal logic) with its associated everyday praxis and dialectical thinking (nonformal logic) with its associated revolutionary praxis. As mentioned earlier, in the materialist dialectics view, totality is seen to be constantly emerging by means of actively engaged forces whose conflict leads to qualitative and relatively rapid social change. Within this view individuals are seen to play an active role in the intellectual and spiritual reproduction of society such that an analysis occurs in which theorists and practitioners are closely involved in interaction so that theory and practice mutually modify each other, intertwine, and produce a new emergent.

The dialectical relationship between theory and practice can be distinguished from the one in empirical analytic social science where theory is thought to drive or inform practice and in interpretive social science where theory is understood to enlighten practice¹⁸. The functions of critical social science reflect a going beyond yet a preserving of the contributions within

the scope of empirical and phenomenological research which are limited with respect to effecting transformative social change. These functions are the formation and extension of critical theorems, the organization of the processes of enlightenment, and the organization of the processes of action. They can be used to portray the relationship between critical theory and critical social science. Critical theorems are developed through the use of a critical theory to examine an aspect of contemporary society by an individual or a group who are concerned with making existing patterns of social interaction more fair and just. The critique exposes the contradictions between what a society purports to be and what it is and represents outcomes that are desirable. Critical theorems must stand up to criteria of scientific discourse; intersubjective understandings obtained from reflection within the group must stand up to authenticity tests; and finally the selected action must reflect prudent decisions¹⁹. Drawing from Habermas, Carr and Kemmis²⁰ define critical social science as:

a social process that combines collaboration in the process of critique with the political determination to act to overcome contradictions in the rationality and justice of social action and social institutions. A critical social science will be one that goes beyond critique to critical praxis; that is, a form of practice in which the 'enlightenment' of actors comes to bear directly in their transformed social action. This requires an integration of theory and practice as reflective and practical moments in a dialectical process of reflection, enlightenment and social action carried out by groups for the purpose of transforming society (p. 144).

This preliminary sketch of the process of critical social science is illuminated by Fay's²¹ notion of a social theory that is critical and practical as well as scientifically explanatory, thereby identifying a process through which desirable outcomes can be achieved. Conditions must be such that there is a crisis in a social system; that the crisis is at least in part caused by distortions of consciousness of those experiencing it; the distorted consciousness is amenable to a process of enlightenment; and that enlightenment leads to emancipation in which a group empowered by its new-found understanding radically alters its social arrangements and thereby alleviates its suffering. He posits four inter-related elements of critical social science: a theory of consciousness, a theory of crisis, a theory of education, and a theory of transformative action. These provide a basis for understanding critical theories and determining their appropriateness as a guide for the creation of learning opportunities for adults. Let us turn now to the components of critical social science as outlined by Fay²².

A THEORY OF CONSCIOUSNESS

First, the theory must point to the way a group of people's view of the world is incongruent with their own life experiences, and it must identify specific contradictions. This is often referred to as critical analysis of unquestioned vital cultural tradition. Second, in addition, it must provide an historical explanation of how this view of the world came into being and is perpetuated. And then finally, it must provide an alternative worldview that overcomes the contradictions between their current worldview and their direct life experiences.

A THEORY OF CRISIS

A theory must be presented based on a social crisis that a particular society is currently experiencing. This theory must be tied to existing social pathologies rooted in the basic structure of the given society and that threaten to destroy it. The theory must portray historically a dialectical combination of distorted consciousness on the part of individuals and existing structural inequities on the part of society.

A THEORY OF EDUCATION

This theory must outline the educational structures and processes that will facilitate the changing of societal members' worldview in such a way that contemporary social pathologies become obvious and reveal the individual's role in perpetuating their worldview.

A THEORY OF TRANSFORMATIVE ACTION

This theory must point out the structural aspects of society requiring change if social pathologies are to be ameliorated. In so doing, it must be able to not only identify those members of society who can be anticipated to carry out the transformative action but also provide at least a general idea of how they might go about doing it.

Fay maintains that in order for a theory to be critical, practical, and scientific it must be a theory of social life or some portion thereof that contains all of the above-mentioned elements and that they must be systematically and consistently arranged.

CRITICAL ADULT EDUCATION

The task is to explore the implications of critical theory for the provision of learning opportunities for adults which are directed toward education's role in restructuring social arrangements along more equitable, just, and humane lines. Critical theory, including the concept of unquestioned vital cultural tradition and the process of dialectics can be employed to reconnect theory and practice in the various sites of adult education - program administration, instruction, policy development, and educational research - in the face of social, political and environmental crises.

As an artifact of society, adult education represents a variation or extension of the unquestioned vital cultural tradition of society writ large. Three elements are generic to all four sites within this specialized domain: practices, social relationships, and the language used to describe both; these are expressions of the unquestioned vital cultural tradition of the domain. In exploring the relationship between theory and practice in each site, two levels of theory are evident: the formally established or overarching theory, and the specific institutional variant developed from one or more formal theories and expressed as an institutional plan, system or method. Practices in adult educational sites tend to relate more directly to institutional theories than to formal theories.

ADMINISTRATION OF ADULT EDUCATION

The functions of program administration include determination and development of intended learning outcomes, management of instructional and support personnel, attraction of appropriate learners, provision of resources, and program evaluation. For each of these functions there are conventional algorithms to guide their enactment that are drawn from theories of administration developed by researchers; in this paradigm, theory is seen to drive practice, and the value of both is weighed on the grounds of efficiency in achieving quantifiable outcomes that conform to the instrumental orientation of the unquestioned vital cultural tradition. In their application of the theory when decisions are to be made, administrators resort to manipulating the variables the theory explains in a manner that complies with the laws of the theory. Evidence of this preoccupation with instrumental success can be found in the language used widely by educational administrators which is replete with the jargon of production and accounting: "needs assessment", "program delivery systems", "cost/benefit analysis of programs", "return on training investment", "marketing committees", to name but a few.

A variety of alternatives to current practice become available when

the functions of educational administration are cast within the generic elements of practices, social relationships and language, and informed by critical theory; these elements can be interpreted and enacted toward improvement by practitioners engaging in collective and collaborative efforts to penetrate and challenge unquestioned vital cultural tradition. For example, when decisions are to be made, administrators might consult initially with those upon whom the decisions will impact in order to identify the contradictions existing within the situation, and to examine them in the context of an evaluation of current practices and organizational relationships, and the common meanings inherent in the way these are described. The examination could expose portions of unquestioned vital cultural tradition, the critique of which would ensure that the dialectical mediation of the contradictions by the group would generate an administrative decision incorporating attributes of rightness, beauty and comprehensibility as well as instrumental efficiency. Inherent in the decision would be the expectation that in its implementation further contradictions will emerge which in turn would require collaborative mediation toward the evolution of more just, humane and equitable patterns of administrative action that would have the effect of empowering both the educators and the learners within the educational institution. The relationship between theory (the organizational plans) and practice (the administrative decisions) would be seen to mutually modify one another through a collaborative process which is informed by critical theory, and from which a new emergent would be generated.

INSTRUCTION

The functions around instruction include the design of instruction, implementation of instruction, and assessment of program outcomes. These functions tend to be guided by established systems and approaches (the institutional theories) that are informed by one or more of the psychological theories. Many of these institutional theories are applied with the dominant intention of increasing in quantifiable terms the efficiency with which preestablished knowledge and skills are acquired. Where instrumental rationality and action are preeminent, many functions around instruction have become desensitized and sterilized of values components. This positivistic orientation is reflected in the code words that are heard in the language of practitioners involved in instruction: "stand-alone instructional modules", "learners at risk", "grade point averages", "reinforcement schedules in contingency management", "learning disabilities". Here the relationship between theory and practice is one in which theory drives practice.

In some settings, certain instructional practices are guided by an interpretive human science orientation informed by humanistic psychology;

instructors and learners are both active participants in an effort achieve intersubjective understandings that will enrich the learning experience in the interests of meeting society's needs and individual needs. Here one encounters the familiar language of andragogy in terms such as "setting the learning climate", "learning facilitator", "negotiation of learning objectives", "self-directed learning", "sharing learning experiences", "ego involvement", "threat reduction". In this orientation, theory is viewed as revealing practice.

Practices from both these orientations could be improved if practitioners involved in instruction were, for example, to collaborate in a critical analysis of their existing practices, social relationships and language in the context of the unquestioned vital cultural tradition of their institution and their profession. They could evaluate the potential for reconstructing dialectically their endeavours to reflect critical social theoretical foundations as well psychological foundations. This reconstruction could result in changes in the content of their programs to include moral and aesthetic dimensions representing the knowledge and capabilities to critique unquestioned vital cultural tradition; and changes in their instructional processes such that learners are engaged in group activities that involve interaction with social issues and structures. The relationship between theory (institutionally determined patterns) and practice (implemented instructional processes) would be seen as a reciprocally interactive one, enacted by groups of practitioners who are informed by critical theory, producing enriched versions of theory and steadily improving practices.

POLICY DEVELOPMENT

Governments generate legislation which is translated into policies that structure the nature and scope of education. These policies allocate educational resources, mandate institutional accreditation, and regulate educational practices. In social democratic political systems, the overarching theory that informs the creation of legislation is capitalism. Within that social theoretical context, the legislation that any government creates is shaped by two major antecedents, namely, the particular ideology of the political party holding power and the political imperative to achieve and maintain power. The development of educational policies informed by current legislation represents practice. The preeminence of the steering medium of power accounts for the kind of educational legislation that is created; its force will have instrumental value for the major actors in the economic sector of the society, will sustain the pattern of existing institutions and their relationships, and will perpetuate the doctrine of individualism as the basis for maintaining a coherent society. Policies are developed in relation to this legislation in the context of unquestioned vital cultural tradition, a significant

component of which is the assumption about the role of knowledge in society; that is, that knowledge (the content for education) that is selected to assure continuity of the social order will be disseminated in a manner that assures its optimal accessibility to those who can be expected to contribute to the maintenance of the socio-economic status quo.

Officials in government develop public policy in education by a process which includes data collection and interpretation respecting the resources available for distribution, the perceived educational needs of the various constituencies, and potential for streamlining educational services, considered in the light of anticipated public response to policy changes. Alternative policy formulations are adjudicated in terms of the potential benefits (cost efficiencies, labour market solutions) and predicted public opinion. Here the relationship between institutional theory (legislation and its antecedents) and practice (policy development) is one in which the theory drives practice.

Alternatives to this pattern of practice are revealed when the functions of policy development are informed by critical theory and reconceptualized as practices, social relationships and language, with the potential for reinterpretation and improvement through collective critique of unquestioned vital cultural tradition. When data respecting educational needs and priorities is to be collected and interpreted, policy developers could consult with representatives from all socio-economic sectors of the adult constituency, particularly those who are presently non-participants in the educational offerings for adults. Through these consultations which could focus on current educational policies, the social relationships that influence their development, and the intersubjective understandings that could be achieved, policy developers and constituents could uncover the contradictions that exist in the provision of educational opportunities, and their roots in aspects of unquestioned vital cultural tradition that perpetuate them. Further collaborative exploration of material and social inequities could lead to dialectical mediation of the contradictions, which could be used by policy developers in generating policies for the education of adults that hold the potential for fostering change in the existing patterns of selecting and disseminating information toward patterns directed toward more just, humane and equitable educational arrangements. When the policy developers would present and rationalize the proposed policies to their legislator for adjudication, the legislator's view of the imperatives that shape the legislation might be altered, with the attendant possibility of a change in the shape of future legislation. As the implementation of the policies were to give rise to new contradictions, the same collaborative process between policy developers and constituents could be used to mediate them dialectically prior to further policy development. The relationship between theory

(legislation and its antecedents) and practice (policy development) in this orientation is one in which theory and practice mutually modify one another and produce new and richer versions of each.

EDUCATIONAL RESEARCH

The goals of educational research are seen conventionally to be either explanation, prediction and control (according to the quantitative view), or understanding and meaning (according to the qualitative view). In the former case, disinterested researchers seek out the inescapable laws that govern behaviour in educational situations. These results are then employed to influence practical change through technical control. Here theoreticians, through a division of labour in which they objectively study educational practice to develop theory which in turn is viewed as driving practice. In the latter case, empathic researchers seek through quasi-participation with practitioners to interpret the manner in which practitioners construct and maintain intersubjective meaning that guides their actions. Here theoreticians are not fully separated by a division of labour; rather they are quasi-participants who through their interpretations convey to practitioners a view of their intersubjective reality that includes aspects of which they may not have been aware. The search is not for objectively derived, inescapable laws, but rather additional meaning subject to the practitioners' verification. In this approach, theory is viewed as revealing practice.

An alternative to conventional approaches, critical social science, becomes available when the previously noted goals of research are reconstructed as the formation and extension of critical theorems, organization for enlightenment, and organization for action. In this orientation, participant researchers join with a group of practitioners who are interested in improving their practices, the social relationships which contextualize those practices, and their understanding of the language they employ to institutionalize their practices and associated social relationships, which is in general a reflection of unquestioned vital cultural tradition. These practitioners could be acting in any of the four sites of adult education. Their engagement in research activities can be differentiated from their everyday practice in these sites, in that a specific aspect of practice is singled out for improvement. Both the theoretician and the practitioners collectively and collaboratively analyze their actions in the context of a specific critical theory that addresses the power relationships that obtain as a result of the overdetermination of purposive-rational thought and action. As the formation of critical theorems enlightens all participants, they then enact action plans based on the theorems. It is expected that these plans when put to practice will inevitably turn up additional contradictions which are the basis for extension of the original critical theorems to be researched in ensuing research iterations. Here theoreticians collaborate with practitioners through the employment of a critical theory to improve practice in a more humane, just and equitable direction. The search here is not only for improved

understanding, meaning and action as is the case in the qualitative or interpretive approach, but in addition an understanding of unintended outcomes and the socio-historical forces that account for them. The view of the relationship between theory and practice in this approach is one in which they are seen to mutually modify each other, intertwine and produce a new emergent with each iteration of the process. This critical social science activity occurs only in the research site.

CONCLUDING COMMENTS

Recent advances in social theory offer the occasion for adult educators to reconceptualize their views of the social role of adult education, as well as methodologies for its implementation. In the enactment of practice in the sites of program administration, instruction, and policy development, practitioners informed by critical theory can actualize their unique potential for interpreting each situation in terms of the opportunities within it to collaborate with their associates (or their learners) in changing their customary practices, altering the established social relationships, and enriching the language in common use to describe the social reality they share. In the myriad of situations that comprise the real world of practice, the nature and scope of opportunities for this collaborative improvement will vary dramatically, however each successful initiative can provide a stepping stone for further initiatives.

In the site of educational research, practitioners engage in the formally organized conduct of critical social science through an action-oriented project initiated and facilitated by a theoretician. Here, a specific area of their educational practice that has been thematized becomes the focus of the research group's systematic, collaborative, self-reflective enquiry and planned action aimed at achieving significant improvements in their practice, their organizational relationships, and their ways of describing both; that is, through the process of taking action to change these, and learning from the effects of the changes.

The prospects for a critical adult education in all of its sites are especially timely in the light of the crisis in contemporary society. As a major player among society's institutions, an education system informed by critical theory can enact a leading role toward the attainment of significant advances in the direction of a more just, equitable and humane society.

REFERENCE NOTES

1. Habermas, J., *The Theory of Communicative Action Vol. II*, Translated by Thomas McCarthy, Boston: Beacon Press, 1987.
2. Parsons, T. *The System of Modern Societies*. Englewood Cliffs, NJ, 1971.
3. Schutz, A. *The Phenomenology of the Social World*. Evanston, IL: Northwestern University Press, 1967.

4. Berger, P.L. and T. Luckman, *The Social Construction of Reality*, London: The Penguin Press, 1967
5. Marx, K. *Economic and Philosophic Manuscripts of 1844*, translated by K. Mapkc, Moscow: Publishers Press, 1977.
6. Giddens, A. *The Constitution of Society: Outline of the Theory of Structuration*, Berkeley: University of California Press, 1984.
7. Habermas, J., *The Theory of Communicative Action Vol. I and II*, Translated by Thomas McCarthy, Boston: Beacon Press, 1987.
8. Heller, A. *The Theory of Need in Marx*, London: Allison and Busby, 1976.
9. Unger, R.M. *Social Theory: Its Situation and its Task*, Cambridge: Cambridge University Press, 1987.
10. For a comprehensive introduction to critical theory, see Arato, A., & E. Gebhardt (Eds.), *The Essential Frankfurt School Reader*, New York: Continuum, 1985, and Held, D., *Introduction to Critical Theory*, Berkeley: University of California Press, 1980.
11. Habermas, Vol. I and II op cit.
12. For an explication of this distinction, see Morrow's comparison of the subjective/objective representational model of the philosophy of consciousness with a linguistically mediated theory of communications model. Morrow, R., *Habermas on Rationalization: Reification and the Colonialization of the Lifeworld*, Paper presented at a joint session of The Canadian Association of Sociology and Anthropology and The International Sociological Association, Research Committee on Alienation Theory and Research (Vancouver, June 1-4, 1983).
13. This section is a distillation of Kosik's interpretation of materialist dialectics as presented in, Kosik, K., *Dialectics of the Concrete*, Dordrecht: D. Reidel Publishing, 1976, Chapter I.
14. For a discussion of how we relate ourselves in various and in innumerable ways to a world which is independent of us, see Israel's notion of a relational realism that does not lead to radical relativism. Israel, J., *Dialectics of Language and the Language of Dialectics*, Munksgaard: Humanities Press, 1979, Chapter I, Section 1.3.6.
15. Ackerman G. and Parsons, T. quoted in P. Sztompka, *System and Function*, New York: Academic Press, 1974, p. 30.
16. For an elaboration of this distinction between early and later positivism, see the introduction in Horkheimer, M., *Critical Theory: Selected Essays*, Translated by Matthew, J. O'Connell and others, New York: Continuum, 1971.
17. This notion of progress as an "unconcluded dialectic" is treated in Held's analysis of Horkheimer's formulation of critical theory. Held, op. cit., pp. 175-180.
18. For an extensive discussion of these three views of the relationship between theory and practice and their implications for education in which teachers are urged to take a critical stance, see Carr, W., & Kemmis, S., *Becoming Critical*, London: The Falmer Press, 1986.
19. For a detailed treatment of the functions of critical social science, see Habermas, J., *Theory and Practice*, Translated by John Veitell, London: Heineman, 1974.
20. Carr, W. and S. Kemmis, op cit.
21. Fay, B. *Critical Social Science*, Ithaca, NY: Cornell University Press, 1987.
22. *ibid.*

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PRAXIS AND TRAINING

D. LITTLE

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When talking about training, we often refer on one hand to "content" or outcomes of training, that is, what competencies are to be acquired, and on the other hand, to the training "process" through which this acquisition occurs. While acknowledging that these distinct aspects of training can in no way be separated, today I will focus my discussion on the process of training with the somewhat glib qualifier that content is derived through a competency based outcome analysis.

As I was preparing to come and talk with you today two things continually surfaced. One is an extraordinary view of the relationship between Theory and Practice. The other is a set of learning principles based on research conducted in a number of areas outside of educational psychology such as communications, epistemology, history, political science, sociology, religious studies, anthropology, linguistics, computer science and neurology. Today I will try to describe praxis, a special view of the relationship between *theory* and *practice*, which is the foundation for five principles of learning that provide a basis for the design and management of training opportunities. The framework to be described is the one we employ to guide our instructional efforts within the Vocational Technical Education Program at the University of Regina.

Praxis

Practice is putting theory into use. In terms of everyday living, this is reflected in the notion of action which is associated with the idea of intention. That is to say, people always do things with an intention. For instance, when a person drives a car, the intention is to apply the

rules of traffic control and motor vehicle operation so as to arrive at a destination without mishap. There are numerous actions entailed in the journey, which are undertaken by the experienced driver without conscious reference to the intention. Thus theory is to intention as practice is to action. As trainers we want to show learners a theory that is new to them so that they can change their Practice in the workplace.

Normally we tend to think of theory as a tried and true way to do something that some bright person discovered, and that can be taught to someone else. In a certain sense theory is thought to drive practice so that training becomes a matter of motivating trainees such that they will routinely put the theory into practice. This view of the relationship where theory is seen to drive practice is the one accepted by most people and seen in the conduct of science. The scientists try out the theory, meticulously adhering to it for the purpose of establishing its validity. Theories are abstract in that they only cover certain selected aspects of practice in order to make the theory understandable and manageable. In this respect, good theories are thought to have the quality of "stinginess". Unfortunately, too often a "good" theory places boundaries around the practice situation such that essential elements of that situation cannot be seen, and opportunities for enriching the theory through the experience of practice are lost.

Praxis, an alternative version of the relationship between theory and practice, has made its appearance in the social sciences. Theory and practice or the scientist and the people being studied are thought to mutually modify each other, become closely involved in interaction with each other and potentially produce a richer theory each time it is used. On this view there is a tension-filled relationship between theory and practice - or the trainer and trainee - which, if managed properly, can facilitate the ongoing development of the theory being taught as well as its successful practice. The idea behind this relationship is that knowledge is always in an incomplete state, and people play a vital role in creating it, not just discovering it. So theory or knowledge does not represent some timeless objective thing out there that specialized persons (scientists) search for, but rather, people in both the theorist and practitioner role go about creating knowledge through work. This view is remarkable in that it assigns a major role and responsibility to trainees and employees regarding learning and work.

Just before we move on to the principles of learning that flow from this view, let me say a word about the logic that supports this special view of the relationship between Theory and Practice or praxis. It is based on the idea that reality is constantly emerging as a result of tension-filled relationships, or actively engaged forces, which, over time, lead to qualitative change. For instance, until the early part of this century, the dominant social value respecting the role of women held that a woman's place was in the home, as a full time wife and mother. In the early portion of World War II, the demand for factory labour to support the war effort forced recruitment of women into the industrial workforce. The success of women in their new occupational roles led to an extension of their involvement in the labour market beyond the end of the war. Over time, the dominant social value came to endorse the expansion of women's roles in society. The actively engaged forces in this case were the prevailing social values on the one hand, and the emergent needs of the war effort on the other.

In the evolution of society, actively engaged forces are thought to cause ongoing change. If we took this view rather than the more commonly held one where the search is for the ultimate status quo, can you imagine the power of thought and action that could be brought to bear by the use of this special way of thinking about the relationship between theory and practice in which the practitioners who apply the Theory make changes in it to reflect their encounter with these actively engaged forces? Just to take the point one step further, can you imagine how even more powerful thought and action could be if we included within the training opportunity a provision for trainees to learn about praxis?

One of the reasons I brought this matter up was a request from one of the Prince Albert trainers who asked me if I could include the notions of experiential and social learning in my presentation. In the case of training, we can look at experiential learning as individual learning, and social learning as organizational learning. On the experiential side, individuals are thought to take ownership of their unique personal experience to bear in changing theory. On the social learning side, individual, unique potential contributions toward changing theory can be validated through a group's assessment of its appropriateness vis a vis organizational norms. The notion here is that individual learning, as expressed in one's personal biography, intersects with

organizational learning, as expressed in the organization's culture. These two actively engaged forces mutually modify each other, and in the process, produce qualitative change. These ideas will be explored in more detail in the principles of learning that follow.

PRINCIPLES OF LEARNING AND TRAINING

I would like now to return to a set of principles of learning mentioned earlier. Each of these principles drawn from a number of different research areas, has powerful implications for the design and implementation of training opportunities¹.

Communication Principle

The fundamental assumption here is that there is a potential in communications for the content of the message to be influenced not only by the person originating it but also by the person receiving it. Contemporary advances in communications research hold great promise for enlarging our understanding of the relationship between the trainer and the trainee. I am referring to the relatively recent proposal to advance the time-honoured *sender-message-channel-receiver* communication model which is based on the notion of feedback, to a two-way convergence model of communication which is based on the notions of feedforward and mutual understanding.

The idea here is that, on the assumption that theory and practice mutually modify each other, the person sending information "hears" -- by interpreting a variety of verbal and extraverbal cues -- the receivers' reaction to the message as it is being sent (feedforward), and adjusts the message to reflect their input, rather than trying to adjust the receivers' views to fit the message. The sender tentatively tries out the message in advance to a group of intended receivers in order to see how it will be received. In the notion of feedforward is the opportunity for changing the message to accommodate not only individual intended receivers but also the reference group within which they are embedded, thus enhancing the potential for mutual understanding. Conversely, the idea of feedback is limited to the potential for confirming after the fact -- after the message in its original form has been sent -- that the receivers have heard it to some degree.

Think of what we might be able to do if we were able to transform perspectives on training by assuming that senders (trainers) often stand to change as much if not more than receivers (trainees). If we were to follow the imperative of the convergence model always to negotiate with

a group in advance what part of the message the intended receivers would be interested in hearing and how it must be reconstructed to reflect these interests, can you imagine the positive consequences? Well, of course every time we sent a message the possibility would exist that it would develop into something more complex. This is quite a different situation from the one where the sender hones the message, selects the proper channel, sends it and obtains feedback. The convergence model with its goal of mutual understanding, offers a dynamic view of the growth of knowledge as well as a more active view of the role of people in the production of knowledge².

The training principle here is one of tactfulness to be distinguished from tactic. This principle of pedagogy, recently elaborated by Max van Manen at the University of Alberta, suggests that whereas tactic is a method or scheme for accomplishing a teaching end that has a calculated, planned meaning such as the algorithms of competency-based training, tact is an effect one has on another; it is the sensitive application of thoughtfulness in action and often consists in holding back, waiting for the teachable moment. Although one cannot prepare for it, one can develop a tactful stance through acquiring the disposition inherent in the convergence model of communication. Tact is having a feel for the situation. It is the ability to convey thoughtfulness that involves awareness of the total being of the trainee including the body; it is an active sensitivity for what is unique and special about the other person. Its components are attunement to subjectivity, subtle influence, holding back, situational confidence, improvisational gift-giving and openness to the learner's experience³.

Process Principle

The view contained in this principle is that the learning process incorporates latent as well as active cognitive processes. Given our concern with organizational learning we, as trainers, often tend to focus exclusively on the active and neglect the latent, thereby overlooking the mutuality of organizational and individual learning. This principle of learning is drawn from the study of the psychology of consciousness. In our culture, with its emphasis on science and technology and analytic modes of thought, we tend to direct our concentration on the ordinary, everyday, efficiency-driven world. Sensual or holistic forms of thinking are downplayed and relegated to the esoteric and arcane, when indeed these latent aspects of learning are the wellsprings of creative thought so necessary for effective production.

These latent aspects can be seen as a "wandering" process which conveys the notion of learning as a journey. Wandering is seen to be a process by which we connect present with past experiences in a manner that suggests possibilities for survival in the future as human life continues to evolve through time with unpredictable fluctuations. The emphasis here is on the importance of an individual learning well what needs to be learned without undo regard for the time required to accomplish the outcome.

The training principle here is that, in our zeal to measure active learning on efficiency criteria, we must ensure that we do not snuff out latent learning thereby desensualizing and desiccating the learning process. As part of a training experience, opportunities for learning must be provided that allow trainees to wander a bit in their pursuit of training objectives in order that they may return to them with a richer understanding. These opportunities can be thought of as occurring in the spaces between the neatly designed boxes in our training plans.

We allow for latent learning in the training process through tact which was described earlier. In addition to our use of the algorithms of competency based instruction we can acquire a measure of awe respecting the uniqueness of the sometimes baffling ways in which trainees act and interpret what we propose to teach them. Just imagine the implications for planning and providing training opportunities if we took these notions seriously. Presently we tend to overemphasize the systematic organizational aspect of learning, and to view learning in training settings as occurring in active spurts focused on discrete tasks; often, however, the organization providing the training opportunity has one thing in mind, the trainer another, and the trainee again something different. A prominent educator puts it this way: the unintended consequences of learning blend with the intended so as to make them virtually indistinguishable, and often the result of learning occurs once, twice and sometimes thrice removed from the training setting. If we were to try to implement these notions, at the very least, a major turn toward individualized instruction would be required. With the technical aspect of instruction embedded in the instructional modules, trainers disposed toward a view of latent as well as active learning would be freed to provide the tact required to ensure that both occurred. The same principle holds for the current pre-eminence of the powerful but dangerous technology of instruction with its

competency profiles and instructional modules, objectives and instructional techniques.

Think about what training settings would look like were they to include provisions for both the active and latent processes in learning. We would have to allow for a linkage between what trainees learn in formal training sessions, what they learn on the job with the trainer in the nonformal setting, and how both of these learnings are connected to what they learn by wandering through the informal learning setting. To accommodate this complex configuration of learning opportunities, we would have to temper our insistence that all learning occur actively within the "boxes" of efficient and justifiable intended learning outcomes with an acceptance of their inseparability from unintended outcomes in the process.

Outcome Principle

This principle is that the human species adapts itself through learning by means of culture. In our case we can think of the culture of the organization rather than the species. This adaptation through learning occurs at both the organizational and individual level. In order for an organization to maintain itself, certain dispositions and capacities must be acquired by the individuals who inhabit it. In addition to this aspect of learning the organization must also learn in the sense that it must change its mode of operation in order to cope with an everchanging world.

This principle is based on the link between individuals' quest for personal identity and forms of social life necessary for survival. That is to say, learning is the process by which individuals acquire the necessary dispositions and capacities in order to perform certain functions within the organization and, in addition, to improve the manner in which they are perceived and performed, thereby expressing their unique personalities.

There is a principle of training involved here. Since the organization's values and visions "preform" the world of practice for members so that certain ways of understanding the organization and their place in it are interrelated, it is crucial that those creating learning opportunities take this function of socialization into consideration. First, they must consider how it influences them, and second, how it operates in the training situation. The central question to be asked is: what role does the individual play in influencing the organization's values and vision

so that the organization continues to evolve and does not become a fossilized doctrinaire system of ideas that stifles development?

The challenging part of this principle is the perspective transformation required of trainers that allows them to structure training settings in such a way that the earlier referred to active and latent processes of learning are nurtured. Think of how exciting learning would be if each training opportunity was planned to incorporate not only the practicality of survival but also possibilities to extend trainees' participation in the ongoing development and critique of the culture of the organization.

Structure Principle

This principle is based on the notion that social reality is shaped by the language used to describe it. As I mentioned earlier when speaking about the outcome principle, individuals take on the values and vision of an organization in order to play a part in it. This organizational view that they take on becomes part of the structure of their mind through the processes of language use and modelling on the part of other organization members. Returning to the point about praxis as the tension-filled relationship between theory and practice, we could look at this relationship in an additional way. Not only is theory never a perfect fit with practice, but also, what we mean is never fully or accurately expressed by what we say. The words we use to describe and prescribe an organization's practices are rarely completely congruent with the meaning inherent in its vision and values. By examining strategically the language we use in an organization or, said another way, by describing our descriptions of practice, we can uncover the meaning of our current practices. In this way, we create opportunities to improve those practices as well as the vision and values that guide them. For instance, in the conventional language of training, descriptions of outcomes and processes are replete with words drawn from the jargon of production and systems theory. We speak of "stand alone modules", "modular mobility", "target populations", "educational treatments", "feedback", "pilot testing programs", "designing delivery systems", all of which shape our overtechnicized approach to teaching and learning. Where, within the limitations of the technical metaphor, is there a place for tact, latent learning, mutual understanding, feedforward, or the quest for personal identity? Only recently are groups within the training community

beginning to reexamine their language as a first step toward reconstructing the values, practices and social relationships that characterize education.

Sociology is the foundation for this principle of learning. Sociologists have shown that people construct social reality through language. This construction is an ongoing process in which people participate, rather than passively living in some objective timeless organizational reality that is impervious to individuals' influence. The central concept of action research (or as it is referred to in different terms as action science, action learning, activity learning, reflective practice or transformative learning), involves small groups of people periodically examining their practice through an exploration of the language they are using. This exploration often turns up differences between what they really mean and the language they use to describe their practice. This difference that is uncovered becomes the basis for establishing new practices that overcome some of the tension between theory (what we mean) and practice (what we do, coordinated through language).

The challenge for training implied here is to provide periodic opportunities for employees to step back from their practice and, as a group, reflect on their collective practice through an analysis of the everyday language they use to coordinate their practices. It can be thought of as a form of participative evaluation. Think of the implications for motivating trainees to enhance production when they learn about the role they can play in the reconstruction of their practice.

Use Principle

The idea here is that no significant learning occurs unless knowledge is put to use. The essential problem in learning is seen to be how to put knowledge to use. The complexity of knowledge can be elaborated as not only knowing *what*, *where*, and *when*, but also being able to put this knowledge into action.

In addition to the assumption that putting knowledge to use is the essence of learning, knowledge is thought to have the potential to change as it is put to use. As mentioned earlier, the notion here is that *theory* guides *practice*, but it, in turn, can be modified by practice; hence, theory has the potential to change each time it is used. You can imagine the implications that ensue if we were willing to see the production of knowledge from this vantagepoint. The social

relationships between trainer-trainee, researcher-practitioner, manager-employee, etc. would be radically restructured. In our case the trainee or the employee could be seen to be a collaborator in the implementation of the work process.

The training principle here is to be sure that theory is directly related to practice. For if knowledge has the potential for change each time it is put to use, and if all individuals can potentially play a role in this process if they are able to put the knowledge to use in a practical situation that has meaning for them, then we probably need to restructure settings for learning so that the world of *practice* is related to the world of *theory* in such a way that access back and forth between these two worlds is fluid. If we believed this, the current relationships between formal, nonformal and informal settings for learning as well as the relationship between trainers and trainees would require major renovations. The encouraging thing about all of this is that major efforts in this regard are under way, oddly enough, in societal institutions outside of as well as within schools. Those concerned with training in milieus as diverse as industry, international development and indeed teacher education are applying this view of a tension-filled relationship between theory and practice to the creation of learning opportunities. We hear about such things as action learning, activity learning, action science, educational action research, reflective practice and transformative learning as reasonable approaches to reconceptualizing learning and training.

Conclusion

Praxis as an approach to training has two aspects. First, a view of the relationship between the theoretician (trainer) and the practitioner (trainee) in which the latter is seen to be an active contributor to the ongoing development of the theory. This perspective captures the essential social relationship within which training occurs. Second, a set of training principles are contextualized in this relationship: be tactful during communication aimed at convergence; ensure that an overemphasis on active learning does not inhibit latent learning; link individual learning, that is, individuals' quest for personal identity with forms of organizational life necessary for survival; provide opportunities for trainees to describe their descriptions of practice, that is, examine strategically the language used to prescribe their practices; and ensure that trainees are able to put knowledge to use in a practical situation that has meaning for them, that is, relate

theory to practice in a mutually interactive way. The concept of praxis and these very broad training principles provide a framework for organizing the training process within a competency-based system in a manner that preserves the power of the systematic approach while superseding it with a view of the trainee as a more active and collaborative participant.

¹ For the source from which these principles are drawn, see Thomas, A. and Ploman, E. (Eds.) Learning and Development, Toronto: O.I.S.E. Press, 1985. The text is a report of a symposium on global learning at which participants from disciplines outside of educational psychology presented research on learning.

² For a comprehensive argument in favour of the convergence model of communication as an alternative to the commonly accepted S-M-C-R model, see Rogers, E. and Kincaid, D. Communication Networks, New York: The Free Press, 1981.

³ For an explanation of the role of tact in teaching, see van Manen, Max, On the Tact of Teaching, CACA/ACEC Newsletter/Bulletin, October, 1988.

ANNOTATED BIBLIOGRAPHY

Bigge, M.L. *Learning Theories for Teachers*. Harper & Row, New York, 1982.

Both historical and contemporary learning theories in the field of educational psychology are overviewed with respect to their implications for educational practice. Bigge employs a two-family classification (behaviourist and cognitive-field theory) to discuss contemporary theories, highlighting common and distinguishing features of each. He also introduces the work of prominent theorists to illustrate various subgroups contained within the two families of theories.

Brookfield, S. *Developing Critical Thinkers*. Jossey-Bass, San Francisco, 1987.

The author treats critical thinking as a productive process that enables people to be more innovative and effective in every aspect of life and work. Four key areas of adult life, in which critical thinking can be applied, are examined: personal relationships, the workplace, politics and the media. In this book critical thinking is discussed without explicit reference to critical social theory.

Cervero, R. *Effective Continuing Education for Professionals*. Jossey-Bass, San Francisco, 1988.

The author asks what sets the practice of continuing education apart from education in general and professional education in particular. The book is about how professionals learn, what motivates them to engage in professional education, what theories underlie programs of continuing education and how the institutional contexts of professional education shape its context.

Cremin, L. *Public Education*. Basic Books, New York, 1976.

This short book provides a lucid linkage between formal, nonformal and informal settings for learning. The author connects educational settings in such diverse institutional contexts as the church, the media, industry and entertainment. The process of education is viewed as a series of transactions between an individual with a particular temperament and life history and one or more institutions of education that tend to relate to one another in configurations in the context of deliberate efforts toward self-development.

Eurich, N.P. *Corporate Classrooms: The Learning Business*. Princeton University Press, New Jersey, 1985.

This report on the \$40 billion vital and expanding education sector in American business and industry examines the major dimensions of an absolutely essential part of this nation's educational resources. In-house

programs, facilities, corporate degree granting institutions and a national technological university—The Satellite University—are described and implications are drawn regarding business and industry, the nation's schools, methodology for schools, continuing education for adults and higher education.

Evans, N. *Post-Education Society: Recognizing Adults as Learners*. Croom Helm, London, 1985.

The author identifies the essence of post-industrialised society as a dilemma in which people accustomed to a relatively recently achieved freedom, founded on opportunities for individual choice in all walks of life, are rather suddenly confronted with the limits to these choices that are manifest in a post-industrial society. A reconceptualisation of the role of education in helping both those providing learning opportunities and those utilising them is offered. Educators are depicted as assisting others to understand what is involved in the transition from an industrialised to a post-industrialised society as co-explorers. The author contends that taking adult growth and development between the ages of 18 and 80 as seriously as the development of children and adolescents leads to a different formulation of how education can provide the learning opportunities required for an adult population in the future.

Knowles, M. *The Modern Practice of Adult Education*, 2nd edn. Association Press, New York, 1981.

Knowles portrays the role and mission of the adult educator, the unique characteristics of adult learners, the administration of adult education programs and the design and management of learning activities for adults. The text lays out the author's theory of androgogy and the facilitation of adult learning, in which the goals of the individual and of society are intertwined. Characteristics of adults as learners are presented as the basis for policy formulation, administration, curriculum and instructor operations. The author, an internationally renowned adult educator, brings to bear over fifty years of experience. He has continuously subjected his experience to reflection through the lens of humanistic psychology and the social psychology of group dynamics. The manner in which this bible of adult education practice is written makes the content easily accessible to those working in the field.

Rybash, J.M., Hoyer, W.J. & Roodin, P.A. *Adult Cognition and Aging*. Pergamon, New York, 1986.

Extensive treatment of learning styles peculiar to adults is undertaken in this text. Particular attention is given to dialectical thinking as a post-formal style of adult thinking. The authors emphasise the observable strengths of adult cognition, and offer a conceptualisation of age-related cognitive changes in adult processing, knowing and thinking.

Schön, D. *Educating the Reflective Practitioner*. Jossey-Bass, San Francisco, 1987.

The author describes various aspects of the process of reflection. In illuminating the relationship between theory and practice the author systematically explores aspects of the reflection process beginning with its initial occurrence during practice (reflection-in-action); followed by thinking about

how one thought about it during practice (reflection-on-reflection-in-action); and finally engaging in a collaborative effort with a master in thinking about how one thought about it during practice (reciprocal reflection-on-reflection-in-action). Educational methods for ensuring that these reflective processes occur are posited.

Schutze, H.G. & Istance, D. *Recurrent Education Revisited*. Almqvist & Wicksill International, Stockholm, 1987.

This report prepared for the Centre for Educational Research and Innovation of the Organisation for Economic Cooperation and Development re-examines recurrent education as a strategy for the distribution of education over the lifespan. One of the major issues dealt with in the report, which is relevant to vocational educators, is that of recurrent education and the world of work; in particular the contribution of education to greater participation in the workplace.

Shor, I. *Critical Teaching and Everyday Life*. University of Chicago Press, Chicago, 1987.

The author juxtaposes vocational-technical career education with liberal arts education in the context of the two-year community college. Through an analysis of the conflicts inherent in higher education for the masses, he is able to point to the liberating possibilities, which exist in education today despite the fact that in general technological advances tend to deskill jobs as a result of the further separation of conception and execution as the symbiotic dynamics of truly human work.

Thomas, A. & Ploman, E. (eds). *Learning and Development*. Ontario Institute for Studies in Education Press, Toronto, 1985.

The papers in this volume represent the deliberations of an international symposium on learning and development held in Toronto and sponsored by United Nations University, Canadian International Development Agency and the Ontario Institute for Studies in Education. Thinkers from around the globe attempted to reconceptualise learning with the idea in mind that by drawing on research results, from disciplines outside educational psychology such as anthropology, biology, linguistics, neurology, political science, religious studies, sociology and others a view of education can be fashioned that reflects values generally attributed to the concept, process and aims of lifelong learning and education. The results of the symposium and the papers are summarised as six principles of global learning that can serve as a basis for planning and evaluating education programs.

Wertsch, J.V. *Vygotsky and the Social Formation of Mind*. Harvard University Press, Cambridge, Mass., 1985.

Drawing on other current research in cognitive studies, cross-cultural psychology, education and work by linguists and philosophers, the author has clarified activity theory as a major Russian psychological theory that depicts instruction as spanning an individual's developmental life cycle. Particular emphasis is placed on the development of higher order mental functioning.

ACKNOWLEDGMENTS

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Reading 3 James A. Leach, 'Training and development programs in vocational teacher education departments: A preliminary investigation', *Journal of Studies in Technical Careers*, Vol. XI, no. 4, 1989, pp. 325-32. Reproduced by permission of Southern Illinois University at Carbondale, Illinois, USA.

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