

NEW HORIZONS IN ADULT EDUCATION

ISSN. 1062-3183

Volume 18, Number 4, Winter 2004

EDITOR

Nancy Gadbow.....Nova Southeastern University

ASSOCIATE EDITOR

Linda Howard.....Nova Southeastern University

EDITORIAL BOARD

Karen Garver.....	University of Nebraska
Jan Jackson.....	California State University, San Marcos
Kathleen King.....	Fordham University
Mary Klinger.....	SUNY Empire State College
Karen Overfield.....	The Art Institute, Pittsburgh, PA
Patricia Lawler.....	Widener University
Michael Ponton	Regent University
Robert Preziosi.....	Nova Southeastern University
Mark Rossman.....	Capella University
Sue Slusarski.....	Kansas State University

New Horizons in Adult Education, founded in 1987, is a refereed electronic journal published by Nova Southeastern University. The journal provides faculty, graduate students, researchers, and practitioners with a means for publishing their current thinking and research within adult education and related fields: research, thought pieces, book reviews, point-counter-point articles, conceptual analysis, case studies, interactive articles, and invitational columns. The authors retain copyright of individual articles. Any item that appears in New Horizons in Adult Education may be retrieved without permission. However, when this material is quoted or reproduced, the author, title of the item, and issues must be cited. The journal is available electronically on the Adult Education Network (AEDNET) web page <http://www.nova.edu/~aed/newhorizons.html>

To correspond with New Horizons in Adult Education send email to horizons@nova.edu or send postal mail to the following:

New Horizons in Adult Education
 Nova Southeastern University
 Department of Higher Education Leadership
 1750 N.E. 167th Street
 North Miami Beach, FL 33162-3017

NEW HORIZONS IN ADULT EDUCATION
Volume 18, Number 4, Winter 2004

C O N T E N T S

Editor's Preface	3
-------------------------------	---

ARTICLES

Furthering the Theoretical Discussion of the Journey of Transformation: Foundations and Dimensions of Transformational Learning in Educational Technology by Kathleen P. King.....	4
The Administrative Challenges of Building Community in Community-Based Adult Literacy Programs that Serve Adolescent Youth-at-Risk by Marion Terry	16
A Workable Future: Delineating the Role of Education in Environmental and Economic Sustainability by Lawrence White.....	39

F O R Y O U R I N F O R M A T I O N

How to Respond to Articles on AEDNET.....	51
How to Obtain Back Issues and the Cumulative Index to New Horizons.....	51
Call for Manuscripts.....	51

NEW HORIZONS IN ADULT EDUCATION
Volume 18, Number 4, Winter 2004

EDITOR'S PREFACE

In her article **Furthering the Theoretical Discussion of the Journey of Transformation: Foundations and Dimensions of Transformational Learning in Education Technology** Kathleen King builds on a research-based model and provides a useful application of this well-known theory. The stages described add depth to the understanding of the transformational journey, and the illustrations of teachers' own transformational process as they learn about educational technology give added meaning and understanding to this concept.

Marion Terry has raised an interesting issue for adult educators to consider in the article **The Administrative Challenges of Building Community-based Adult Literacy Programs that Serve Adolescent Youth-at-Risk**. Too often adult educators focus on adult learning, as if it exists apart from learning throughout the lifespan. In describing an adult literacy program that also included adolescent youth-at-risk, Terry describes both challenges, as well as some benefits in such a mix of learners. "Building community" in educational settings sometimes may include working with diverse learners, even mixing adults with adolescents; certainly family education programs may include both children and adults. This article challenges us as adult educators to see opportunities to such build community-based programs.

In the article **A Workable Future: Delineating the Role of Education in Environmental and Economic Education**, Lawrence White presents a compelling position, supported by scientists and environmentalists, as well as adult educators. Bringing together the concepts of environmental and economic sustainability as a critical issue to be considered by adult educators reminds us of our heritage and the social responsibility, promoted by Freire and others throughout our history. We are not only concerned about helping adults learn how to learn, but also helping them see and understand the critical issues we face as a global society. Then, hopefully, we are enabling more people to take an active role in promoting an equitable and just future for people around the world, as well as protecting the natural environment for all.

Readers are invited to make these articles "interactive" by responding on AEDNET (the Adult Education NETwork) and sharing their comments. (Directions to guide this discussion are given in this issue on page 51). Readers also are encouraged to submit an article for consideration by the editorial board of New Horizons on a related topic or other topic relevant to adult education philosophy, research, and practice. (See Call for Manuscripts on page 51 for details.)

To subscribe to AEDNET send an electronic mail message addressed to

listserv@list.nova.edu

Type in the body of the message

Subscribe aednet firstname lastname

The listserv will respond to your subscription request with a welcome message including detailed information on AEDNET.

NEW HORIZONS IN ADULT EDUCATION
Volume 18, Number 4, Winter 2004

**FURTHERING THE THEORETICAL DISCUSSION OF
THE JOURNEY OF TRANSFORMATION:
FOUNDATIONS AND DIMENSIONS OF TRANSFORMATIONAL
LEARNING IN EDUCATIONAL TECHNOLOGY**

Kathleen P. King
Fordham University

Abstract

This article builds on the research-based model of the “journey of transformation” to further analyze its theoretical foundation and details. This model provides a framework for understanding how educators, as adult learners themselves, may experience perspective transformations in their perspective and practice of teaching and learning. Using the model as a focus for professional development creates opportunities for emancipatory learning, bridges the literature and research of adult learning and professional development in educational technology, and offers an integrated model of transformational learning theory with unique dynamics. Implications include those for understanding educators, transformational theory, application to the professional development of educators, and future research.

Introduction

The ubiquitous calls for the integration of technology and technology skills into education results in the need for educators to continually learn educational technology. In the process, this technology is pushing adult learning, or lifelong learning, into the forefront of our technologically linked global communities that are churning with constant change (Edwards & Usher, 2001; Toeffler & Toeffler, 1995). As educators and researchers, we may pursue this connection more specifically by understanding educators' needs and experiences of ongoing technology learning, and considering how our technology-driven cultures may be informed by transformational learning theory (E. Taylor, 1998). Building on the phenomenon of rapid technological change and grounded in research, transformational learning theory research can be used to provide insight into educators' learning experiences and identification of context-based refinements with an integrated, applied model.

Recognizing that educators and professional developers face a difficult problem in keeping up with constant changes in technology, several adult learning theories can provide a basis for understanding the frustrations, fears, and risks educators confront. In fact, technology creates more difficulties for educators as they have to learn how to use it, recognize its shortcomings, and determine how to utilize it effectively in instruction. Educators in these settings need to be understood from their position as adult learners within this difficult context (Kasworm & Londoner, 2000). Transformational learning provides a basis to understand how adults sometimes experience dramatic changes in their meaning perspectives, or frame of reference, through re-evaluation of their beliefs, values, or assumptions, the development of

alternative perspectives, and the reintegration of these understandings into their lives. The “journey of transformation” model (King, 2002a, 2002b, 2003) goes further and is a framework from which to view and facilitate a progressive experience of creating and discovering new perspectives that some educators experience while learning educational technology. Recognizing that adults bring individual histories and perspectives to the teaching and learning experience, nonetheless, there emerged a familiar pathway of development that educators can experience as they learn technology applications to education (King, 2002a, 2003). The journey of transformation provides a new approach for educational technology learning and offers insight into transformational learning as it demonstrates a different dynamic of the process and multiple strands of development embedded within it.

This paper builds on the journey of transformation model to explore its theoretical roots in the literature, further delineate its meaning in terms of transformational learning theory, and explore its additional dimensions. Implications for this discussion encompass understanding educators, transformational learning theory, application to the professional development of educators, and future research. Its purpose is to extend an analysis of the model and to promote its further research and development.

Martin’s Journey

Briefly turning to a summary of one participant’s experience illustrates the journey of transformation model. Based on interviews and journal entries Martin’s story demonstrates many of the salient characteristics of the “journey of transformation.”

Martin had been proficient in the programming languages of computers in the 70’s and 80’s; however, “life intervened” and he had not stayed abreast of the changes in technology. The late 90’s came and Martin could not operate the computer sitting on his desk and was frustrated and confused by the technological demands placed upon him as an educator. Much of this condition came from his identity as a knowledgeable educator being threatened by the constant wave of technology change. This situation grew increasingly uncomfortable, troublesome, and embarrassing until he finally conferred with a colleague about current technology applications and his lack of knowledge and ability. Through on-going conversations, Martin gained confidence to enroll in educational technology courses that were evaluated through this research study.

At first, Martin would wait for a carefully scripted set of instructions before starting a task on the computer. Through participating in classroom discussions and realizing others were also beginners in applying technology to their classes he began to challenge his current practice and explore new possibilities. Rather than only focusing on skills, Martin grasped new purposes and tested his plans to meet them. Moving from being a received knower, Martin took responsibility for his own learning, interacting with technology first-hand to discover what he needed to know to accomplish his own purposes. He developed a new comprehensive tool and process for his students to use in conducting and organizing their academic research using technology. Additionally, he began to dialogue more with his students in class, inviting their views and experiences; he gained competence and confidence in his ability to understand technology and created new

connections with teaching and learning. Rather than working in a world waiting to be discovered, Martin began building new constructions and exploring new relationships of theory and application, all through continuing to learn and use educational technology.

For Martin, this process took place over several years. Often educators see progress much more quickly than Martin, but he was grappling with a more analytical focus than many. Martin's changing perspective of teaching and technology has affected his classroom format, preparation, assignments and, perhaps most of all, his concept of how he can capture technology to conceive of and accomplish new goals. He has empowered himself through this journey of discovery to understand how to question and construct multiple meanings of teaching and learning with technology.

Martin's experience reveals how the journey of transformation unfolded for him. The stories of the other educators are different in specifics, but as documented in their journals the overall journey remains consistent. The many changes experienced by the educators in the journey of transformation are detailed elsewhere as including: emphasizing self-directed learning; using new teaching methods; incorporating critical thinking skills development in learning; employing problem-based learning; preparation and research; and confidence and empowerment of teachers and learners (King, 2002, 2003). The focus of this discussion is to explore the model of the journey as an integrative representation of transformational learning.

Background Research

This article builds upon this research and model that have been published elsewhere (King, 2002a, 2002b, 2003). The purpose is to further extend the theoretical dimensions of the model. This section provides an overview of the context of this research.

Based on research conducted among 205 educators engaged in educational technology professional development, the journey of transformation was proposed to explain the distinctive experiences of transformation among these educators (King, 2002, 2003). As Taylor cites the need for such, this research offers a unique opportunity to look at transformational learning in a specific instructional context (E. Taylor, 2000). The educators were enrolled in professional development courses in educational technology where they engaged in discussions, readings, curriculum development, small group assignments, journal writing, on-line conferencing, presentations, problem-based projects, and "hands-on" experience with technology. These classes focused on learning and using computer applications for the development of curriculum, related materials, and assistance in the delivery of learning experiences.

The classes either met 15 times, 2 hours each, or 10 times for 3 hours each (King, 2002, 2003). The sessions typically included 4 parts fairly equally divided among the time - discussion of articles about using technology in classrooms, presentation of concepts and skills for technology, pursuit of an activity to discuss practical application of these concepts in either small groups or the entire class, and participation in a hands-on computer-based segment to use, evaluate, and plan to apply the technology. The format was flexible in nature and yet always maintained an emphasis on learner needs, multiple learning activities, and active participation.

The 205 participants included 155 women and 50 men with 0-40 years ($M=10.53$) experience in teaching K-12, adult and higher education. The mean age range of the participants was 30-39 years. The research revealed 84% of the respondents had experiences of perspective transformation through this context and followed a distinct pattern of development that emerged as the journey of transformation model (King, 2002, 2003). This model may be defined as a four stage integrated model of transformational learning experienced within the context of educational technology learning resulting in fundamental transformations of educators' perspectives and practice of teaching and learning. The four stages of the journey of transformation are Fear and Uncertainty, Testing and Exploring, Affirming and Connecting, and New Perspectives. Frequently having to learn technology or new aspects of technology under pressure served as "disorienting dilemma" that was characterized by Fear and Uncertainty.

This research revealed that educators can have transformative experiences as they learn educational technology, including, new visions of teaching and the classroom, transitioning from being a received knower to a constructed knower in educational technology and interacting with educational technology professional development as emancipatory learning rather than instrumental. The research further demonstrated that when educators learn technology and build on their professional expertise, they may not only experience changes in their personal and professional perspectives of individuals, teachers and learners, but also fundamentally change their educational practice in lasting ways. (King, 2002a, 2002b). For example, these educators often moved from teacher-centered to learner-centered learning models and expanded their view of the classroom to create more active, constructivist, and transformative experiences. Rather than faculty development solely focusing on instrumental learning (skills training or theory transmission), these professional development experiences presented learning opportunities for educators to fundamentally reflect, examine, and redefine their perspectives, purposes, and practices.

As identified in the research, each of the journey of transformation's stages have distinct characteristics. These stages and characteristics are illustrated in Figure 1. The details of the stages and additional strands, or dimensions, of development will be explored more in-depth in this paper. However, first, building upon this holistic description of the model, the theoretical context will be explored to better understand its relative place in the literature.

Theoretical Context

Within the framework of understanding higher education faculty as adult learners (Berge & Collins, 1998; Lawler & King, 2000) comes the opportunity to utilize transformational learning as a framework (Cranton, 1996, 1997) from which to examine the educators' experiences as they learn and use technology. Together with the literatures of professional development and educational technology, transformational learning lends consideration of a deeper understanding of how educators learn educational technology.

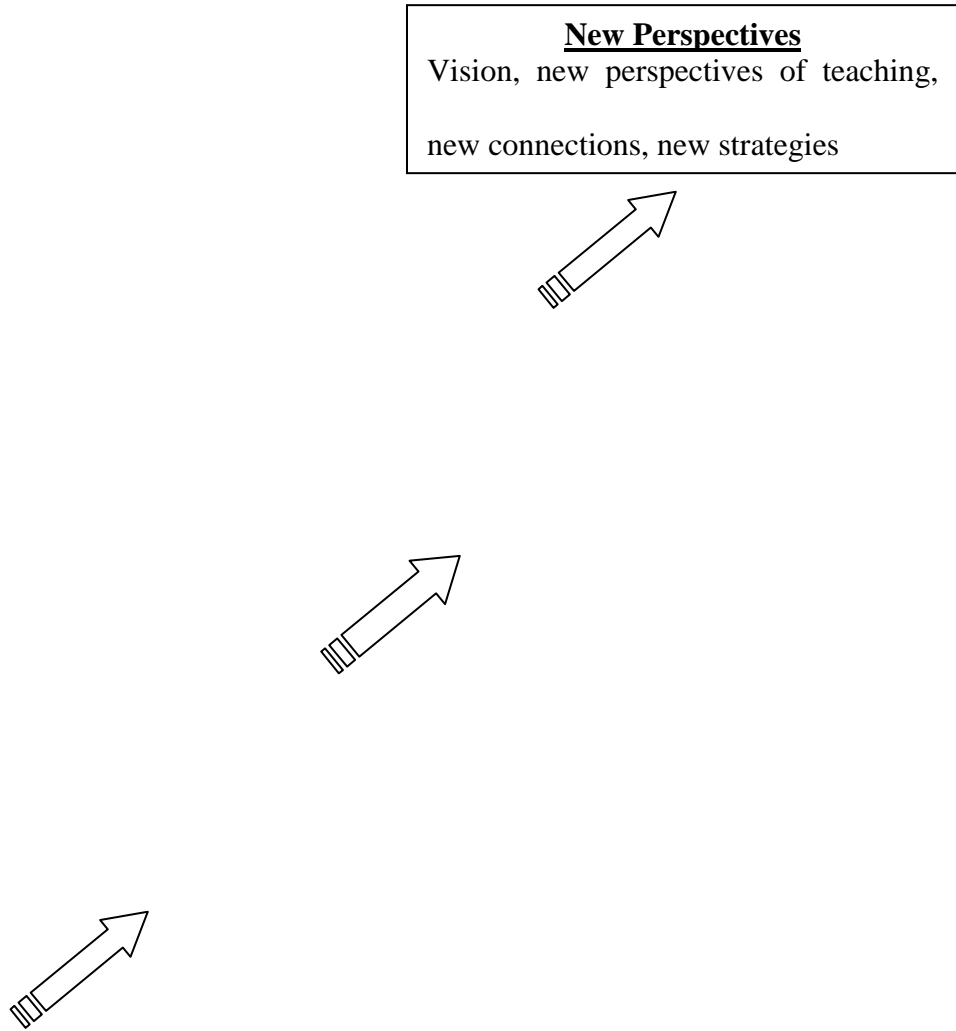


Figure 1 The journey of transformation path: Transitions of emotion and learning.

Transformational Learning

Transformational learning theory affords an explanation of educators' experiences of a fundamental change in their perspective or frame of reference as they engage in educational technology professional development. Grounded in Mezirow's theory of transformational learning as a fundamental structural shift of reference and meaning perspectives that result in striking alterations of adults' interactions with the world, this model references the ten stages that he proposed, but goes further to define complex dimensions of experiences where Mezirow's theory stops (Mezirow, 1978; Mezirow & Associates, 1990, 2000). Sifting through and reflecting on the research, literature, and debate that has ensued over the last 20 years, yields an understanding that others also grapple with complex issues of adult learning and development, including types of reflection, meaning perspectives, and domains of learning in considering transformational learning (Cranton, 1994, 1996; Dirkx, 2000; Mezirow & Associates, 2000; E. Taylor, 1998, 2000; K. Taylor, 2000).

Of particular importance to consideration in this study, transformational learning is seen as an experience of critical questioning of beliefs and assumptions as individuals examine the framework from which they have been viewing their world. Often a "disorienting dilemma" is a trigger event that stirs this self-examination, progressing through a loosely articulated process, and over time individuals begin to shift meaning perspectives, or frames of reference, to understand their experiences and world in new ways (Cranton, 1994).

Recently Mezirow (1991, pp. 168-169) helped to further define the focus of the ten stages of transformational learning as he describes five major developmental "movements" as critical reflection, determining something is true by using empirical methods (if it involves instrumental learning), arriving at more justified beliefs through continuing discourse (if communicative learning), taking action on the transformed perspective and acquiring a disposition to critically reflect on assumptions, seeking validation through discourse, and putting transformed insight into action (Mezirow, 2000, p. 344). This summary draws attention to reflection, dialogue, new perspectives, new ways of understanding, and resultant action. By focusing on these "high points" one can recognize a holistic pattern that describes the flow of the transformative process. With this schematic model in mind, the familiar ten stages may be used as a starting point to explain the changes in more detail.

Within transformational learning not only the content of learners' understanding changes, but also the very way they understand, their epistemic perspective, shifts (Kegan, 2000). Cranton's more detailed modification of Mezirow's original framework is an important one that more fully articulates the individualistic aspect of perspective transformation. As one considers how and why adult learners reflect, refine, and build new connections or new perspectives the constructivist elements of transformational learning emerge (Cranton, 1994; Kegan, 2000). The individual's development of new "connections," or synthesis, in understanding and learning can be a major impact of transformative learning.

These constructed meanings may be further examined through the instrumental, communicative, and emancipatory categories of learning in ways that may not have been initially

anticipated by Mezirow. For example the articulation and interrelationships of the stages may be affected with a different learning focus in educational technology. Additionally, changes in how learners learn may occur as these new connections are experienced and they may transition through different ways of learning, such as received knowers and constructed knowers (Belenky, Clinchy, Goldberger, & Tarule, 1986). Moreover, a content area that is traditionally approached from an instrumental learning frame exposes new possibilities for communicative and emancipatory learning. Indeed Baptiste (2000) emphasizes that Mezirow failed to recognize the need to understand power and coercion in transformational learning through specific contexts. Coming to the highly visible and valued area of technology knowledge, we have one example of where such forces need to be recognized and understood.

The varied literature on transformational learning research demonstrates how perspective transformation is experienced in many different settings (E. Taylor, 1998, 2000). The journey of transformation offers insight into a specific instructional context of educational technology professional development as identified as a need in the literature (E. Taylor, 2000). This model's explanation provides a different understanding of educators' learning and reveals an emergent pattern of transformational learning that addresses different elements of development and influence than recognized by Mezirow. Indeed, the literature offers support for these elements in the work of Cranton (1996), Belenky et al. (1986), Baptiste (2000), Kegan (2000), E. Taylor (1998, 2000), and others. The journey of transformation model integrates many of these elements in important ways. Correspondingly, the literature in professional development and educational technology provide groundwork for the model as well.

Professional Development

Our understanding of transformational learning in the higher education professional development context is further informed by recognizing the diverse needs, contexts, and abilities faculty bring to technology learning. Some of these needs are unique to faculty and may be identified from the literature as including their being experts in their fields, having unusual work schedules, and diverse work responsibilities (Baiocco & DeWaters, 1998; Lawler & King, 2000). Other professional development needs are revealed when faculty are viewed as adult learners, including their needing to engage in active learning experiences, to build on prior experience, and to learn in a climate of respect and safety (Brookfield, 1986; Lawler & King, 2000).

Faculty frequently approach professional development with disappointing prior experiences and yet sometimes with great need (Vannatta & Beyerbach, 2000). Viewing them as adult learners, one can begin to see them as risk-takers, needing to step aside from their comfortable and familiar "expert" standing and engage as learners in areas within which they may not feel competent. Furthermore, focusing on the adult learner's (faculty's) needs as they learn educational technology is consistent with theories of the diffusion of innovation that recommend focusing on the "client" rather than the innovation (Rogers, 1995). However, until the journey of transformation was proposed, an integrated adult learning model to inform professional development practice in educational technology had not been proposed.

Educational Technology

Educational technology is defined as “a combination of the processes and tools involved in addressing educational needs and problems, with an emphasis on applying the most current tools: computers and their related technologies” (Roblyer & Edwards, 2000, p. 6). In this sense educational technology includes the many skills, tools, processes, and theories educators employ to use technology in educational applications. Whether the tools include the Internet, videos or word processing, educators are purposing to use them in teaching and learning (Gooden, 1996; Roblyer & Edwards, 2000). Educational technology is that broad domain of constantly developing knowledge that supports the development of applications of technology to educational problems and purposes.

The need for professional development in educational technology is an urgent matter, because educators are under great demands to incorporate technology into their curriculum (Levin & Buell, 1999). However, some traditional professional development programs solely rely on lecture or demonstration and do not afford the opportunity for educators to gain hands-on experience, develop curriculum materials, or reflect on the meaning of their learning experiences (Vannatta & Beyerbach, 2000). The literature on educational technology makes it clear that educators need these experiences in order to effectively learn and apply what is offered.

Recognizing that the literature on educational technology has many significant and worthy suggestions for content, structure and format of training sessions (Berge & Collins, 1998; Cuban 1998), the journey of transformation model poses a different framework that has been successful among educators learning educational technology across disciplines and grade levels. Educational technology professional development becomes more than gaining skills or theory, and instead becomes an exploration of new possibilities and solutions to curriculum, teaching and learning, and ways of understanding.

Within these literatures’ contexts, the fundamental theoretical premises and processes that frame the model and underlie the original research include recognizing educators as adult learners and considering perspective transformation as a possible theory by which to examine faculty learning and change in educational technology use. The model offers points of synthesis by drawing upon each of these literatures to provide an integrated perspective of educational technology professional development.

The Journey And Its Stages

The Journey

The transformational learning experiences described in the journey of transformation were fundamental changes of heretofore persistent "habits of mind" (Mezirow, 1997). The “disorienting dilemma” for them was trying to cope with technological change and the urgent related professional needs. As Toeffler and Toeffler (1995) remind us, as our society experiences the clashing of the industrial age with the information age, individuals, like these educators, are

often left struggling in the crosscurrent. Many of the educators had experienced a difficult time of facing new learning and being confused. Through professional development they began taking risks, trying out new perspectives, engaging in self-reflection (even self-doubt sometimes), and ultimately creating new, "more inclusive, discriminating, self-reflective and integrative" (Mezirow, 1997, p. 5) perspectives of their profession and teaching practice. As Armstrong (2000) describes, this double-loop learning, where problems are confronted and a new understanding developed, often is not an easy or comfortable process.

On a holistic level, many of these educators started as "received knowers" and ultimately emerged as "constructed knowers" (Belenky et al., 1986). Some of them felt that they were no longer trapped by the emotional and psychological dimensions of technology demands, they gained footing in recognizing how *they* learned and confidence in themselves as constructing knowledge. For some, they experienced a release from stifling pressures of technology demands. Altogether the experiences depict a model that incorporates many possibilities with common patterns of development in a learning journey that has depth and multiple dimensions.

Inter-relationship of Stages

Along this transformational learning journey, educators develop in a fluid, interdependent pattern from inexperienced, hesitant, and sometimes fearful technology users to those who are independently learning technology and discovering new ways to change their teaching and learning and their ways of understanding. These broad stages are inter-related to the detailed stages of Mezirow's model. The proposed stages are also consistent with the fundamental understanding of the needs of educators as adult learners (Lawler & King, 2000), instructional design (Luthra, 1998), and adoption of innovation (Rogers, 1995), but provide further explanation.

The four stages of the journey have linkages with Mezirow's theory of transformational learning. Most simply, Table 1 displays the alignment of the two models where most of the journey of transformation stages corresponds to two or more transformational learning stages. However, the journey's stages represent not single actions, but continuums of experience. In particular, transformational learning is demonstrated in the educators' learning journeys of *development*, their *disequilibrium* that promotes learning, and their learning that includes *reflective abstraction*, and the construction of *structures/meaning*.

Table 1. The Journey of Transformation Stages

The Journey of Transformation	Perspective Transformation Stages
Fear and Uncertainty	Disorienting dilemma; self-examination
Testing and Exploring	Assessment of assumptions; recognize discontent; exploration of new roles and actions
Affirming and Connecting	Planning action; acquiring knowledge and skills; trying new roles
New Perspectives	Reintegration

Regarding *development*, rather than an isolated learning moment, the journey emphasizes that there is a direction that some follow- a general path which leads to perspective transformation - as they engage in adult learner-grounded professional development in educational technology. Similar to our understanding of the diffusion *process* of innovations (Rogers, 1995), the model is one of a journey. In contrast to the same literature, however, this model is one of fundamental transformations of perspectives, *constructions of meaning*, and ways of understanding that go beyond technology (the innovation) itself and is best explained through transformational learning theory. The journey of transformation is one of *reflective abstraction* that starts in questioning, and analysis, and leads to development and empowerment that is consistent with the theory of transformational learning. The characteristic *disequilibrium* of transformational learning is likewise markedly noted in the initial stages of the journey of transformation as educators start to face their growing confusion, fears, and/or hesitations regarding educational technology learning. These characteristics of the journey of transformation demonstrate the notable dynamics of transformational learning predicated on context, critical reflection, and construction of the new meanings and perspectives.

Understanding that many educators can experience these changes in perspective and related practice, developers, instructional technologists, and other educators involved in assisting them can gain new insight into faculty members' needs. Instead of solely focusing on skill acquisition and just-in-time solutions (instrumental learning), the journey of transformation emphasizes the educator as a self-directed adult learner and professional creating new possibilities (emancipatory learning). Additionally, the expansive field of adult learning gains further explanation of transformational learning to a developmental journey and insight into how these specific experiences differ from the more general model of transformational learning.

The Stages Explored

Fear and uncertainty. At the base of educators' journeys of transformation is the "disorienting dilemma" found in technology's relationship to our current culture and educational expectations. Learning a new skill-set is often uncomfortable for adults, but learning technology seems to especially generate fear and uncertainty (Dainow, 2001; George & Camarata, 1996; Luthra, 1998). Part of this heightened emotion may be traced to the very high value the general public, business, and education place on technology knowledge (Toeffler & Toeffler, 1995). Context has been recognized as an important aspect of understanding transformational learning, and in this case contributes to a culturally based "disorienting dilemma" that goes beyond a single catalyst for change and is rooted in the social, cultural, and economic shifts of our time (Baptiste, 2000; Clark & Wilson, 1991; E. Taylor, 1998).

In beginning sessions, the teacher/facilitator may often be involved nurturing and supporting participants' initial efforts to complete guided computer processes. Within this first stage of the journey learners need to build confidence in the teacher/facilitator to provide support and guidance, learn to follow instructions, and start to branch out to explore new possibilities. Teachers describe how their fear undermines their confidence and the feelings of fear, self-doubt, and defeat are often prominent in discussions with learners and within their journals from the

beginning. Facilitators who work with such educators to apply basic skills to curriculum development and nurture independence can find them moving to the next stage of the journey of transformation. Practically, the cultivation of self-direction needs to be balanced with support as suggested by Mezirow (1997), but needs to extend more specifically to individual affective and cognitive needs.

Building upon Mezirow's disorienting dilemma and self-examination stages, the Fear and Uncertainty stage goes further to reveal concrete examples of how our technology-based culture can leave the novice stranded in emotions and isolated from solutions. Looking at the emotional, affective side of this dilemma and questioning confirms that perspective transformation and educational technology learning need to address much more than instrumental learning (E. Taylor, 2000). The emphasis in the journey of transformation is to build upon these starting points to construct new ways of understanding and meeting educational technology challenges.

Testing and exploring. During the testing and exploring stage, educators are gaining confidence to pursue more activities and beginning to reach an exploration mode. During this stage, educators characteristically are no longer limited to a script of instructions, but are exploring different functions and applications on their own (George & Camarata, 1996). They have begun to see similarities among programs and anticipate how they likely function. As learners explore on their own, they gain independence and autonomy.

Teachers describe their activities in the second stage of the journey of transformation as engaging in testing, exploring, and gaining confidence with the use of educational technology. Many times teachers indicate that they were questioning their previous ideas and beliefs about teaching and learning. By building on their growing confidence in educational technology, they also explore how they could implement new teaching methods with their students. Additionally, as their confidence grows, some feel freer to voice their unhappiness with their previous technology knowledge and curricular integration. While they still need guidance, at this stage teachers' confidence is growing and being displayed in several forms.

As described in the next three stages of transformational learning the educators test and explore their personal, culture- and/or media-based assumptions about technology learning, their displeasure with their current lack of expertise, and their newly perceived roles as teachers and learners. In the journey of transformation, however, there is a balance of questioning and exploring. The learners have been fearful; now they realize technology opens possible new doors and they question and explore new possibilities all at once. In contrast to Mezirow's stages, the teachers question, recognize discontent, but then dwell in the arena of exploration. Their evaluation of educational technology possibilities is often evident in journal entries (King, 2002, 2003). Class discussions can engage the teachers in critical assessment of what they are learning, but the new possibilities for themselves as teachers and learners often quickly attract them. By the end of the Testing and Exploring stage they have already traversed instrumental and communicative learning and taste the freedom of emancipatory learning. Rather than relying on knowledge revealed by others, they are beginning to become engaged as discoverers and constructors of new learning.

Affirming and connecting. The next stage of the journey is one of affirmations and connections. In this stage, teachers are busy acquiring more instruction, planning how to use knowledge, and trying out the new connections, or syntheses, regarding teaching and learning they have been making. For instance, educators relate how they realize that the collaborative learning model they have experienced can be used in their classes and that using technology should be consistent with, and not divorced from, their prior educational knowledge and practice. In these ways some realize how they can *connect* their teaching experience with technology; they can use their teaching expertise to apply technology in new ways. For example, they might have vast experience in working with visually impaired learners and as they see technology tools that read aloud or enlarge text, they may realize some ways to reconceptualize their role as a facilitator and incorporate additional learning strategies. What might have seen so new and obscurely “technical” before, may begin to fit into a new place within their experience and more. The teachers are reminded first-hand about the challenges and difficulties learners encounter and these adult learning experiences often yield new perspectives of their teaching. As they continue to gain confidence, the educators often begin to envision theoretical, philosophical, instructional, and curricular connections that can lead to furthering educational objectives.

Often as educators make plans and design classroom materials that they can use with their students, they are also implementing them week-by-week with their classrooms. While engaging in developing curriculum that includes technology, the journey of transformation characteristically includes their affirming and connecting and/or discussing how they can further develop their practice. They may be looking at teaching and learning from a new perspective as this stage opens up new possibilities. Often the educators are eager to share their fledgling experiences with their colleagues and may affirm and stretch their possibilities and scaffold with others' experiences.

Additionally, rather than an "us-them" dichotomy perspective, the teachers may move toward collaborative relationships among teaching, learning and technology, and teachers and learners. New connections and affirmations of their learning experiences characterize this stage that is parallel to Mezirow's stages of planning new action, acquiring skills, trying new roles and building expertise and confidence. Among those in the original study who experienced the journey of transformation, each of them rapidly “cycled through” this process several times with new ideas being tested, affirmed, and connected. This integrated cycle is another difference from the Mezirow model as the four stages from planning to competence are closely linked. Within this broad Affirming and Connecting stage, one has a sense of the classroom as their experiential laboratory as they gain promising perspectives, build related plans for action and start to put them into practice. The model of emancipatory learning is seen in full force among these constructed knowers.

It is also important to note that the Testing and Exploring stage is closely tied to the Affirming and Connecting stage. While they build upon one another they can also be traveled through back and forth within their own stage and between the two of them. Like the perspective transformation model itself, this articulation leads away from a rigidity (Cranton, 1994), and instead highlights the holistic characteristics of the journey of transformation. The

metaphor of a journey is, however, importantly supported because it demonstrates the overall experience that progresses within and among the stages.

New perspectives. The final stage of the journey may be reached in days, months or years; the timeline for the journey is different for every individual. Usually at the New Perspectives stage, educators have invested much time and work in conquering new challenges, exploring new technologies, and starting to develop new curriculum materials. Educators reach beyond previous conceptual and curricular boundaries to see possibilities they may never have noticed before. In the final stage of New Perspectives, teachers more completely reflect, develop new ideas, consider their merit, and view learning and meaning in new ways. The teachers thoughtfully reexamine their grade and content areas to see where technology use can benefit their curricular goals and consolidate their direction.

The professional development classroom is characteristically "noisy" at this point, as teachers engage in collaborative endeavors to create, evaluate, and reframe interdisciplinary and across grade-levels curriculum that capitalize on the benefits technology has to offer. In this stage, educators have reached a new consciousness of teaching and learning: for many of them rather than teacher-centered, they have moved to learner-centered perspectives. Additionally, they experience freedom in their roles and abilities as they engage in emancipatory learning for themselves. Often a theme of empowerment permeates these accounts.

For some, the world looks different from the new standpoint – no longer built by another, but constructed from their own ideas, explorations, tests, and connections, these educators face their profession, classrooms, and practice from a new direction. Their frame of understanding has transitioned from a training or “received” process to active engagement in creating new knowledge. Consistent with Mezirow’s final stage of reintegration the New Perspectives stage provides a synthesis of all the preceding experiences. What differs in the journey is that this new perspective of their profession and teaching and learning can be a culminating experience that ties together several “cycles” of the two middle stages (Testing and Exploring and Affirming and Connecting). The larger conclusion, the greater insight is a milestone experience.

As they complete the journey's cycle, educators state that they are encouraged with a vision of new possibilities for their professional work and their students. They have a vision of greater potential and proactively seek ways to connect and build educational technology into their classes and programs. In fact, follow-up research shows they continue to be motivated over time by a desire for continued challenge and growth and equipped with the skills and perspectives they have gained (King, 2002, 2003). There is also indication that educators may begin another journey as they face the challenges of learning more new technologies. Such additional journeys mirror this current model of the journey of transformation, but often the preliminary stages are much shorter in duration.

Multiple Strands of Experience

Further examination of the model reveals another dimension of several concurrent strands that may be found unfolding within a given journey of transformation experience. On different levels one might see the cognitive, affective, power, and action strands which have been

raised as issues in the transformational learning literature in the past (Baptiste, 2000; Kegan, 2000; E. Taylor, 2000) . The four stages may be seen as also tied together through an interwoven pattern along the dimensions of these strands. For instance as Martin's experience followed the stages of progression, one can also see his cognitive development from a received knower to a constructed knower, his affective responses from fear to confidence and his confrontation with societally ascribed power in taking the risk to learn educational technology. Each of these strands carries through the four stages. Much like a grapevine wreath they are interlaced and collectively follow the pursue direction.

The cognitive strand is clearly evident in the Fear and Uncertainty stage of the journey of transformation as educators often start with a preference for carefully scripted instructions. They characteristically wait for knowledge to be "dispensed" to them by the educational technology "authority." In the second stage, however, they begin to test and branch out to explore technological applications. No longer confined to discrete sets of instructions, they venture out more independently. As they traverse the Affirming and Connecting stage, these educators find connections between what they already know and what technology reveals. They begin to step into the role of a constructed knower as they realize their validity as educators carries over into the application of technology (Belenky et al., 1986). Becoming yet more independent, the learners begin to build new applications. In the final stage, these constructions become more identifiable as the learners have explored possibilities, ventured solutions, refined their attempts, and synthesized the new understandings and applications. For instance with Martin, he built new constructions and no longer waited to be told how to use and apply technology. His views of teaching and learning changed so that he challenged his prior assumptions of the teacher-centered classroom and developed his own perspective of teacher as facilitator.

Additionally, the cognitive strand may be traced through the journey on the level of complexity of analysis. Initially, educators approach educational technology with an instrumental focus (Cranton, 1994) as if to say, "show me the steps and I will follow them." If, however, they begin to experience the journey through professional development that is learner-centered, active, hands-on, and reflective, they start to look at technology application from a different perspective. Instead of taking technology application as the final word, some educators begin to test its limits, explore its value, and question its application. Through this analysis they develop a deeper understanding of possibilities, rather than discrete answers. This strand of cognitive development also follows through the stages as in the first stage they often accept technology application at face value, in the second stage they being to test the limits, in the third stage they evaluate how it fits with their prior experience and understanding, and as in the final stage, they begin to synthesize their own constructs and solutions for using technology and understanding both education and technology.

An affective strand, or dimension, is also clearly evident in the four stages of the journey. Consistent with other critiques of Mezirow's theory, the journey accounts for more than cognitive, or rational, development (Baptiste, 2000; Cranton, 1994; Dirkx, 2000; E. Taylor, 2000). As revealed through this discussion and evident in Figure 1, the stages have an affective dimension. Starting with the fear and uncertainty of the first stage, it has been described how those working with educators need to understand the emotions and personal history educators bring with them to educational technology learning. This is a critical element of the journey of

transformation that is missing from the traditional view of transformational learning. Understanding the needs of adult learners and their possible vulnerability in this setting confirms the critical need for support, safety, and nurture in the journey as in transformational learning (E. Taylor, 2000). The model does not separate out the learners' affective conditions from their journey of learning. Instead it is a critical element that may be traced through the four stages. Overall it is a progression from fear and uncertainty to hesitant risk-taking to growing confidence and independence and ultimately empowerment if the journey is completed. The journey provides many points from which to build an understanding of educators on this level and to meet their needs in professional development that is informed by it. The strand of affective progression is an integral element of understanding and applying the model.

Additionally, the journey is also interwoven with a strand of power. This power element is linked to the value that our society places on technology knowledge. As described by Baptiste (2000) the context is one charged with elements of power from our society and education at large. For some educators, the experiences of transformational learning includes a new found freedom to successfully learn technology and develop new understandings of their profession, practice, and world. In the beginning stages, educators are sometimes frozen with fear as they do not know where to start. Their confusion sometimes is rooted in the threat that technology presents to them (Dainow, 2001; George & Camarata, 1996; Luthra, 1998). Educators have described how they are certain they will fail in such learning; and attribute this immobility to the high cost of failure in this highly valued area. As one follows the strand of power through the stages, the growing confidence of the learner is tied to how they begin to deconstruct the hidden store of technology knowledge. As they approach the content systematically with support and in an environment of safety, they can face the threat and continue to move forward. As the learners test and explore technology it becomes less threatening because it becomes "known." As they affirm the value of their expertise in education as necessary to make connections with technology, they overcome the oppression. And as they gain new perspectives of teaching and learning they are able to stand confident in their own ability to understand, demystify, and further develop technology applications to teaching and learning. Curiously, educational technology learning often is pursued on an instrumental learning (skills) level solely. Instead, the journey experience includes communicative learning that opens the door to emancipatory learning and the empowerment of educators. Power is a prominent issue that may be seen running as another strand, or "current," throughout the experience.

Finally, a strand of action may be seen throughout the journey as educators start on the level of following steps in application, but ultimately become more pro-active and create new developments, new opportunities, and new solutions. In the area of educational technology, transfer of learning is sometimes recognized as parallel application of formal learning to the learners' work context. For example, can teachers use the grade book software to do their grading? Instead, the journey results in constructing new solutions for individual contexts. Rather than just following the instruction steps for their customary grading process, teachers may develop new grading rubrics, identify additional dimensions of learning objectives, customize grading software to meet these new needs, and begin to form new perspectives of assessment and their role in it. The journey of transformation vividly portrays how learners move from inaction to guided action to independent pursuits and finally, innovative constructions of their own. The new perspectives of teaching and learning with and without

technology brings with it new possibilities for action that extends and transforms prior perspectives and practice.

As stated, in an interwoven form these many strands follow, support, and define the journey of transformation cycle. The individual strands may be seen in the distinct stages and yet they follow through from one stage to the next. One may return and trace the path of each strand through the journey and thereby better define the dimensions of the transformational experiences.

Significance Of The Model

In considering the significance and implications of this model, the impact on understanding educators, transformational learning, professional development, and future research may be examined. Leading these comments is the realization that not all technology learning brings positive change. Simply put, technology has the potential for creating confusion and fear among educators. Greater dependence on technology can distance relationships, cause confusion or misunderstandings, or obscure educational objectives (Kasworm & Londoner, 2000). The journey of transformation model recognizes and validates this experience while also providing a basis for the careful examination and evaluation of technology's application to and role in education. The critical reflection and analysis inherent to the model begins with the learner and it is within and from their context (cognitive, affective, and action or inaction), experiences, and values of teaching and learning that it eventually leads to the application of technology to teaching and learning. This model offers a perspective that can help us understand better those who struggle with technology learning and application and support positive educational technology professional development.

Recognizing the potential that changes in teaching and learning resulting from the journey of transformation can have on educators, their students, colleagues and institutions, those interested in educational reform may find some answers in the application of transformational learning to professional development in educational technology. By focusing on the growth and development of educators learning technology, this research offers the opportunity to understand faculty needs and explore their potential in powerful theoretical and practical ways. New possibilities are raised with this model and the direct impact of these findings may include changes in professional development planning, delivery and follow-up, and professional development plans (King, 2002; Gaff & Simpson, 1994). However, equally important is that those interested in the professional development of educators need to be prepared for educators' development and transformation. Providing traditional workshops alone will likely not be the entire answer, instead educational organizations should be developing continuing programs of educational technology learning where adult learning is anticipated and supported on an ongoing basis. In understanding the adult learner and professional development we also learn about transformational learning as described next.

In considering how this model informs transformational learning we are reminded that Kegan states, it is not so much changes in *what* we know, but changes in *how* we know that depicts transformational learning (2000, p. 50). The transitions from instrumental and/or communicative to emancipatory learner and from received knower to constructed knower are embedded in this model. The four stages delineate a progression that follows how educators

learning educational technology may experience transformational learning. While the model accounts for the stages outlined by Mezirow, there is a dynamic of iterative, loosely coupled cycling that is embedded within the four stages and not seen elsewhere. The multiple strands, or dimensions of the journey reveal a complexity in this setting that demonstrates cognitive and affective changes, issues of power, and a progression in action. It ties together the experience of development and dimensions into a distinct model. These conclusions allow us not only to consider how transformational learning might be alternatively conceptualized as a theory by itself, but also to explore how it may be otherwise experienced in specific instructional settings as called for in the literature (E. Taylor, 2000).

Regarding research, discussion, and development of multiple points of inquiry, additional research about this model needs to be pursued. Such research could further test the model and provide modifications and refinements for diverse settings. For example, the model may be examined among faculty in community colleges and within different disciplines, such as, business, nursing, the sciences, and the arts. The exploration of the relationships between other adult learning theories (such as andragogy and self-directed learning) and the model can be examined to see what emerges as similarities and differences and how the model fits among these paradigms. The journey of transformation offers a different perspective on educational technology learning that also may be further explored through the variables of learning styles, personality types, and organizational cultures.

Finally, it is important to clarify that this model of the journey of transformation is intended to provide an understanding and vision of educators' learning and development, it is not meant to confine learners to predetermined outcomes or timelines. This is an open-ended journey: a constructivist opportunity for educators in professional development. It provides a framework for understanding, a new perspective. All educators have their own distinct experiences from which to grow.

References

- Armstrong, H. (2000, Nov.). Reflections on the difficulty of creating and sustaining equitable communicative forums. *Canadian Journal for the Study of Adult Education*, 14 (2), 67-85.
- Baiocco, S. A., & DeWaters, J. N. (1998). *Successful college teaching: Problem-solving strategies for distinguished professors*. Boston: Allyn & Bacon.
- Baptiste, I. (2000, May). Beyond reason and personal integrity: Toward a pedagogy of coercive restraint. *Canadian Journal for the Study of Adult Education*, 14 (1), 27-50.
- Belenky, M., Clinchy, B., Goldberger, N., & Tarule, J. (1986). *Women's ways of knowing: The development of self, voice and mind*. New York: Basic Books.
- Berge, Z., & Collins, M. (1998). *Wired together: Teacher education and professional development, Vol 3*. Cresskill, NJ: Hampton Press.

- Brookfield, S. B. (1986). *Understanding and facilitating adult learning*. San Francisco: Jossey-Bass.
- Clark, M. C., & Wilson, A. (1991, Winter). Context and rationality in Mezirow's theory of transformational learning. *Adult Education Quarterly*, 41(2), 75-91.
- Cranton, P. (1994). *Understanding and promoting transformative learning*. San Francisco: Jossey-Bass.
- Cranton, P. (1996). *Professional development as perspective transformation*. San Francisco: Jossey-Bass.
- Cranton, P. (Ed.). (1997, Summer). *Transformative learning in action: Insights from practice* (New Directions in Adult and Continuing Education, No. 74). San Francisco: Jossey-Bass.
- Cuban L. (1998). High-tech schools and low-tech teaching. *Journal of Computing in Teacher Education* 14(2), 6-7.
- Dainow, S. (2001, Aug. 10) Technology causes stress for journalism professors, report says. *The Chronicle of Higher Education*, 47 (48).
- Dirkx, J. (2000). After the burning bush: Transformative learning as imaginative engagement in everyday experience. In C. Wiessner, S. R. Meyer and D. A. Fuller (Eds.). *Challenges of practice: Transformative learning in action, proceedings of the third international transformative learning conference* (pp. 247-343). New York: Teacher's College Columbia.
- Edwards, R., & Usher, R. (2001, August). Lifelong learning: A postmodern condition of education? *Adult Education Quarterly*, 51(4), 273-287.
- Gaff, J. G., & Simpson, R. D. (1994). Faculty development in the United States, *Innovative Higher Education*, 18(3), 167-176.
- George, G., & Camarata, M. R. (1996, July-Aug.). Managing instructor cyberanxiety: The role of self-efficacy in decreasing resistance to change. *Educational Technology*, 49-54.
- Gooden, A. R. (1996). *Computers in the classroom; How teachers and students are using technology to transform learning*. San Francisco: Jossey-Bass.
- Kasworm, C., & Londoner, C. (2000). Adult learning and technology. In A. Wilson and E. Hayes (Eds.). *Handbook of Adult and Continuing Education* (pp. 224-242). San Francisco: Jossey-Bass.
- Kegan, R. (2000). What "form" transforms? A constructive-developmental approach to transformative learning. In J. Mezirow & Associates (Eds.). *Learning as transformation: Critical perspectives on a theory in progress* (pp. 35-70). San Francisco: Jossey-Bass.

- King, K. P. (2002a). *Keeping pace with technology: Educational technology that transforms, Vol 1. The challenge and promise for K-12 educators*. Cresskill, NJ: Hampton Press.
- King, K. P. (2002b, Fall). Educational technology professional development as transformational learning opportunities. *Computers and Education: An International Journal* 39(3), 283-297.
- King, K. P. (2003). *Keeping pace with technology: Educational technology that transforms, Vol 2. The challenge and promise for faculty in higher education*. Cresskill, NJ: Hampton Press.
- Lawler, P. A., & King, K. P. (2000). *Planning for effective faculty development: Using adult learning strategies*. Melbourne, FL: Krieger.
- Levin, S. R., & Buell, J. (1999). Merging technology into teacher education: Technology tools and faculty collaboration. *Journal of Computing in Teacher Education*, 16(1), 7-14.
- Luthra, S. (1998). Is anyone listening to the teachers? In Z. Berge & M. Collins (Eds.), *Wired together: The online classroom in K-12: Vol 3*. (pp. 121-128). Cresskill, NJ: Hampton.
- Mezirow, J. (1978). *Education for perspective transformation; Women's re-entry programs in community colleges*. New York: Teacher's College, Columbia University.
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco: Jossey-Bass.
- Mezirow, J. (1997). Transformative learning: Theory to practice. In P. Cranton (Ed.). *Transformative learning in action: Insights to practice* (New Directions in Adult and Continuing Education, No. 74) (pp. 5-12). San Francisco: Jossey-Bass.
- Mezirow, J. (2000). Transformative learning as a meaning becoming clarified. In C. Wiessner, S. R. Meyer & D. A. Fuller (Eds.). *Challenges of practice: Transformative learning in action, proceedings of the third international transformative learning conference* (pp. 344-346). New York: Teacher's College Columbia University.
- Mezirow, J., & Associates. (1990). *Fostering critical reflection in adulthood: A guide to transformative and emancipatory learning*. San Francisco: Jossey-Bass.
- Mezirow, J., & Associates. (2000). *Learning as transformation: Critical perspectives on a theory in progress*. San Francisco: Jossey-Bass.
- Roblyer, M. D., & Edwards, J. (2000). *Integrating educational technology into teaching* (2nd ed.). Upper Saddle River, NJ: Prentice-Hall.
- Rogers, E. (1995). *Diffusion of innovations* (4th ed.). New York: The Free Press.
- Taylor, E. (1998). *The theory and practice of transformative learning; A critical review*. Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education.

- Taylor, E. (2000). Fostering Mezirow's transformative learning theory in the adult education classroom: A critical review. *Canadian Journal for the Study of Adult Education*, 14(2), 1-28.
- Taylor, K. (2000). Teaching with developmental intention. In J. Mezirow & Associates (Eds.). *Learning as transformation: Critical perspectives on a theory in progress* (pp. 151-180). San Francisco: Jossey-Bass.
- Toeffler, A., & Toeffler, H. (1995). *Creating a new civilization: The politics of the third wave*. Atlanta: Turner.
- Vannatta, R. A., & Beyerbach, B. (2000). Facilitating a constructivist vision of technology integration among education faculty and pre-service teachers. *Journal of Research on Computing in Education*, 33(2), 132-148.

NEW HORIZONS IN ADULT EDUCATION
Volume 18, Number 4, Winter 2004

**The Administrative Challenges of Building Community in
Community-Based Adult Literacy Programs that Serve Adolescent Youth-at-Risk**

Marion Terry
University of Regina, Canada
and
Brandon University, Canada

Abstract

Community-based adult literacy education programs are rooted in the communities they serve. The commitment that community-based adult literacy coordinators and administrative advisory groups make to nurturing community in their programs, moreover, is based on the firm belief that building community is an integral part of their mission. When their commitment to providing adult literacy education extends to adolescent youth-at-risk who are also in need of academic instruction outside of regular school, they invite new challenges for classroom community building. This article studies the administrative practices of community-building, and the effects of including adolescent youth-at-risk, in community-based adult literacy education programs.

Introduction

Community-based adult literacy education programs are rooted in the communities they serve. (All non-referenced assumptions that this article makes about literacy programming are based on the author's experiences as the Community Developer for Literacy in Rural and Northern Manitoba, Canada, from 1990 to 1993, and on her research in the field of adult literacy.) They include a variety of community stakeholders on their local governing bodies, and develop program services (hours of operation, types and levels of instruction, and means of access) in response to the academic needs of self-identified undereducated adults in their communities. (For the purposes of this article, the term *undereducated* is used as the antonym of *literate*: an undereducated individual is one whose reading, writing, math, and/or computer skills are lower than he or she needs to accomplish current home and/or work goals; a literate individual is one whose literacy skills are sufficient to reach his or her goals. The term *undereducated* is preferred to *illiterate*, because of the latter term's negative connotations of absolute deficit.) Furthermore, most of the paid staff – and all of the volunteers – in these programs are drawn from the local community. Being a “grass roots” (Crook, Pakulski, & Waters, 1992, p. 155) part of their external communities predisposes community-based adult literacy program administrators and staff to focus on internal community-building, as well. Internal efforts to build community, however, are complicated in programs characterized by continuous entry/exit access patterns and the inclusion of adolescent youth-at-risk. In this article, the term *adolescent youth-at-risk* refers to teenagers who have not completed high school and are at risk of never doing so because they have dropped out of school already or are at

risk of dropping out. This article uses literature in the fields of child and adult education as a basis for studying the administrative practices of community-building, and the effects of including adolescent youth-at-risk, in community-based adult literacy education programs.

Community in Society-at-Large

Community membership is considered “part of our human nature” (Sergiovanni, 1994, p. 35), a “social good” (Noddings, 1996, p. 245) characterized by “reciprocal caring relationships” (Beck, 1994, p. 11), “belonging” (Furman, 1998, p. 300), and “memory” (Merz & Furman, 1997, p. 25). Beck defines community caring as “hope and faith in the potential of others” (p. 6), typified by uncritically receiving another’s perspective, actively responding, and making a commitment to remain in the relationship. She insists that people need this type of reciprocal caring to be “fully and completely human” (p. 28). Furman (1998) focuses on “the sense of belonging, trust of others, and safety” as rivets for community affiliation. Bellah (1985) credits the “history and hope” of shared memory for elevating to the level of community what would otherwise be a mere “gathering of the similar” (p. 154, as cited in Merz & Furman). Tonnes (1957, as cited in Furman, 1998; Merz & Furman, 1997; Sergiovanni, 1994) would describe this difference as what separates instinctive *gemeinschaft* communities of the mind and heart from functional *gesellschaft* communities of goal-directed actions. Buber (1965) describes social structures without this higher level sense of community as “an organized atrophy of human existence” (p. 31, as cited in Beck, p. 31).

The School as a Community

The task of all educators is to integrate *gemeinschaft* qualities into the *gesellschaft* communities that are produced by schools, without succumbing to the “dark side” (Noddings, 1996, p. 245; see also Fine, Weis, & Powell, 1997; Shields & Seltzer, 1997) that cultivates exclusionary boundaries and forced sameness in the name of shared values and the desire to belong. It may be impossible for schools to become true communities of memory (Noddings, 1996; Merz & Furman, 1997), and the concept of shared values must be redefined within the context of multicultural postmodern classrooms (Chavez & Guido-DiBrito, 1999; McCaleb, 1997; Guy, 1999), but school administrators, teachers, and students can work together to create communities of commitment and interdependencies (Sergiovanni, 1994), cooperation and acceptance (Beck, 1994), responsibility and choice (Merz & Furman, 1997, p. 26), trust and safety (Furman, 1998), and nonviolence and care (Noddings, 1996). Indeed, they must, because community-building is part of the ethic to care in schools (Beck, 1994; Furman, 1998).

Community-based adult literacy programs also subscribe to a caring ethic. Born of a desire to help adults achieve their desired literacy skills within the context of a small “school,” these programs cater to a community subset that has not been served well by regular school communities. They are thus designed to avoid the exclusionary dark side of community building, by inviting and accepting all undereducated adults (and many adolescent youth-at-risk) who wish to learn. Still, the waiting lists for programs that are oversubscribed can tempt program coordinators to “pick and choose” among applicants, instead of applying the expected “first-come, first-served” rule. Selecting successful applicants on the basis of available staff and resources (including time and materials) for their areas of academic need reflects

administratively responsible decision-making, but choosing applicants on the basis of how well they are likely to “fit in” with the other students can be ethically questionable. Community-based adult literacy educators must decide to what lengths they should go in order to cultivate and protect within-program communities that evince the *gemeinschaft* qualities regular school educators pursue. “Adult education is as much a social as ‘personal’ reality” (Courtney, 1992, p. 111), particularly in literacy programs that serve adults who are educationally and socioculturally disadvantaged. Community-based adult literacy coordinators are therefore behooved to be as inclusive as possible in their enrollment practices, and to foster commitment, interdependence, cooperation, acceptance, responsibility, choice, trust, safety, nonviolence, and care among whatever disparate individuals choose to enroll.

When adolescent youth-at-risk request academic support from community-based adult literacy programs, the rules of inclusion bend. First, adult literacy programs are mandated to serve adults, and may not be allowed to use adult education funding for “under-age” students. Second, younger students can negatively impact on an adult classroom climate. Program administrators and coordinators who wish to include adolescent youth-at-risk can avoid government sanction by assigning volunteer tutors to work with these individuals. They can also extend their classroom hours beyond the times included in their applications for funding, thus freeing them to serve “out-of-scope” learners while separating these students from the rest of the adult literacy group. The program coordinators who are determined to include adolescent youth-at-risk, however, are often also determined to integrate them with the adult program students. They report that the younger students have a positive effect on classroom climate, by imparting a youthful energy and by motivating the older students to “set a good example.” These practitioners also insist that the younger students behave better and stay on task longer in the company of adult students. The adolescent youth-at-risk appear to like working with adults: they like being included in a mutually respectful and caring community. The adult students, on the other hand, give mixed reviews: some appreciate the opportunity to interact with children the same age as their own (or of an age their children are rapidly becoming), but others find the younger students’ exuberance distracting and they resent the instructional time that is spent with students who “don’t belong here.” Clearly, the decision to include adolescent youth-at-risk should not be taken lightly by community-based adult literacy administrators and coordinators, not only because of the effects on precious staff time and instructional resources, but also because of the effects on community-building among their adult students.

The School as a Learning Community

The onus for molding schools into caring communities falls upon school administrators, whose ethic of care (Furman, 1998; Noddings, 1992) commits them to the “total development of each student and teacher, of the various communities affected by the organization, and, ultimately, of society at large” (Beck, 1994, p. 71). This is no small order! Enculturating the various learning, professional, collegial, inclusive, and inquiring communities that comprise a purposefully caring school (Sergiovanni, 1994) requires a values-driven (Beck, 1994), expressive and instrumental (Stockard & Mayberry, 1992) leader who can inspire others not only to “cooperate for the common good” (Furman, 1998, p. 314), but also to invest in the “social capital” (Coleman, as cited in Stockard & Mayberry, 1992, p. 74) of a value community that reflects “the historical moment and its tensions” (Starratt, 1996, p. 72). It requires a “caring

principal” (Grant, 1988, as cited in Beck, 1994, p. 48) who has “fearless and empathetic regard of students” (Beck, p. 342; McQuillan, 1997; Starratt, 1996) and teachers (Mitchell & Sackney, n.d.; Stockard & Mayberry, 1992), and who can kindle *gemeinschaft* qualities of affection, collectiveness, particularism, ascription, and diffuseness (Sergiovanni, 1994) in the interpersonal relationships that comprise school communities. This leadership process begins with private reflection to develop a vision; continues with dialogue that engages teachers, students, and stakeholders from the external community to assess school realities; and follows through with the structuring of opportunities to care (Beck, 1994) – such as by giving teachers more time to work with each other (Lytle, 1996; Mitchell & Sackney; Scribner, 1999) and with their students (McQuillan; Noddings, 1992; Stockard & Mayberry, 1992), and to engage in private (Lohman, 2000; McQuillan; Scribner) and more formal (Lieberman, 1995; Mott, 2000; Mitchell & Sackney, n.d.) professional development activities.

There is a clear division of administrative roles within the context of community-based literacy programs: the community advisory groups, which parallel the school boards and superintendents in regular school divisions; and the coordinators, who are like teaching principals. The responsibility for molding these adult education programs into caring communities therefore falls primarily upon the program coordinators. As head teachers in their programs, these individuals work directly with students, with paid and volunteer staff, and with external stakeholders (such as students’ family members and community referral agents). For adult literacy coordinators, the “historical moment” (Starratt, 1996, p. 72) that drives their efforts to enculturate community among their program staff and students is the perceived shortage of literacy skills among their adult citizenry – and the desire of these adults to improve their skills within the context of adult literacy programs. Adult literacy coordinators are responsible for teaching by example the affectiveness (emotional commitment), collectiveness (student-teacher partnering), particularism (individual caring), ascription (acceptance), and diffuseness (inclusiveness) that Sergiovanni (1994) highlights as defining *gemeinschaft* in school communities. They are also responsible for arranging time for inter-staff collaboration and for more formal professional development activities. Community-based adult literacy programs are caring by nature; the extent to which this caring translates into cohesive educational communities depends on how well their coordinators play the leadership role.

Adult literacy coordinators are the driving force behind (or against) including adolescent youth-at-risk in community-based adult literacy programs. These students can pose significant challenges to the cultivation of community among adult literacy students and staff. They are, for example, usually very effective in their relationships with teachers, but unlike most adult literacy students their effect is not always initially positive. It can also be difficult for staff (who are not used to dealing with high school-age students) to nurture with adolescents the collective “student-teacher ‘we’” (Sergiovanni, 1994, p. 22) that characterizes adult student-teacher relationships. On the other hand, adolescents who attend adult literacy program are usually very easily integrated into particularism, ascription, and diffuseness: they respond well to individualized attention, they relish being appreciated just because they “are” regardless of their academic performance levels, and they add considerably to the holistic pluralism of the classroom. Community-based adult literacy coordinators who are considering accepting adolescent youth-at-risk into their programs would be well advised to consult with their own staff, as well as the coordinators of other programs who serve adolescent youth-at-risk, before

approaching their local advisory committees for approval. If they decide to accept these students, their professional development plans should also include training events geared toward helping themselves and their staff work more effectively with adolescents.

Community among Teachers

A critical part of community building in schools is the purposeful integration of teaching staff into a professional learning community of their own (Daley, 2000; Furman, 1998; Mitchell & Sackney, n.d.). Teachers' experiences of personal and professional growth in schools are essential to their own well-being and the maintenance of productive relationships with their students (Hiemstra, 1991; Sissel, 1996). As Kroth and Boverie (2000) articulate, "It is difficult to promote deep internal passion in others when one's own lifework is a hollow shell" (p. 146). Teachers need to feel "recognized, valued, and cared for" (Johnson, 1987, as cited in Beck, 1994), and they need to feel an affinity with colleagues who are striving for the same instructional goals with their own students (Hansman, 2001; Lieberman, 1995; Stockard & Mayberry, 1992). In addition to accessing external professional development courses and workshops (Ross-Gordon, 1991; Mott, 2000; Scribner, 1999), teachers need to be given scheduled opportunities to improve their practice within the context of the schooling environment (Lytle, 1996; Mitchell & Sackney, n.d.; Scribner, 1999). On-site group activities such as planned collaboration (Lytle, 1996; Mitchell & Sackney, n.d.; Scribner, 1999) and case study analysis (Daley, 2000), and individual activities such as portfolio development (Lieberman, 1995) and personal narratives (Mitchell & Sackney, n.d.) or reflective journals (Daley, 2000) make "authentic" (Lieberman, 1995) contributions to teachers' sense of "commitment, efficacy, and satisfaction" (Beck, 1994, p. 48). Teachers' in-class relationships with their students, moreover, depend on their purposeful acquisition of knowledge about their students' "world and life experience" (Sissel, 1996, p. 98), including their home cultures (Jacobson, 1996; McCaleb, 1997; Ross-Gordon, 1991; Scribner, 1999). The role of school administrators in nurturing positive, collegial, and empowering relationships among teaching staff (Mitchell & Sackney, n.d.) is an essential part of building community in their schools, but it is not easy. Teachers need time and repeated opportunities to acquire trust in each other before they will risk exposing personal and instructional weaknesses in the course of collaborative inquiry (Mitchell & Sackney, n.d.). The learning that accrues from developing this trust, however, is a significant part of the situated learning (Daley, 2000; Hansman, 2001) that will help them to cultivate community within the context of their own classrooms.

Most community-based adult literacy programs have one teaching coordinator and a few paid and/or unpaid additional instructors. Some programs are staffed solely by the coordinator; others recruit several volunteer tutors to work one-on-one with part-time students. Although the level of interpersonal and inter-professional communication is generally high between the coordinator and other teaching staff (in the course of developing and revising learning plans and preparing instructional materials), the level of interaction among these "other" instructors can be low to non-existent. Even in a one-room setting, it is difficult to develop a within-program professional community among tutors who may or may not be trained professionals, and who may or may not cross paths over the course of a week. It is impossible to do so when there is only one coordinator/instructor. The task is certainly easier in programs that employ a coordinator and a few additional instructors (especially when these instructors work with the

same students), but it does not happen on its own. Someone – usually the coordinator – has to make a concerted effort to initiate and maintain collaborative professional inquiry among staff members, by scheduling meetings to discuss program issues and problematic (or celebratory) student cases, and by including these other members in more formal professional development activities. Because of the close working relationship that usually develops between the coordinator and other staff, fear of exposing instructional weaknesses is not a common deterrent to inter-staff collaboration, but care must still be taken to ensure that discussion of individual student cases is a proactive problem-solving, and not a reactive blaming, exercise. Teaching in a community-based adult literacy program is intrinsically rewarding: adult literacy instructors are usually “recognized, valued, and cared for” (Johnson, 1987, as cited in Beck, 1994) by their grateful students, with whom they develop positive working relationships. However, as writers such as Beck, Lytle (1996), and Mitchell & Sackney (n.d.) have eloquently pointed out, teachers need validation from each other as well. The coordinator in a community-based literacy program is the administrator responsible for fostering inter-staff reflection and collegiality.

Problems of finding time for community-based literacy program instructors to interact on an informal – or even formal – basis are exacerbated when adolescent youth-at-risk are added to student rosters. These students can be exhausting to work with: they often crave teacher attention and approval, and they tend not to be able to stay independently on-task as long as their adult peers in the classroom. Adult literacy classrooms are typically very busy places, characterized by individuals and small groups working on disparate tasks according to their own daily routines. There may be no set coffee breaks, there may even be no set lunch break, and the class day may not end until the last student is ready to go home. Adding adolescent youth-at-risk students can make a normally hectic pace frantic for instructors. Some coordinators schedule a half-day a week (usually on Monday morning or Friday afternoon) without students, so they can catch up on paperwork and consult with other staff members. Coordinators who use volunteer tutors will also schedule individual appointment times (usually once a month) to discuss what the tutors are doing with their students and how the coordinator can better facilitate the process. These coordinators, however, rarely schedule group meetings with their tutors, and the only times many of these tutors ever meet is at annual start-up and end-of-year “tutor appreciation” events. Particularly because working with adolescent students can be very different from working with adult learners, coordinators of community-based adult literacy programs that include adolescent youth-at-risk should ensure that they and their paid and volunteer teaching staff have ample opportunities to meet as a group in order to discuss overall program and individual student learning issues.

Community in the Classroom

“Classrooms are communities and are in communities” (Bingman, Martin, & Trawick, 1996, p. 47). The goal of community-minded administrators is to make sure that the classroom community is an integral part of its students’ “life world . . . of natural relationships” (Starratt, 1996, p. 73) – and to ensure that this part of their life world is a happy one (Starratt, 1996; Sisco, 1991; Stockard & Mayberry, 1992). That means helping teachers and students create “free spaces” (Fine et al., 1997) characterized by “connection” (Taylor, 1999, p. 61), empathy (Kilgore, 2001), care (Starratt, 1996), physical comfort (Vosko, 1991), and empowerment (Fulton, 1991; Fine et al.). The concern for connection and empathy arises from feminist writers

(such as Fine et al.1997; and McCaleb, 1997) who entreat educators to translate women's intuitive sense of "otherness" into the classroom interactions of both genders. Because empathy is a cognitive as well as an affective process (Kilgore, 2001), it can be taught. Classroom care for people and for learning itself (Starratt, 1996; Stockard & Mayberry) can also be taught, through example and through formal and informal classroom discourse (Amstutz, 1999; Noddings, 1992). Vosko (1991) notes the importance of physical comfort in the classroom design, and the ways that it can be achieved – by arranging furniture to accommodate students' needs for territory, personal space, and sight-lines, "Having a sense of place and space empowers" (Heath, 1995, p. 52). For many learners, this need to have a sense of control over physical space in the classroom carries over into the need to have some measure of control over their learning activities as well. Despite complaints that self-directed learning has become a "cultlike" (Caffarella, 1993, p. 25) "rut" (Brookfield, 1992, p. 227) for adult educators, most adult and child educators agree that some degree of sharing in decision-making is an integral part of creating a learning environment that reflects "community" (Beck, 1994; Bingman et al., 1996; Garrison, 1992). A school administrator must make a concerted effort to get to know the teacher(s) and students in each classroom in order to help them nurture this type of reciprocal relationship (Hayes, 1992; Merz & Furman, 1997; Noddings, 1992).

Community-based adult literacy classrooms are microcosms of the larger community. Their undereducated students are (often painfully) aware of their respective positions in the sociocultural milieu outside of school. Indeed, their efforts to improve their literacy skills are inextricably linked to their desires for a better life in the external community. Creating "free spaces . . . in which people . . . are able to imagine life differently, joining together to nurture hopes and dreams, often producing real changes in their individual and collective lives" (Fine et al., 1997, p. 253) is an integral part of each program's (sometimes written, sometimes not) mission to serve. Most adult literacy teachers and their students spend significant amounts of time together, even in programs that use part-time voluntary tutors. Establishing positive interpersonal relationships between staff and students in these programs is a prerequisite for teacher and learner satisfaction and academic growth. Especially for those students whose home lives are emotionally impoverished, the need to learn how to meaningfully and empathetically care for and connect with others is not only essential for the learning environment itself, but is also a critical part of the preparation for further educational training and employment. Above all, these students need to feel empowered – empowered to reciprocally interact with each other and their teachers, and empowered to make informed choices (Brookfield, 1992; Caffarella, 1993; Garrison, 1992) regarding what they will learn and how they will learn it. As head teachers, the coordinators of community-based adult literacy programs are ideally situated to nurture this type of classroom community. Moreover, most coordinators are women, so they would be expected by Taylor (1999) and McCaleb (1997) to draw on their own propensities toward connection (Taylor, 1999) and intuition (McCaleb, 1997) in their efforts to cultivate these qualities among their students and (predominantly female) staff.

Adolescent youth-at-risk evince personal, social, and academic characteristics that make them more likely to leave regular school early – and less likely to return after leaving – than their school-age peers. Most undereducated adults who attend community-based adult literacy programs dropped out of school as teenagers, and are thus essentially "grown-up" adolescent youth-at-risk. Although the two groups are academically similar, they may lead very different

personal and social lives, and these disparities can significantly affect the “prevailing condition, atmosphere, or ambiance” (Sisco, 1991, p. 42) that distinguishes community in a classroom. For example, the adolescent students seem to have a greater need for “territory” (Vosko, 1991), and they both relish and defend their rights to personal space. When adolescent youth-at-risk join community-based adult literacy programs, the program coordinators must closely monitor their relationships with each other, with their adult peers, and with program staff. These students have been described by some coordinators as being “like puppies” who want to interact with others, but have not quite learned how to do so in an adult and socially responsible manner. Often the adult students will take it upon themselves (in the manner of parents) to give feedback intended to guide appropriate behaviour, but it is usually up to the coordinator and other staff to make sure this “guidance” is gentle and constructive. Adolescent youth-at-risk attend adult literacy programs either because they are at risk of dropping out of regular school, or because they have already been suspended or expelled or have dropped out. They may therefore be considered somewhat “fragile” learners, whose entry into an adult education classroom marked by connection, empathy, care, and empowerment must be carefully negotiated in partnership with the coordinator who is administratively responsible for preserving classroom community.

The Classroom as a Learning Community

To the foci on individualized (or at least personalized) instruction in grade school (Amstutz, 1999; McQuillan, 1997; Stockard & Mayberry, 1992), and on self-directed learning in adult education (Brookfield, 1992; Caffarella, 1993; Garrison, 1992), is added the focus on group instruction (Cranton, 1996; Rose, 1996) as a natural outgrowth of building community in the classroom. Suggestions for group learning include discussion (Heimlich, 1996; McCaleb, 1997; Rose, 1996), storytelling (Amstutz, 1999; Rossiter, 1999; Starratt, 1996), gaming (Heimlich, 1996), co-authoring (McCaleb, 1997), and role play (Heimlich, 1996). Although the term *learning community* is not a synonym for group learning, classroom community advocates such as Armstrong and Yarbrough (1996), Heimlich (1996), Imel and Tisdell (1996), and Saltiel (1998) prescribe group learning activities as an important ingredient in the recipe for generating *gemeinschaft*-like student-teacher and student-student relationships. To Armstrong and Yarbrough (1996), “a collection of individuals is not necessarily a group” (p. 34). They specify five stages for developing the interdependence that defines a productive group: politeness (getting acquainted), focus (negotiating work plan), conflict (between individual and group identity), solidification (cohesive interaction), and performance (proficiency). To foster non-threatening individual participation in group activities, Heimlich (1996) recommends using “the think-feel-believe rule” of asking questions about “what individuals think, feel, or believe” so “there can be no wrong answers” (p. 47). Imel and Tisdell (1996) warn of the potential for negative intergroup effects and adverse power relations among group members. They emphasize the role of educators in ensuring that group learning exercises are positive and productive experiences for all participants. School administrators should play a definitive role in encouraging teachers to include group learning in their classrooms, by providing access to related professional development, and by periodically participating in classroom group learning activities themselves.

Community-based adult literacy learning communities include both individual and group learning to achieve mutually exclusive and inclusive learning goals. Most programs serve only

twelve to fifteen students at a time, so learning in small groups should be relatively easy to orchestrate. Because most students negotiate individual attendance schedules, however, it can be difficult to organize groups whose members will be available for repeat sessions. Therefore, most group work occurs on a “one-shot” basis, focusing on particular topics for preliminary discussion, and followed by individual reading/writing assignments. For example, a reading selection (such as a story or a magazine article) or a local news event might be used as the catalyst for group discussion and pre-writing activities. The follow-up writing can be done in the group as well, but only if the writing can be finished in one session or all of the group members are scheduled to come to class at the same time within the next day or so. Sometimes group work takes the form of a class project, such as compiling and illustrating a collection of student writings. In this case, too, the group activities consist of planning and follow-up, and the actual writing and illustrating are done individually or in student pairs. Thus, the extent to which a community-based adult literacy student group will work its way through all of Armstrong and Yarbrough’s (1996) stages of group development depends on the attendance patterns of the students and the willingness (and skill) of the program staff in planning group activities and cultivating group interaction. The program coordinator must lead by example, seeking out opportunities to connect students in common learning activities, particularly when special arrangements need to be made for multiple tutor-student pairs to meet at the same time. The administrative role of the program coordinator is thus critical to the group learning process in community-based adult literacy programs.

Adolescent youth-at-risk can add an interesting dimension to the group interactions in a community-based adult literacy classroom. Sometimes having a small group of younger students in the room makes the older students band together; sometimes it curtails the adult students’ informal conversations altogether. When the younger students are included in group activities, their youthful enthusiasm and contrasting life views can either positively or negatively affect the group learning process, depending on whether their contributions complement or derail the train of conversation. For example, when the topic is parenting, younger students can add a delightful and informative dimension to the discussion. However, when the topic is a more sensitive subject, such as sexuality or spousal relations, the younger students’ presence can stifle open discussion by the adults. Armstrong and Yarbrough’s (1996) stages of group development and Imel and Tisdell’s (1996) warnings about intergroup effects and power relations are therefore particularly germane to deliberations over whether or not to welcome adolescent youth-at-risk into adult literacy classrooms. Progress toward group development among a disparate group of undereducated adults can be slowed or arrested altogether when younger students, with their own needs for group affiliation and affirmation, enter the picture. Intergroup effects, when divisions arise between the younger and older students, can cause real problems for classroom climate and over-all group cohesiveness. Interpersonal and intergroup power struggles can also materialize. The adult literacy coordinator plays a key administrative role in the decision to include (or exclude) adolescent youth-at-risk, and in endeavouring to navigate a smooth entry for them into the adult learning group (when the decision is to include them).

The Classroom as a Democratic Community

To many educators (including Courtney, 1992; Fine et al., 1997; and Sergiovanni, 1994), the primary function of schools is to “be models of democratic living and give students the

opportunity to function responsibly in a democratic society” (McCaleb, 1997, p. 44). The values of democracy and citizenship are not instinctive, however; they must be actively taught (Boggs, 1991; Heaney, 1992; Sergioivanni, 1994). Teaching democracy means teaching students to believe in the “intrinsic value of human beings” (Beck, 1994, p. 71; see also Taylor, 1999), regardless of race (Brown, Cervero, & Johnson-Bailey, 2000; Noddings, 1992; Peterson, 1996), gender (Amstutz, 1999; Brown et al.; Noddings, 1992), culture (Furman, 1998; Noddings, 1992; Guy, 1999), sexual orientation (Edwards & Brooks, 1999), or socioeconomic status (Amstutz, 1999). It therefore means making “the invisible visible” (Chavez & Guido-DiBrito, 1999, p. 44) in the classroom, by acknowledging and addressing social problems such as racism and homophobia, in order to nurture the “otherness” (Furman, 1998, p. 311) that defines living in a postmodern global community (Crook et al., 1992; Kenway, 1995). It means analyzing “difference, power, and privilege” (Fine et al., p. 249) in an effort to commit students to a communitarian goal of liberating marginalized subgroups in society (Cunningham, 1992; Kroth & Boverie, 2000; Tisdell, 2000). Democratic classrooms develop “a sense of respectful community” (Chavez & Guido-DiBrito, p. 46) in their students, by administrator and teacher-led example and by direct instruction.

Many undereducated adults who attend community-based adult literacy programs are those least privileged in society. They are the marginalized (Edwards & Brooks, 1999; Merriam, 1993), oppressed (Amstutz, 1999; Merriam, 1993) individuals in need of emancipation (Amstutz; Cunningham, 1992; Tisdell, 2000). Other adult literacy program students, however, are neither marginalized nor oppressed. Addressing social problems within a multiracial, multicultural, socioeconomically stratified classroom is a real challenge. Adult literacy educators must be careful to respect all perspectives, so as not to fall into the trap of blaming one group for all of another group’s ills (Amstutz, 1999; Noddings, 1992). Community-based adult literacy coordinators play a huge role in keeping democratic principles of “respectful community” (Chavez & Guido-DiBrito, 1999, p. 46) at the top of their students’ learning agendas. They must ensure that they and other program staff “make the road by walking” (Amstutz, 1999, p. 30), in order to teach democracy and citizenship by example.

The adolescent youth-at-risk who attend community-based adult literacy programs also represent a disadvantaged group in society. Most feel marginalized and unwanted in regular school; some belong to other oppressed racial and socioeconomic groups as well. Adult literacy coordinators report that these students have a strong belief in fairness, and respond very well to their endeavours to inculcate principles of democracy and citizenship in the classroom. They can also have a positive effect on their older classmates who have experienced more difficulties as marginalized adults in the larger society. Administrative efforts to make community-based adult literacy programs into “models of democratic living” (McCaleb, 1997, p. 44) may thus be an equalizing agent for welcoming adolescent youth-at-risk into adult literacy classroom communities.

Conclusion

The administrative commitment that community-based adult literacy coordinators and administrative advisory groups make to nurturing community in their programs is based on the firm belief that building community is an integral part of their mission. When their commitment

to providing adult literacy education extends to adolescent youth-at-risk who are also in need of academic instruction outside of regular school, they invite new challenges for classroom community building. This article considers these challenges within the context of several issues addressed in the literature on child and adult education. It is by no means a comprehensive treatment of the topic; rather, it is intended to serve as an introduction to the joys and pitfalls of introducing adolescent youth-at-risk into adult literacy communities.

References

- Amstutz, D. D. (1999, Summer). Adult learning: Moving toward more inclusive theories and practices. In T. C. Guy (Ed.), *Providing relevant adult education: A challenge for the twenty-first century* (pp. 19-32). New Directions for Adult and Continuing Education, 82. San Francisco: Jossey-Bass.
- Armstrong, J. L., & Yarbrough, S. L. (1996, Fall). Group learning: The role of environment. In S. Imel (Ed.), *Learning in groups: Exploring fundamental principles, new uses, and emerging opportunities* (pp. 33-39). New Directions for Adult and Continuing Education, 71. San Francisco: Jossey-Bass.
- Beck, L. G. (1994). *Reclaiming educational administration as a caring profession*. New York: Teachers College Press.
- Bingman, M. B., Martin, M., & Trawick, A. (1996, Summer). Building connections: Classrooms and communities in rural Virginia. In P. A. Sissel (Ed.), *A community-based approach to literacy programs: Taking learners' lives into account* (pp. 47-58). New Directions for Adult and Continuing Education, 70. San Francisco: Jossey-Bass.
- Boggs, D. L. (1991). Civic education: An adult education imperative. *Adult Education Quarterly*, 42(1), 46-55.
- Brookfield, S. (1992). Self-directed learning, political clarity, and the critical practice of adult education. *Adult Education Quarterly*, 43(4), 227-242.
- Brown, A. H., Cervero, R. M., & Johnson-Bailey, J. (2000). Making the invisible visible: Race, gender, and teaching in adult education. *Adult Education Quarterly*, 50(4), 273-288.
- Caffarella, R. S. (1993, Spring). Self-directed learning. In S. B. Merriam (Ed.), *An update on adult learning theory* (pp. 25-35). New Directions for Adult and Continuing Education, 57. San Francisco: Jossey-Bass.
- Chavez, A. F., & Guido-DiBrito, F. (1999, Winter). Racial and ethnic identity and development. In M. C. Clark & R. S. Caffarella (Eds.), *An update on adult development theory: New ways of thinking about the life course* (pp. 39-47). New Directions for Adult and Continuing Education. San Francisco: Jossey-Bass.

- Courtney, S. (1992). *Why adults learn: Towards a theory of participation in adult education*. New York: Routledge.
- Cranton, P. (1996, Fall). Types of group learning. In S. Imel (Ed.), *Learning in groups: Exploring fundamental principles, new uses, and emerging opportunities* (pp. 25-32). *New Directions for Adult and Continuing Education*, 71. San Francisco: Jossey-Bass.
- Crook, S., Pakulski, J., & Waters, M. (1992). *Postmodernization: Change in advanced society*. Newbury Park, CA: Sage.
- Cunningham, P. M. (1992). From Freire to feminism: The North American experience with critical pedagogy. *Adult Education Quarterly*, 42(3), 180-191.
- Daley, B. J. (2000, Summer). Learning in professional practice. In V. W. Mott & B. J. Daley (Eds.), *Charting a course for continuing professional education: Reframing professional practice* (pp. 33-42). *New Directions for Adult and Continuing Education*, 86. San Francisco: Jossey-Bass.
- Edwards, K., & Brooks, A. K. (1999, Winter). The development of sexual identity. In M. C. Clark & R. S. Caffarella (Eds.), *An update on adult development theory: New ways of thinking about the life course* (pp. 49-57). *New Directions for Adult and Continuing Education*. San Francisco: Jossey-Bass.
- Fine, M., Weis, L., & Powell, L. C. (1997). Communities of difference: A critical look at desegregated spaces created for and by youth. *Harvard Educational Review*, 67(2), 247-284.
- Fulton, R. D. (1991, Summer). A conceptual model for understanding the physical attributes of learning environments. In R. Hiemstra (Ed.), *Creating environments for effective adult learning* (pp. 13-22). *New Directions for Adult and Continuing Education*, 50. San Francisco: Jossey-Bass.
- Furman, G. C. (1998). Postmodernism and community in schools: Unraveling the paradox. *Educational Administration Quarterly*, 34(3), 298-328.
- Garrison, D. R. (1992). Critical thinking and self-directed learning in adult education: An analysis of responsibility and control issues. *Adult Education Quarterly*, 42(3), 136-148.
- Guy, T. C. (1999, Summer). Culture as context for adult education: The need for culturally relevant adult education. In T. C. Guy (Ed.), *Providing relevant adult education: A challenge for the twenty-first century* (pp. 5-18). *New Directions for Adult and Continuing Education*, 82. San Francisco: Jossey-Bass.
- Hansman, C. A. (2001, Spring). Context-based adult learning for teacher education. In S. B. Merriam (Ed.), *The new update on adult learning theory* (pp. 43-51). *New Directions for Adult and Continuing Education*, 89. San Francisco: Jossey-Bass.

- Hayes, E. (1992). Current perspectives on teaching adults. *Adult Education Quarterly*, 43(3), 173-186.
- Heaney, T. (1992). When adult education stood for democracy. *Adult Education Quarterly*, 43(1), 51-59.
- Heath, S. B. (1995). Race, ethnicity, and the defiance of categories. In W. D. Hawley & A. W. Jackson (Eds.), *Toward a common destiny: Improving race and ethnic relations in America* (pp. 39-70). San Francisco: Jossey-Bass.
- Heimlich, J. E. (1996, Fall). Constructing group learning. In S. Imel (Ed.), *Learning in groups: Exploring fundamental principles, new uses, and emerging opportunities* (pp. 41-49). *New Directions for Adult and Continuing Education*, 71. San Francisco: Jossey-Bass.
- Hiemstra, R. (1991, Summer). Aspects of effective learning environments. In R. Hiemstra (Ed.), *Creating environments for effective adult learning* (pp. 5-12). *New Directions for Adult and Continuing Education*, 50. San Francisco: Jossey-Bass.
- Imel, S., & Tisdell, E. J. (1996, Fall). The relationship between theories about groups and adult learning groups. In S. Imel (Ed.), *Learning in groups: Exploring fundamental principles, new uses, and emerging opportunities* (pp. 15-24). *New Directions for Adult and Continuing Education*, 71. San Francisco: Jossey-Bass.
- Jacobson, W. (1996). Learning, culture, and learning culture. *Adult Education Quarterly*, 47(1), 15-28.
- Kenway, J. (1995). Having a postmodernist turn or postmodernist *angst*: A disorder experienced by an author who is not yet dead or even close to it. In R. Smith & P. Wetzlar (Eds.), *After postmodernism: Education, politics, and identity* (pp. 36-55). Washington, DC: Falter.
- Kilgore, D. W. (2001). A group learning intervention into how women learn empathy in prison. *Adult Education Quarterly*, 51(2), 146-164.
- Kroth, M., & Boverie, P. (2000). Life mission and adult learning. *Adult Education Quarterly*, 50(2), 102-149.
- Lieberman, A. (1995, April). Practices that support teacher development: Transforming conceptions of professional learning. *Phi Delta Kaplan*, 76, 591-596.
- Lohman, M. C. (2000). Environmental inhibitors to informal learning in the workplace: A case study of public school teachers. *Adult Education Quarterly*, 50(2), 83-101.
- Lytle, S. L. (1996, Summer). "A wonderfully terrible place to be": Learning in practitioner inquiry communities. In P. A. Sissel (Ed.), *A community-based approach to literacy*

- programs: Taking learners' lives into account* (pp. 85-96). *New Directions for Adult and Continuing Education*, 70. San Francisco: Jossey-Bass.
- McCaleb, S. P. (1997). *Building communities of learners: A collaboration among teachers, students, families, and community*. Mahwah, NJ: Lawrence Erlbaum Associates.
- McQuillan, P. J. (1997). Humanizing the comprehensive high school : A proposal for reform. *Educational Administration Quarterly*, 33(supplement), 644-682).
- Merriam, S. B. (1993, Spring). Adult Learning: Where have we come from? Where are we headed? In S. B. Merriam (Ed.), *An update on adult learning theory* (pp. 5-14). *New Directions for Adult and Continuing Education*, 57. San Francisco: Jossey-Bass.
- Merz, C., & Furman, G. (1997). *Community and schools: Promise and paradox*. New York: Teachers College Press.
- Mitchell, C., & Sackney, L. (n.d.). *Building capacity for a learning community* [On-line]. Available: <http://www.umanitoba.ca/publications> (2002, July 7)
- Mott, V. W. (2000, Summer). The development of professional expertise in the workplace. In V. W. Mott & B. J. Daley (Eds.), *Charting a course for continuing professional education: Reframing professional practice* (pp. 23-31). *New Directions for Adult and Continuing Education*, 86. San Francisco: Jossey-Bass.
- Noddings, N. (1992). *The challenge to care in schools: An alternative approach to education*. New York: Teachers College Press.
- Noddings, N. (1996). On community. *Educational Theory*, 46(3), 245-267.
- Peterson, E. A. (1996, Summer). Our students, ourselves: Lessons of challenge and hope from the African American community. In P. A. Sissel (Ed.), *A community-based approach to literacy programs: Taking learners' lives into account* (pp. 17-26). *New Directions for Adult and Continuing Education*, 70. San Francisco: Jossey-Bass.
- Rose, A. D. (1996, Fall). Group learning in adult education: Its historical roots. In S. Imel (Ed.), *Learning in groups: Exploring fundamental principles, new uses, and emerging opportunities* (pp. 3-13). *New Directions for Adult and Continuing Education*, 71. San Francisco: Jossey-Bass.
- Ross-Gordon, J. M. (1991). Needed: A multicultural perspective for adult education research. *Adult Education Quarterly*, 42(1), 1-16.
- Rossiter, M. (1999, Winter). Understanding adult development as narrative. In M. C. Clark & R. S. Caffarella (Eds.), *An update on adult development theory: New ways of thinking about the life course* (pp. 77-85). *New Directions for Adult and Continuing Education*. San Francisco: Jossey-Bass.

- Saltiel, I. M. (1998, Fall). Defining collaborative partnerships. In I. M. Saltiel, A. Sgroi, & R. G. Brockett (Eds.), *The power and potential of collaborative learning partnerships* (pp. 5-11). New Directions for Adult and Continuing Education, 79. San Francisco: Jossey-Bass.
- Scribner, J. P. (1999). Professional development: Untangling the influence of work context on teacher learning. *Educational Administration Quarterly*, 35(2), 238-266.
- Sergiovanni, T. J. (1994). *Building community in schools*. San Francisco: Jossey-Bass.
- Shields, C., & Seltzer, P. A. (1997). Complexities and paradoxes of community: Toward a more useful conceptualization of community. *Educational Administration Quarterly*, 33(4), 413-439.
- Sisco, B. R. (1991, Summer). Setting the climate for effective teaching and learning. In R. Hiemstra (Ed.), *Creating environments for effective adult learning* (pp. 41-50). New Directions for Adult and Continuing Education, 50. San Francisco: Jossey-Bass.
- Sissel, P. A. (1996, Summer). Reflection as vision: Prospects for future literacy programming. In P. A. Sissel (Ed.), *A community-based approach to literacy programs: Taking learners' lives into account* (pp. 97-103). New Directions for Adult and Continuing Education, 70. San Francisco: Jossey-Bass.
- Starratt, R. J. (1996). *Transforming educational administration: Meaning, community, and excellence*. New York: McGraw-Hill.
- Stockard, J., & Mayberry, M. (1992). *Effective educational environments*. Newbury Park, CA: Sage.
- Taylor, K. (1999, Winter). Development as separation and connection: Finding a balance. In M. C. Clark & R. S. Caffarella (Eds.), *An update on adult development theory: New ways of thinking about the life course* (pp. 59-66). New Directions for Adult and Continuing Education. San Francisco: Jossey-Bass.
- Tisdell, E. J. (2000). Spirituality and emancipatory adult education in women adult educators for social change. *Adult Education Quarterly*, 50(4), 308-335.
- Vosko, R. S. (1991, Summer). Where we learn shapes our learning. In R. Hiemstra (Ed.), *Creating environments for effective adult learning* (pp. 23-32). New Directions for Adult and Continuing Education, 50. San Francisco: Jossey-Bass.

NEW HORIZONS IN ADULT EDUCATION
Volume 18, Number 4, Winter 2004

**A WORKABLE FUTURE: DELINEATING THE ROLE OF EDUCATION
IN ENVIRONMENTAL AND ECONOMIC SUSTAINABILITY**

Lawrence White
Algonquin College

Abstract

It has been suggested that humankind ought to focus on freeing itself from its economic prison by broadening our compassion and developing an appreciation of the natural world. If this is the direction that humankind must head in order to ensure its on-going place in the world, then it follows that education in all of its forms would and should play a key role in increasing humanity's knowledge and understanding about the world so that effective and well-informed choices for a sustainable economic and environmental future can be made. This paper, then, will seek to explore the pivotal role of education and educators in transforming human thinking and helping to rekindle the link between economic and environmental policy.

The human being is part of the whole, called by us "The Universe," a part limited in time and space. He experiences himself, his thoughts and feelings, as something separate from the rest – a kind of optical delusion of his consciousness. This delusion is a kind of prison... Our task must be to free ourselves from this prison by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty. Nobody's able to achieve this completely, but the striving for such achievement is in itself a part of a liberation and a foundation for inner security.

Albert Einstein

Introduction

To become human, one must make room in oneself for the wonders of the universe. South American Indian saying

The sphere of rock on which we live began to coalesce some 15 billion years ago. Evolved from the dust of ancient stars in the "Big Bang," a pattern slowly settled in place allowing for the emergence of energy structures and matter. Almost 4½ billion years ago, simple single-celled life appeared in our oceans. Slowly, some 2 billion years ago, oxygen began to accumulate and, some 500 million years later, complex cells with nuclei formed. With the formation of the ozone layer and the development of the atmosphere, life began to move onto the land. Only in the last 450,000 years has humankind evolved. *Homo sapiens* was, at the time, no different than any

other creature that roamed the earth – one of many organisms competing in an increasingly diverse world. However, in the last 4,500 years following the advent of domestication and other key technological inventions, such as written language, the world’s major civilizations emerged. Some 450 years ago, we were propelled into the industrial age and human technology and population began to grow exponentially. Then, 45 years ago, we ventured further – harnessing the atom, exploring space, and delving into genetics (Myers, 1993).

During this recent time in our history, human population exploded virtually out of control. The population explosion brought forth the concomitant technological innovations, exploitation of the earth as a means of obtaining resources, and the growth of an economy that has become the defacto *raison d’être* of life as we now know it. In order to feed our economy, we plough and clear-cut, we re-direct and deface, we politicize and arm, and we quantify and try to manage. Unfortunately, much of this “development” has been unevenly distributed and accomplished and, now, we are faced with resulting disparities in wealth, education, and health, to name just a few. Due to this, major dilemmas now face our society related to seemingly insurmountable issues such as equity, sustainability, and harmony.

The economic situation today is based on the inherent logic of selfishness and greed. Fundamental human activities, such as caring and cooperation, have been dismissed as irrational. “Conventional economists are infatuated with what they call human capital: the tremendous inventive and consumptive capacity of people. Thus population growth is celebrated by economists because it increases the greatest natural resource of all – the human brain” (Suzuki, 1998, p.45). Ignoring Malthusian warnings regarding limits to growth and the concept of carrying capacity, proponents of human capital theory, such as T. W. Schultz, proposed that the future prosperity of humankind could be assured, through the increased abilities of people and advances in useful knowledge (as cited in Bouchard, 1998). Schultz went on to describe those commodities upon which we depend for survival – air, water, soil, forests, etc. – as natural capital. He purported that, while natural capital may be finite, human capital was renewable, with no theoretical limit (as cited in Bouchard, 1998). This anthropocentric attitude, nurtured and increasingly accepted over the years, has resulted in an overvaluation of human capital and an undervaluation of the natural world (Suzuki, 1998). In fact, we hardly ever consider the life support systems of the earth within our concept of economy. They are viewed as external. According to Suzuki, “these so-called externalities are actually the life-support system of the planet. Without them, there could be no life – and certainly no economy” (1998, p.46).

While it is clear that education played a key role in the development of human capital theory, with a focus on increasing human knowledge (Bouchard, 1998), it has not been as clear or as generally accepted that education should play a similar role in assuring a shift towards sustainability and harmony with regard to our relationships with the world around us. The term environmentalism came into popular use some four decades ago (Anon.), about the same time that the world began actively adopting the principles of human capital theory. The radical onslaught of the environmental movement within the first few decades spawned some 12,000 grassroots groups and some 150 major national organizations in the United States alone. Since then, “environmentalism has become ingrained in [our] culture through laws, textbooks, schools, work, practice and consciousness” (Anon, p. 1).

The growth of economy and environment has been divergent, each following quite different paths and, often, at loggerheads with one another. Corporate decisions are made in boardrooms far removed from the locations of natural resources and labor. The corporate bottom line does not always consider these externalities.

Albert Einstein, in the opening quotation, suggested that we ought now focus on freeing ourselves from our economic prison by enhancing our compassion and developing an appreciation of our natural world, and our place within it. This concept was redefined by the World Commission on Environment and Development when it stated “there has been a growing realization in national governments and multilateral institutions that it is impossible to separate economic development issues from environmental issues; many forms of development erode the environmental resources upon which they must be based, and environmental degradation can undermine economic development” (WCED, 1987, p.3).

If this is the direction that humankind must head in order to ensure its on-going place in the world, a position supported by many (Diduck, 1999; Fien & Tillbury, 2002; Griffith University, 1997; WCED, 1987; Ramphal, 1992; Sauv , u.d.; Suzuki, 1998; Suzuki, 2002), then it follows that education in all of its forms – formal, informal and non-formal – would and should play a key role in increasing humanity’s knowledge and understanding about the world so that effective and well-informed choices for a sustainable economic and environmental future can be made. This paper, then, will seek to explore the pivotal role of education and educators in transforming human thinking and helping to rekindle the link between economic and environmental policy.

The Rise of Human Capital

It’s all a question of story. We are in trouble just now because we do not have a good story. We are in between stories. The old story, the account of how we fit in, is no longer effective. Yet we have not learned the new story.
Thomas Berry

“The knowledge of every band of human beings, acquired and accumulated through generations of observation, experience and conjecture, was a priceless legacy for survival” (Suzuki, 2002, p. 11). Thus, the information and knowledge of nomadic groups melded into a worldview, an understanding or perception of the interconnectedness between human, spirit and environment (Suzuki, 2002). Such interconnection fostered universality, or the thinking that nothing can exist in isolation. With this in mind, Suzuki (2002), suggests that early human society constructed a truly ecologically sustainable way of life.

The centrality of humanity’s world, and place within it, was questioned in the 16th and 17th centuries by the astronomers Copernicus and Galileo who, respectively, placed Earth as just one of many planets revolving around a central sun, and hypothesized regarding the existence of a galaxy in which the Earth’s system was but one of many such systems. Thus, humanity’s rationalization of enshrinement as God’s creation was challenged (Suzuki, 2002). The marginalization of Earth and humankind “pushed us out of the centre, and we’ve been trying to get back there ever since” (Suzuki, 2002, p. 13).

By the 18th century, Newton again revolutionized the thinking of humankind with his disclosure that the universe was nothing more than a complex mechanism whose operation and components could be described with science. Thus, to a world minimized by centuries of observations denouncing its centrality, the ability to latch onto a perception of being able to view the world as a machine, adjustable and controllable, was a much-needed boost to human ego (Suzuki, 2002).

Darwin cast doubt on human dominion yet again when, with the publication of *The Origin of Species*, divine creation was replaced by natural selection and the concept of evolution. “Cast... as the children of chance, creatures with enough self-awareness and wit to recognize ourselves as a kind of cosmic joke... *Homo sapiens* has undergone a relentless diminuendo, ending up as just another species that happened to evolve way out in the heavenly boonies” (Suzuki, 2002, p. 15).

Suzuki suggests that this on-going loss of identity left humanity yearning to fill a void and re-establish itself as dominant. One way we have managed this, he suggests, is through “the exchange of money for goods in the temples of the marketplace” (2002, p. 20). As the emphasis on consumerism grew, human morality changed and expanded with it. ‘Bigger, better and more’ became the credo. In order to achieve this goal, the need for ‘bigger, better and more’ knowledge followed. Progress and success came to be synonymous with prosperity.

The link to education, (Prosperity = Knowledge = Education), proposed first by Schultz as human capital theory suggested that economic growth resulted directly from the quality of the citizenry (as cited in Bouchard, 1998). Consequently, education systems were evolved into mechanisms by which economic growth could be maximized (Spencer, 1998).

The effort to achieve economic success came not, however, without its liabilities. As consumption and growth increased, knowledge increased and, as knowledge increased, population increased, thus precipitating a vicious circle of growth and development. The demand for ‘bigger, better and more’ resulted in an ever-increasing harvest of the earth’s resources. Urbanization (in an effort to secure higher paying employment) added pressures to a fragile and finite environment. Now, however, with more than half the world’s population living in urban centers (Butterworth and Fisher, 2000; Suzuki, 2002), we are beginning to lose our identity and sense of relationship with nature. Cities are human-made environments in which we find ourselves surrounded by the species we chose. Humanity has, on the surface, extracted itself from nature and from the limits it can impose on life. We are not pressured by predators and less pressured by concerns about climate and food supply. “We forget the source of our water and energy, the destination of our garbage and sewage... we imagine a world under our control and will risk or sacrifice almost anything to make sure our way of life continues” (Suzuki, 2002, p. 24-25).

Human capital theory has, by the very nature of our devotion to consumerism, caused us to lose sight of our traditional worldview. However, our unlimited faith in ingenuity to provide on-going solutions to the problem of resource scarcity represents a Promethean worldview (Dryzek, 2002). We must, as indicated in the quote from Thomas Berry at the top of this section, embark upon the rediscovery of our new story.

Understanding Sustainable Development

Not till we are lost, in other words not till we have lost the world, do we begin to find ourselves and realize where we are and the infinite extent of our relations.
Henry David Thoreau

The term ‘sustainable development’ came into popular use with the publication of *Our Common Future* by the World Commission on Environment and Development (1987). The so-called Brundtland Commission defined sustainable development as development that “meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987, p. 8).

In keeping with the observations of Malthus in his *Limits to Growth*, the Commission suggested that there exists dynamic limits to development that are determined by the current state of technology, sociology and environmental activity. Sustainability, therefore, reaches deep within the purview of the global biosphere into the realm of human civilization. Inequities between peoples, cultures and nations exacerbate the problems, as does rapid, unplanned growth (WCED, 1987).

In order for sustainable development to be effective it must be global and it “requires that those who are more affluent adopt lifestyles within the planet’s ecological means” (WCED, 1987, p. 9) and an understanding that only “a revolution in human consciousness... will provide the ethical impetus for change” (Ramphal, 1992, p. 199).

It is unrealistic, however, to expect all people to agree on patterns of development and resource use. For example, “an economist... placing faith in technological change and elastic technical substitution, may see unlimited potential for economic growth. [An] ecologist, relying on systems thinking, knowledge of thermodynamics and a sense of place in the ecosystem, may see an entirely different picture, one of unsustainable resource exploitation, climate change, fragile ecosystems and alienation between humans and nature” (Diduck, 2002, p. 86).

Just as with the divergence of economy and environment, fundamental differences exist in the conception of the environment itself. For example, as many as six paradigmatic conceptions have been identified and include environment as nature, as a resource, as a problem, as a place to live, as the biosphere, and as a community project (Sauvé, u.d.). It is critical to understand that all conceptions coexist and that any environmental education process “should consider each one of these complementary visions... either cumulatively, through carefully orchestrated interventions, or, preferably, in an integrated pedagogical approach” (Sauvé, u.d., p. 11). Suzuki likens these differences to perceptions of a tree. While some people consider a tree to be little more than a “brown and green bit sticking up above the ground” (1997, p. 198), others are aware of the roots, the air and water that move around it and the earth that provides it support. Still others are aware of the flora and fauna that live in, on, and under the tree. There are others who view the same tree as a source of relaxation and recreation while others, still, view it as a source of firewood, timber or income.

Such a divergence of thought is commonplace in human society. Education can play an instrumental role in helping all of humankind to understand and work within the limits of the earth's resources. Such newly gained attitudes and appreciations "will be reflected in decisions at home and in corporate boardrooms around the world" (WCED, 1987, p. 112). Indeed, sustainable development "requires the capacity to adapt to constantly changing conditions and in public expectations shaped by culture, values and experience" (Harvey, 2002, p. 3).

Transformation Theory and The Role of Education

The truth is that we have never conquered the world, never understood it; we only think we have control. We do not even know why we respond in a certain way to other organisms, and need them in diverse ways so deeply.

Edward O. Wilson

In his *Pedagogy of the Oppressed*, Paulo Freire argues that "while the problem of humanization has always, from an axiological point of view, been humankind's central problem, it now takes on the character of an inescapable concern. Concern for humanization leads at once to the recognition of dehumanization, not only as an ontological possibility but as an historical reality" (2002, p. 43). Freire's notion of dehumanization, when considered within the context of sustainability, is exemplified by the problem of global poverty (Markandya, 2001). With developed, wealthier nations being the oppressors, and underdeveloped, poorer nations being the oppressed (and generally speaking, the citizens thereof), decisions made by the wealthy have exponential implications on the poor. For example, environmental regulations that increase production costs of goods can lead to unemployment and higher acquisition costs. The poor are exponentially less able to adapt to these changes. It remains, however, uncertain as to whether "increasing poverty, caused by any one of a number of factors... results in the degradation [of the environment], or [if] degradation, following natural disasters or policy-induced changes... results in increased poverty" (Markandya, 2001, p. 4).

Within the context of environmental problems, a type of double-edged oppression challenges humankind. Not only are the poor oppressed through the exploitation of resources, but also the wealthy are facing oppression inflicted by the environment upon them, and, by association, on the entire population. Consequently, when Freire suggests that the oppressed rise to the challenge of liberating themselves and their oppressors as well, within an environmental context, this relates to all of humankind rising up to the challenges posed by an environment fast approaching its carrying capacity (Diduck, 1999; Freire, 2002). Education can, therefore, play a key role in helping to develop the human capital required to defeat oppression.

Education for Sustainability

We need to bring our educational programs a new ethic. Man is capable of as much care as he is of destruction. If we can make conservation a national cause, we can raise generations who will learn that the earth itself is sacred. Once that ethic is taught, beginning in our kindergartens, no more... wilderness bowls will be broken and turned to dust.

William O. Douglas

However, “education for sustainability must differ significantly from much of the nature study work carried out under the environmental education banner” (Fein and Tilbury, 2002, p. 9). The new paradigms in environmental education must include environmental, economic and human equality, human rights and peace, and, underlying it all, politics. Subject issues must include food security, sustainable tourism, poverty and gender alongside deforestation, climate change, biodiversity, and waste management, to name only a few (Fein and Tilbury, 2002). This transformative education, if it is to truly improve the social responsibility of humankind (Scott, 1998), must focus and develop skills necessary for and foster the critical evaluation and re-evaluation of economic assumptions (Diduck, 1999).

Mezirow advocated in favor of critical education in his development of meaning schemes (habitual expectations) and meaning perspectives (expectations related to activities and life around us). The issue of questioning previously held expectations and perceptions is central to transformative learning (Cranton, 1998). Similarly, Freire’s concept of conscientization outlines a process in which people “achieve a deepening awareness of both the sociocultural reality which shapes their lives and of their capacity to transform that reality through action upon it” (Cranton, 1998, pp. 193-194).

“If we accept that individuals construct their own perspectives about the world around them and that people learn by challenging those perspectives, [then]... it is the power of the learning group... that is most likely to lead individuals to critical reflection” (Cranton, 1998, pp. 196-197). In keeping with this, Freire clearly placed control within the learning environment on the learner, suggesting that dialogue leads to critical self-reflection and reflection on the world around them. Freire suggests that this occurs through cycles of praxis. Praxis, according to Freire, is a cycle of action-reflection-action that results in the realization of new opportunities and understanding. (Diduck, 1999; Freire, 2002).

Freire’s dialogical and praxical approach is echoed within the field of environmental education (Diduck, 1999). Participation-based societal environmental education is the key. Success cannot be achieved unless all citizens participate and are allowed to participate (Cantera, 2002; Diduck, 1999; Fein and Tilbury, 2002; Harvey, 2002;

A New Focus for Education and Educators

*We can all continue to say we are only churchmen, or only educators,
or only students, or only government people – that our role is limited,
and that we cannot be expected to solve the problems of the world.
But... some of us had better choose to define ourselves as world
problem solvers if world problems are going to be solved.
Theobald*

James Wolfenson, World Bank President said, "Everyone agrees that the single most important key to development and to poverty alleviation is education. This must start with universal primary education for girls and boys equally, as well as an open and competitive system of secondary and tertiary education... Adult education, literacy, and lifelong learning must be combined with the fundamental recognition that education of women and girls is central

to the process of development” (Communities By Choice, 2002).

Education in all of its forms is now considered essential to achieving progress towards sustainable development. Moreover, it embraces all of the ways that people learn and develop values and lifestyles that reflect an understanding of global realities and responsibilities with respect to the future (UN, 2001). Whereas, in the past, education has been a means by which existing knowledge was shared, the new focus is on the future – preparing humankind for life, security, change, innovation and happiness in a sustainable fashion (UN, 2001).

In order to ensure preparedness, environmental education must be relevant to both the organization offering the learning and to the audience (Athman & Munroe, 2002). Focussing attention and learning on issues to which learners can relate, such as local problems and initiatives, increase the integrity of said relevance. Relevance is also solidified by allowing learners to physically experience the learning. Dewey explained this as making an assumption explicit so as to allow critical reflection (Cranton, 1998).

Formal education activities that lead towards an understanding of the interconnectedness between society, environment and economy could include initiatives such as green schools, in-service professional development, and core curricula reviews (NFPSEE, 1994; UNESCO, 2002). Using secondary and post-secondary institutions to spread and promote the concepts involved with sustainable development allows broader public awareness and understanding. “Not only do they prepare students who will become teachers and leaders in the educational field, they also educate the students who will become leaders in the other fields” (NFPSEE, 1994, Ch. 2, p. 1). Further, basic education acts as a foundation for future learning and development and, through such initiatives as literacy, provides a basis for democracy, social justice, peace, and mutual respect (UNESCO, 2002).

Professional development provides an opportunity to bridge the present with the future and provides a venue through which on-going new challenges and initiatives can be discussed and considered. The identification of core curricula and major themes that can be applied throughout learning permits an infusion of environmental ideas and the potential to challenge existing standards and establish new ones.

Formal education, however, is only the beginning and humanity today has a much greater opportunity than ever before for educational experiences within daily life. These informal opportunities are raised through the intervention of public awareness campaigns, discussion networks, community partnerships, workforce development, and lifelong learning (NFPSEE, 1994; UNESCO, 2002).

Traditional print, audio and visual media play an integral role within the frameworks of providing information. Increasingly, the role and involvement of telecommunications and commercial software are being felt. Likewise, partnerships and network opportunities allow citizens to participate at levels and for durations that meet the constraints of their daily schedules and they allow for discovery and learning through participation. Local community associations, advisory committees and many NGOs fulfill this role with regard to informal learning.

The development of workforce initiatives such as those that prepare potential workers to enter the workforce with innovative and sustainable ideas is and will continue to be required as societies make the transition to information societies (NFPSEE, 1994). Indeed some major workforce initiatives are being managed and introduced through the involvement of local, national and international unions. An excellent example of such an initiative is the Steelworkers Humanity Fund. The Steelworkers Humanity Fund focuses primarily on the issue of human rights and sustainable development specifically related to the establishment of global trading relations with regions that violate basic human rights.

“Lifelong learning encompasses adult education for vocational and professional advancement, enjoyment and leisure, and remediation for improving basic skills and knowledge needed to function as a member of a family or a community” (NFPSEE, 1994, Ch. 3, p. 15). Lifelong learning should provide opportunities to learn about sustainability as an ongoing process and should include discussion of the core concepts and workable, living solutions. The concept of schooling as a “once and for all” preparation is now obsolete because of the exponential growth in the advancement of knowledge and the continuous need for understanding and solutions (UNESCO, 2002).

“Like the society it serves and will shape, today’s education is in transition” (Griffith University, 1997). Education is searching for a means by which it can restore and preserve the traditional values of human society while, at the same time test assumptions and innovations that have an impact on the world of future generations. It is obvious that a new global ethic is required – one that provides for the functional involvement of humanity within the biosphere (Griffith University, 1997). While most current environmental education initiatives rely upon technocentric approaches, there exists a need for a focus on ecology and justice. According to Vandana Shiva, physicist, author and ecofeminist, “a science that does not respect nature’s needs and a development that does not respect people’s needs inevitably threatens survival” (Griffith University, 1997). As such, environmental education must adapt to reflect epistemologies that value diversity of knowledge, identity and society (Griffith University, 1997; UNESCO, 2002).

Conclusion

With such a wide variety of understandings and approaches to environmental and economic planning, and an equal number to the intended direction and role of education, and with the looming crisis of sustainability, we are faced with a serious and complex problem. Despite centuries of centralist and anthropocentric thinking, we are now engaged by the dilemma of uprooting the economic and social fabric within which we have thrived in favour of more globally responsible and ecocentric actions and thoughts.

Education can lead us, both formally and informally, towards our goal of reuniting economy and environment in a sustainable fashion. If, ultimately, our goal is the development of responsibility, environmental education, therefore, ought to be considered as “education for the development of responsible societies” (Sauvé, p. 14). Such a transformation will be the result of active and equal participation in critical assumption challenges, self and societal re-evaluations, and dialogical and praxical pursuits concerning our environmental interactions.

There is joy in the companionship of others working to make a difference for future generations, and there is hope. Each of us has the ability to act powerfully for change; together we can regain that ancient and sustaining harmony, in which human needs and the needs of all of our companions on the planet are held in balance with the sacred, self-renewing processes of Earth.
David Suzuki (2002, p. 240-241)

References

- Anonymous. "Education in a Variety of Social Movements" (pp. 1-5). Retrieved November 17, 2002 at http://scholar.lib.vt.edu/theses/available/etd-120142139711101/unrestricted/body_back.pdf
- Athman, J. A. & M. C. Munroe. "Elements of Effective Environmental Education Programs." Retrieved November 17, 2002 at <http://www.rbff.org/educational/BPE3.pdf>.
- Bouchard, P. (1998). "Training and Work: Myths About Human Capital." In S. Scott, B. Spencer and M. Thomas (Eds.). *Learning for Life: Canadian Readings in Adult Education* (pp. 128-139). Toronto, ON: Thompson Educational Publishing, Inc.
- Butterworth, I. M. & A. T. Fisher (2000). "Urban Environmental Education: A Community Psychology Perspective." Published in *Environment-Behaviour Research on the Pacific Rim: Proceedings of the 11th International Conference on People and Physical Environment Research*. Sydney, Australia: University of Sydney.
- Cantera. "Popular Education." Retrieved November 17, 2002 at <http://www.oneworld.org/cantera/education/>.
- Canton, P. (1998). "Transformative Learning: Individual Growth and Development Through Critical Reflection." In S. Scott, B. Spencer and M. Thomas (Eds.). *Learning for Life: Canadian Readings in Adult Education* (pp. 188-199). Toronto, ON: Thompson Educational Publishing, Inc.
- Clover, D. E. (1998). "Adult Education with an Ecological Context." In S. Scott, B. Spencer and M. Thomas (Eds.). *Learning for Life: Canadian Readings in Adult Education* (pp. 213-222). Toronto, ON: Thompson Educational Publishing, Inc.
- Communities By Choice (2002). "Bridging the 'Knowledge Divide' Through Education." Retrieved November 17, 2002 at <http://www.communitiesbychoice.org/news.cfm?a=890>.
- Diduck, A. (1999). "Critical Education in Resource and Environmental Management: Learning and Empowerment for a Sustainable Future." In *Journal of Environmental Management* v. 57 (pp. 85-97).

- Dryzek, J. S. (2002). "Environmental Issues." Published in *World Youth Report 2003*. International Council for Adult Education. "The Earth Charter Initiative." Retrieved November 17, 2002 at <http://www.earthcharter.org/resources/essays/icae.htm>
- Fien, J. & D. Tilbury (2002). "The Global Challenge of Sustainability." In D. Tilbury, R. B. Stevenson, J. Fien, and D. Schreuder (Eds.) *Education and Sustainability: Responding to the Global Challenge* (pp. 13-24). Cambridge, U.K.: IUCN Publication Services.
- Freire, P. (2002). *Pedagogy of the Oppressed*. New York, NY: The Continuum International Publishing Group Inc.
- Government of Canada. "What is Sustainable Development?" Retrieved on November 16, 2002 at http://www.sdinfo.gc.ca/what_is_sd/index_e.cfm.
- Griffith University (1997). "Teaching for a Sustainable World." Retrieved November 17, 2002 at <http://pandora-test.nla.gov.au/pan/25085/20020529/www.ea.gov.au/education/publications/tsw/rationale.html#7>.
- Harvey, D. (2002). "Sustainability: A Holistic Institutional Approach for Community Colleges and Technical Institutes." In *College Canada* v.7, no. 2 (pp. 3-9).
- Hopkins, C. & R. McKeown (2002). "Education for Sustainable Development: An International Perspective." In D. Tilbury, R. B. Stevenson, J. Fien, and D. Schreuder (Eds.) *Education and Sustainability: Responding to the Global Challenge* (pp. 25-36). Cambridge, U.K.: IUCN Publication Services.
- Markandya, A. (2001). "Poverty Alleviation and Sustainable Development: Implications for the Management of Natural Capital." Proceedings of the Workshop on Poverty and Sustainable Development, Ottawa, Canada.
- Morales-Gomez, D. "Knowledge, Change and the Preservation of Progress." Retrieved November 17, 2002 at <http://www.idrc.ca/books/reports/V211/know.html>.
- Myers, N. (Ed.) (1993). *GAIA: An Atlas of Planet Management* (pp. 259). New York, N.Y.: Doubleday Dell Publishing Group, Inc.
- National Forum on Partnerships Supporting Education about the Environment (1994). "Education for Sustainability: An Agenda for Action." Retrieved November 16, 2002 at <http://www.gcrio.org/edu/pcsd/toc.html>.
- Ramphal, S. (1992). *Our Country, The Planet: Forging a Partnership for Survival*. Washington, D.C.: Island Press.
- Sauvé, L. "Environmental Education and Sustainable Development: A Further Appraisal." In

- Canadian Journal of Environmental Education* v. 1 (pp. 7-33).
- Spencer, B. (1998). *The Purposes of Adult Education*. Toronto, ON: Thompson Educational Publishing, Inc.
- Steelworkers. "Humanity Fund: The Role of the Export development Corporation in the Promotion of Human Rights and Sustainable Development." Retrieved November 16, 2002 at http://www.uswa.ca/eng/humanity/EDC_2.HTM#.
- Suzuki, D. (1998). *Earth Time*. New York, N. Y.: Stoddart Publishing Co. Ltd.
- Suzuki, D. (2002). *The Sacred Balance*. Vancouver, B.C.: Greystone Books.
- UNESCO. "New Role of Education." Retrieved November 16, 2002 at <http://www.unesco.org/education/esd/english/education/role.shtml>.
- United Nations, Economic and Social Council (2001). "Education and Public Awareness for Sustainable Development." Report of the Secretary-General to the United Nations Economic and Social Council (E/CN.17/2001/PC/7).
- Wilson, J. (1992). "Green Lobbies: Pressure Groups and Environmental Policy." In R. Boardman (Ed.). *Canadian Environmental Policy: Ecosystems, Politics, and Processes* (pp. 109-125). Don Mills, ON: Oxford University Press.
- World Commission on Environment and Development (1987). *Our Common Future*. Oxford, U.K.: Oxford University Press.

NEW HORIZONS IN ADULT EDUCATION
Volume 18, Number 4, Winter 2004

HOW TO RESPOND TO ARTICLES ON AEDNET

To respond to the articles in this issue please send your comments to AEDNET identifying the subject as the title of the article (or first part of title).

**HOW TO OBTAIN BACK ISSUES AND CUMULATIVE
INDEX OF NEW HORIZONS**

It is now possible to search the AEDNET archives via a web browser. All the archived issues of New Horizons in Adult Education can be located at the following:
<http://www.nova.edu/~aed/newhorizons.html>

CALL FOR MANUSCRIPTS

New Horizons in Adult Education, founded in 1987, is a refereed electronic journal that provides faculty, graduate students, researchers, and practitioners with a means for publishing their current thinking and research within adult education and related fields. The journal is published two or three times a year and is available electronically on the Adult Education Network (AEDNET) web page <http://www.nova.edu/~aed/newhorizons.html>

New Horizons publishes research, thought pieces, book reviews, point-counter-point articles, conceptual analysis, case studies, interactive articles, and invitational columns. The editorial staff welcomes articles for review submitted either electronically or in a variety of disk formats through regular mail. **Guidelines for manuscript submission** are available on the AEDNET and New Horizons in Adult Education web page at <http://www.nova.edu/~aed/newhorizons.html>

If you would like to submit an article, you may contact New Horizons in Adult Education by e-mail or mail.

E-mail address: horizons@nova.edu

Mailing address:

Nancy Gadbow, Editor, New Horizons in Adult Education
Nova Southeastern University
Department of Higher Education Leadership/FGSEHS
1750 N.E. 167th Street
North Miami Beach, FL 33162