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NEW HORIZONS IN ADULT EDUCATION
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EDITOR'S PREFACE

Gender issues have been topics for exploration and research in many areas of adult education. Both articles in this issue tackle an area related to gender. In their article Educating Rita: An Examination of the Female Life Course and its Influence on Women's Participation in Higher Education M. Jo Bates and Susan Norton describe factors affecting women's decision to participate in higher education programs. Their survey of women at two higher education institutions dealt with specific life events and their perceived impact on the subjects returning to school. Although their study results were considered to be preliminary, based on a small sample size, the authors present some thoughtful discussion of several life events and their potential influence on women's decision to return to school. They encourage further investigation of these motivation factors for women.

Jeanne d'Arc Gaudet and Claire Lapointe also focus on gender issues, particularly gender equity in teacher training. Their article What Could an Equitable Instructional Design Achieve? An Experiment with Trainers describes the influence of equity training on the perceptions of teacher educators, as well as the relevance of an equitable educational model for use in training. The authors assert that "such training, once inserted into programs offered by schools and faculties, would improve the acquisition of skills and knowledge necessary to the design of equitable instructional programs." The applications are relevant for many areas of adult education and training.

Stephen R. Schafer provides a useful review of Jane Vella's book Taking Learning to Task. Schafer compares his extensive experience with Cooperative Extension Service and their educational programs with the philosophy and approach that Vella presents. He endorses her practical guide for learning-centered teaching.

Readers are invited to make these articles "interactive" by responding on AEDNET and sharing their comments. (Directions to guide this discussion are given in this issue on page 29). 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 29 for details.)

NEW HORIZONS IN ADULT EDUCATION
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**EDUCATING RITA: AN EXAMINATION OF THE FEMALE LIFE COURSE AND ITS INFLUENCE
ON WOMEN'S PARTICIPATION
IN HIGHER EDUCATION**

by

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Abstract

The focus of this paper is on the motivations behind participation and if there is the presence of external stimuli that can trigger adult education participation by women. Questions for the research were given to sixty-one female returning higher education students to ascertain whether or not seven specific events had or had not happened to the women in the two years prior to their return to college. These seven specific events also were also on a Lykert scale of 1 (no contribution) to 5 (primary reason for return) as to the contribution of these events in the decision to return to school. In a narrative format, the women were asked their top three reasons for returning to school. This question was inserted to verify results from the seven specific events and to capture any factors that were important in the decision that were not listed in the previous events. Although the anticipated results could not be verified due to the small sample size, information was gathered that should be investigated further to garner a true picture of the motivation factors of women in the decision to participate in higher education.

Introduction

A description of the typical adult learner is inadequate in the current era of rapid social change. As ever changing technology has accelerated, the necessary knowledge base for individuals, the adult learner's motivations for participation have changed to meet these demands. The focus of this paper is on the motivations behind participation and if there is the presence of external stimuli that can trigger adult education participation by women. It is our belief that by examining the literature within the adult education field, as well as other disciplines, and finding validation in the research results, we will discover whether an external influence based on change as a motivator for participation indeed exists. It is hoped that we can detect what that motivator is. We also feel that via this research we may find some insight as to what women desire from their learning.

Women as Learners

An issue that must be addressed within current adult human development theory is that research has been predominately based on male subjects with a homogeneous ethnic, racial, or social class background (Kerka, 1993). Trends in the literature (Belenky, et al.; 1986, Hayes, et al. 2000; and Kerka, 1993) suggest that current discussions and research are discovering that women learn differently from men and speak with different voices. These voices are described as more collaborative, nurturing, and communal. Women tend to be more relationship oriented in their learning and learning perspectives. Although Houle's (1961) writing was based on observations of twenty-two women, a theory has been constructed regarding participation and motivation utilizing male subjects. This theory suggests that the female perspective may be significantly different from that of the male. Tennant and Pogson (1995) note that reviews done by Gilligan, and Caffarella and Olson found that interpersonal relationships and "a sense of interconnectedness to others" were extremely important to women. Although this work has been helpful, it was stated that research on ethnic women or women of poverty is incomplete.

In his book, *The Inquiring Mind*, Houle (1961) states that, with regard to the reasons for participation in adult education, taking part is due to an affinity to the orientation of a specific group type of learners. Houle's adults fall into one of three groups: goal-oriented, activity-oriented, or learning-oriented. While these statements may be true for some, if not most, learners, it is the authors' belief that a group of learners exist who do not fit into these designated categories. Houle's assumption is that participation in continuing education is, essentially, internally motivated. It is our belief that there is a group of individuals who are motivated to participate due to external factors. Under this assumption, we will be focusing our research on women who are externally motivated and their subsequent participation in higher education.

Motivation

Motivation for learning is an aspect that greatly influences one's participation in adult education. As early as 1839, William Ellery Channing wrote that all people have an innate need to develop to their full potential as human beings. This is a call for continued education/learning throughout the life-cycle. Pear (1939) cited maturity as the root of adult education. He portrays adults as interested in many different things, focused on social interests, and exhibiting the ability to plan realistically for the future. Adam (1940) found little evidence for a belief that adults looked for specific opportunities to discipline their minds. Rather, they were more interested in learning for its entertainment value, the promise of material advancement, or for increased personal power. Cross (1981) found that there is no satisfactory theory explaining motivation for adult learning, thus reaffirming the findings of Adam (1940). As noted previously, Houle (1961) described three types of adult learners: goal-oriented, socially-oriented, and those who learn just for the pursuit of learning. A cluster analysis conducted by Boshier and Collins (1985) revealed a cognitive interest cluster, an activity orientation cluster, and a professional advancement cluster. These findings roughly coincide with the three types of adult learners described by Houle. With the possible exception of the professional advancement cluster (which can be internally or externally motivated), these findings ascribe exclusively internal motivation to adult learners.

Participation

A critical area of interest for this paper is participation by women in adult education. Specifically, we are interested in who participates and who does not participate in the adult education process. Early research shows that participation is often based on the needs and characteristics of the client population. Evans (1926) found that young workers participated in educational activities, a job-oriented set of participants. In a mini meta-analysis Verner and White (1965) examined five articles looking at different types of participants. Included in this study were special audiences, such as older adults and young people no longer in school. This set of learners describes those who participate because of the desire for learning. Hopper and Osborn (1975) studied older adults in British universities and Ilsley (1990) found that volunteer work proved to be incidentally instructive. These are the socially-oriented learners. The fundamental thought to these studies is that all adults, to some extent, are potential learners.

While the above studies concentrated on looking at a variety of potential learners, Johnstone and Rivera (1965) arrived at the following profile of an adult learner:

The adult education participant is just as often a woman as a man, is typically under forty, has completed high school or more, enjoys an above-average occupation, is married and has children, lives in an urbanized area but more likely in a suburb than large city, and is found in all parts of the country, but more frequently in the West than in other regions. (p. 8)

This profile paints a middle-class picture of the average adult learner, similar to that put forth by Robinson and Canfield (1975). Both of these studies omitted many other types of adults who themselves could be potential learners, including the non-career women of interest in this study.

Barriers to Participation

What is needed now is an understanding of why some adults are not inclined to participate in the process of adult education. An examination of the barriers to adult education is in order. According to Merriam and Caffarella (1999) the two most cited reasons for non-participation are insufficient time and lack of money. Others have also delineated many more barriers for the potential adult learner to overcome. Johnstone and Rivera (1965) list both internal and external barriers to participation. Internal barriers are based upon the disposition of the adult, while external barriers are situational influences. Cross (1981) added institutional barriers. Valentine and Darkenwald (1990) listed the following five barriers which deter adults from participation: personal problems, lack of confidence, high educational costs, lack of interest in the educational process in general, and lack of interest in specific courses offered. These barriers stand squarely in the path of potential learners, especially those persons who are already disinclined to participate. In a time of rapid social change, these barriers must disappear in order to attract those adults who are in need of further education. We are addressing those adults who, to prepare themselves for social changes, lack the means and motivation to participate in the learning process necessary to cope with these changes.

Three Areas of Application

The researchers' inquiry begins with the belief that external change is a motivator for women to participate in adult education. This change can take the form of a sudden change to the individual, change through the normal maturation process, or social change affecting a specific individual. Change can manifest itself in many forms. Three forms that apply to this paper are a woman's need for independence, changes in women's roles, and natural change due to the maturation process.

Need for Independence

During their study of the effects of economic status, economic independence, and the empty nest syndrome in the family life cycle, Hiedemann and Suhomlinova (1998) found that, while women's economic independence has a negative effect on the risk of disruption of a marriage, advanced education has a positive effect. Their research left several unanswered questions regarding the challenges left by the empty nest syndrome, baby boomers having children later in life, and the onset of retirement coinciding with empty nesting. Any of these life changes may in fact be a catalyst for the type of learning that Mezirow (1991) describes as transformative, change that occurs in the adult as a result of the process of learning.

Conversely, Neugarten (1976) states that the orderly progression of life experiences (empty nest, menopause, and retirement) are not influential as a crisis catalyst if they are experienced in the normal life cycle progression. Crises arise when we experience incongruity between our experience and our expectations (Neugarten, 1976). The question that must be addressed is whether the catalyst is the internal struggle of the individual or the onset of personal external change that motivated the individual to participate in the learning process.

Women's Changing Roles

Whether brought on by sudden change or through the natural life course, changing roles and identity for women can have a profound effect. As Hayes et al. (2000) argue, separated and divorced women wrestle with their own expectations as well as society's expectations of what they should do. Studies by Louis (1985) and Greaves (1992) discuss the incongruence between what the women knew as true prior to their life change and what they became faced with after the change occurs. Again, our question is whether these women would have been motivated to participate in education, had they not felt the profound incongruence of sudden change, new expectations, and change in their personal truth.

The Maturation Process

In their chapter on biological and psychological development, Merriam and Caffarella (1999) discuss life events and transitions as the change agents that may be catalysts for participation. Through the work of various authors (Erickson, 1963, 1982; Kegan, 1982; Kohlberg, 1973; Loevinger, 1976; and Vaillant, 1977) a sequential theory of life events and transitions has emerged that theorizes a hierarchical nature to the stages of adulthood. While there is some debate in the literature as to whether the steps are sequential or whether the process is internally or externally driven, acceptance of this concept has facilitated many cornerstone beliefs in the adult education area.

Methodology

A survey was given to women participating in degree completion programs at two private institutions (Newman University and Southwestern College, both in Wichita, Kansas). The degree completion programs were chosen for their prerequisite of some college experience for entrance in the program. At the two institutions, 62 women participated in the study. At Newman University, the researchers administered the survey during class time. Southwestern College surveys were administered on a volunteer basis, with participants filling out surveys and anonymously returning their input to the researchers. This method of distribution was due to the constraints requested by the individual institutions.

Questions for the research centered on whether or not seven specific events had happened to the women in the two years prior to their return to college. These seven specific events were also rated on a Lykert scale of 1 (no contribution) to 5 (primary reason for return) as to the contribution of these events in the decision to return to school. In a narrative format, the women were asked their top three reasons for returning to school. This question was inserted to verify results from the seven specific events and to capture any factors that were important in the decision that were not listed in the previous events. Demographics of the women surveyed were captured in two areas: age ranges of the participants by decades for ages 20 to 60 and over and whether or not they had children.

Findings

Of the 62 women surveyed, 32.3% were in the 20-30 age range; 37.1% were in the 31-40 age range; 22.6% were in the 41-50 age range; and 8.1% were in the 51-60 age range. No participants were in the 61 and over age range. Of the 62 participants, 46 (74.2%) or nearly two-thirds, had children. Only three of the seven specific events were noted as affecting the participants; 2 participants (2.7%) noted remarriage, 2 different participants (2.7%) noted child moved out of the home, and 10 participants (13.7%) noted divorce. Of the 13.7% of participants who noted divorce as a contribution, 4 (6.5%) women rated divorce as a high contribution and 3 (4.8%) women rated divorce as the primary reason for return.

Of the remaining 53 participants (85.5%), the majority of the narrative answers fell in to three general categories. All participants had at least one narrative answer that fell in to one of the three categories of financial improvement, personal goals and aspirations, and effect of their return on their family. Forty-two of the women (67.7%) of the women stated that improvement of their career status and financial improvement was one of their top three reasons to return. Nineteen (30.6%) of the women stated reasons dealing with self-fulfillment and self-esteem:

- Reach and fulfilling my dreams
- Doing something for myself
- To gain self-confidence
- Desire at a major change in life to reinvent my life
- Needed to prove to myself I could do it
- Self-esteem
- I wanted to have a college education, it was my dream

- Finally finish something I started

Eleven women (17.7%) noted that considerations for the family and being a role model for their children were major considerations.

Conclusions

The current divorce rate in the United States is approximated to be in the 50% range, yet our survey participants totaled 13.7%. Although these results do not account for women who experienced divorce beyond the two-year time frame, the number seems to be somewhat small. These conclusions should be validated through a much larger survey to ascertain if these life events are or are not motivators. From this research, we may be able to conclude that divorce is a motivator to participate when it happens to a woman. Although only ten of the participants had experienced divorce in the two years prior to returning to school, those women perceived the event as a strong motivator.

The narrative survey afforded more insight into the motivators for participation. The three general areas of answers (financial improvement, self-fulfillment and self-esteem, and considerations for the family) seemed to be the underlying motivators for most of the women. Many of the participants had motivators in more than one category, and six (9.6%) of the women had one answer in each of the three categories.

Recommendations for further research

Much more research could be done on this topic. One thing that should be changed is that the number of subjects in such a study must be raised to ensure a large enough population of women to ascertain those who have had one of the seven life events happen to them. This is necessary to see if, indeed, these are or are not motivators. The participants were also of a somewhat homogeneous nature, in that they were attending college in the same city (Wichita, KS), they were all attending private colleges, and they were all in programs that were designed specifically for those who wished to finish a bachelor's degree. This may or may not be relevant. Expanding the size of the study would validate or invalidate these concerns.

The other areas that should be explored are those topics that were evident in the narrative surveys. Motivators of financial improvement, self-fulfillment and self-esteem, and considerations for the family should be explored and validated for the larger survey participation. With a larger number of subjects as a basis, it is our hope that correlations could be made concerning the interaction of life events and motivation to participate that we were unable to verify.

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**WHAT COULD AN EQUITABLE INSTRUCTIONAL DESIGN ACHIEVE? AN
EXPERIMENT WITH TRAINERS**

by

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Abstract

The lack of gender-equity in teacher training and sensitivity to gender equity among teachers prevents women from fully accessing non-traditional jobs. Consequently, educators miss relevant tools when designing courses that take into account the needs and concerns of women. This article describes the influence of equity training on teachers' representations of women's and minority groups' needs. ATLAS-ti and ALCESTE software were used to analyse pre- and post-training interview content. Collated results show that after participating in equity training, educators' representations are modified. Moreover, gender-discerning analysis shows a more significant modification in men's post-training discourse.

Introduction

The existence of laws and policies regarding equity in employment and education is an indication that society recognizes the importance of righting the wrongs suffered in the past by groups subjected to discrimination. However, despite the fact that special programs have been put in place, girls and women still encounter considerable challenges in accessing non-traditional fields where they continue to be under-represented (Gaudet & Lapointe, 2000; Sadker, 2000; Lapointe, 1998; Gaudet, 1997). One of the main obstacles preventing women from fully accessing non-traditional area of training is the lack of a gender equity component in teacher training and sensitivity to gender equity among teaching staff (Gaudet, 1998). According to Théberge (1999), Brown (1999) and Gaudet (1998), teacher training which includes programs dealing with issues of equity would favour the integration of women and other minority groups in those fields of employment. However, university faculties of education still hesitate in instituting courses and programs that specifically study this issue as part of teacher training (Sadker, 2000; Bryan, 2000; Théberge, 1999; Knupfer, 1999; Franceskidès, 1998).

What tools could be made available to teachers to increase their understanding of the equity in education issue? Would these educational tools allow people to improve their practice so as to facilitate the integration of all learners? What influence does equity in education in general, and more particularly gender-equity in education, have on educators' representations?

In this article, the authors first present a review of literature on equity in training and relevance of an equitable educational model in training. The developmental method used in the development of an equitable educational guide and the methodology that allowed it to be validated are then described. Finally, results of the research are presented and followed by discussion.

Problem Statement

According to several authors (Care & Udod, 2000; Bailey, 1995; Garon, 1993; Herr Van Nostrand, 1993, Vezina & Courville, 1992 in Gaudet & Legault, 1998), educators must question their perceptions and beliefs on the subject of training for girls and women if they wish to significantly reduce the obstacles to full equity in employment of females. According to Secada (1989), the principle of equity demands to go beyond set rules and procedures to re-examine pre-established objectives relating to equity to see if they have been met.

A considerable number of researchers are interested in the question of equity in education (see among others Solar, 1998; Gaudet, 1997; Nichols, 1994; Muffoletto, 1994; Das Gupta, 1993; Secada, 1989). Equity in education means taking into account the needs and interests of those who have traditionally been kept on the fringes of the educational system, such as the handicapped, minority ethnic groups and women. With regard to teacher training programs, Kerr (1990), Muffoletto (1994) and Damarin (1994) all refer to the apparent lack of awareness and subsequent concern for the principles of democracy, fairness and equity towards these groups.

Among the researchers who have worked on the concept of equity in education, some have studied the importance of integrating the experiences, values and learning styles of women into teaching (Damarin, 1994; Foley, Keener & Brauch, 1993; Fennema & Myers, 1989; Belenky, Blythe, Goldburger & Tarule, 1986). In Canada, the results of a preliminary study (Gaudet, 1998) involving instructional systems designers confirmed that the concerns of women who work in non-traditional sectors are seldom taken into account when these programs and systems are being put in place. In fact, more than half of the people interviewed admitted to attach little or no importance to the particular concerns and needs of such target groups. Yet, according to Franceskidès (1998), when the system ignores the needs of women and minority groups, the consequences can be costly both economically and socially. Given this fact, it becomes essential that professional trainers have access to the appropriate tools to help female learners enter non-traditional domains.

Review of Literature

According to Gaudet and Legault (1998), Bailey (1995), and Leduc (1994), women still face a number of challenges in the workplace. Bailey (1995) states that sexual stereotypes and gender segregation in education, in training and in employment limit women's potential as individuals and as citizens. A considerable number of studies have been completed on the culturally-conditioned learning styles particular to ethnic groups. Women have also been the

focus of numerous studies on this subject (Caleb, 2000; Sadker, 2000; Ouellette, 1999; Gaudet, 1998; Pearson, 1992; Belenky et al. 1986). For instance, a body of research has shown differences in treatment according to gender as well as the specific concerns of women in training situations (Masland, 1994; Pearson, 1992; Herr Van Nostrand, 1993; Pollard, 1993; Van Note Chism, Cano & Pruitt, 1989; Fennema & Myers, 1989; Belenky et al. 1986). The results of a study by Davenport (as cited in Théberge, LeBlanc & Brabant, 1996) stress that women pay special attention to the learning climate and interpersonal relations and appreciate group discussion more than men do. Men, on the other hand, have a tendency to prefer presentations, assigned readings and visual materials. According to Belenky et al. (1986), women prefer to acquire knowledge that is inter-related, integrated, and unified, something which the authors refer to as "connected knowing," while they have more difficulty in settings where a "separated knowing" approach is used. A recent study by Caleb (2000) comes to similar conclusions.

Masland (1994) presents a revealing picture of the results obtained by various researchers on girls and women receiving differentiated treatment in the learning environment. For example, Alton-Lee, Nathall, and Patrick (as cited in Masland, 1994) presented teachers with videotapes showing their teaching practices. The teachers realized that they paid more attention to comments made by boys, that they used exclusively masculine terms, that they used analogies related to activities such as football to reinforce the lessons and that they paid little attention to the way the learners were spatially situated in the classroom. Furthermore, although the study by Sternglanz and Lyberger-Ficek (as cited in Thorne, 1989) indicates no significant difference in the teacher/learner interaction when the teacher was female, it did find a significantly higher level of interaction with boys when the teacher was male. Similar studies conducted by Sadker (2000) and Tracy and Lane (1999) also confirm these observations.

Regarding the contribution of women and the integration of their viewpoints in actual teaching content, researchers noticed that there was no awareness of this element (Caleb, 2000; Dallaire & Rail, 1995; Gilligan, Lyons & Hanner, as cited in Masland, 1994). Finally, in the last few years, extensive research conducted on sexual and sexist harassment in the workplace, in education and in training shows that real problems exist which slow the advancement of women (Gauvin, Marcoccio & Guérette-Breau, 1999; Gaudet, 1998; Lapointe, 1998; Marshall & Trapp, as cited in Masland, 1994).

Relevance of an Equitable Teaching Model

In light of the above-mentioned facts, it may be concluded that female learners face numerous barriers that male do not. Therefore, their entry into male-dominated fields must be supported and facilitated (Gaudet & Legault, 1998; Chicha, 1995; Masland, 1994). While professional training increasingly concerns itself with jobs springing from the new global economy, such as those related to information and communication technology, we can see a significant gap forming between men and women in those sectors, which are quickly becoming male-dominated. According to a study published by the AAWU (2000), American women are under-represented in sectors related to technology and computer science where they only represent 20% of students. In Quebec, Canada, in 1998, women made up only 24% of people registered in computer science in universities, and less than 20% in physics programs at the collegiate level (CIRADE, 2000).

Given the trend towards the pauperization of women in the world and the need to allow them to attain economic parity with men, the entry of women into emergent professions and jobs must be supported by policies, tools and models that favour their integration (Gaudet, 1998; Chicha, 1995). The development of instructional design models that take into account the specific culture of women, their needs and experiences, constitutes an efficient way to encourage women's successful training. In fact, to reduce obstacles to full equality in women's employment in a significant manner, the various participants in training milieus must question their educational notions and practices (Théberge, 1999; Tracy & Lane, 1999; Piano, 1998; Sanders, 1997). Based on the review of literature on equity in education, the present study aimed at answering the following questions:

Does participation by educators in equitable training modify their representations pertaining to the needs of women and minority groups?

Do educators' representations on the needs of women and minority groups vary according to gender?

Does participation in equity training modify these representations differently according to gender?

Methodology

Development of the Educational Guide

The educational guide was developed from a grid of 30 equity factors that could counter obstacles met by girls and women studying traditionally male domains (Gaudet, 1997). This initial grid had been tested during an experimental-type study, and the results had showed the impact the addition of equity elements to educational model design had on course design (Gaudet, 1998). This initial grid was slightly modified, and a final version of 18 factors retained. An equitable pedagogical guide was then developed and tested on trainers.

The educational guide is made up of three parts. The first consists of an introduction, a table of contents, objectives and a schedule of activities. The second contains the educational activities themselves, subdivided into 15 sections in which 25 activities are detailed. The third part contains a collection of texts specifically relating to gender equity, as well as a personal log.

Subjects and Sampling

Following a call for volunteers among Francophone businesses in the Moncton, New Brunswick region, ten trainers (six men and four women) agreed to participate in the study. Training was conducted over a two-day period. The first day consisted of reflexive analysis activities on sexist and racist stereotypes present in society and in organization systems. The second day of training dealt principally with the auto-evaluation of educational practices, followed by discussions with the researchers, as well as presentations on new trends in instructional design and cognitive psychology.

Data Collection Techniques and Instruments

Two principal techniques were used to collect data: the semi-structured interview and observation. There were two interview sessions, one before the training session, the other approximately three weeks later. The interview guide contained twelve questions pertaining to the steps followed by the trainer when starting a new course. In the second series of interviews, a thirteenth question was added to verify participants' perceptions of the relevance of the training. Interviews were recorded and transcribed integrally. Observation data was collected throughout the training session, recording participants' verbal and non-verbal behaviour.

Data Analysis

With the exception of answers to the thirteenth question, which were analyzed through emergent categorization using the ATLAS-ti software, pre- and post-training interview data were analysed using the ALCESTE method (Reinert, 1986). According to Reinert (1993, p.12), within the framework of individual interviews, "when the subject is collective," the lexical worlds "become a kind of 'common ground'." Analysis of individuals' worlds of representations thus gives access to a social and collective reality.

Once the interviews were divided into initial context units coded according to gender, the program established, through a descending hierarchical classification, classes of words by virtue of co-occurrences of words in the units (Chi2) and in relation with gender. Analysis of the vocabulary used in each class allowed for the identification of themes corresponding to their specific worlds of representations.

Observation Results

Resistance to Equity Training Issues

From the first moments of the training session, when the specific theme of educational equity was broached, the research team noticed an expression of resistance from some of the trainers. This resistance persisted throughout the first day of training. Furthermore, the researchers quickly realized that some participants expected to be presented with innovative tools in the form of «recipies» rather than partake in a reflexive analysis process. The research team adapted to this situation by going back over the participants' previously-acquired knowledge relating to educational design and elements of cognitive psychology in order to better link concepts of equity and gender to them. The sequence of activities for the second day was also revised to better meet the participants' needs.

Modification of Attitudes

On the second day, volunteer participation increased, particularly that of the women, and the group's interest in the issue of equity became more and more evident. Notes recorded in the observation grids indicated a change in participants' behaviour, attitudes and comments. This

change manifested itself through questions, openness to change and recognition that inequity is present in the classroom.

Interview Result: What Was Remembered As Being Essential ?

Participants' Representations Regarding Relevance Of Training

The following question was added to the post-training interviews: "Two or three weeks after participating in the training session on equity, what do you remember as being essential on this subject? What has stayed with you?"

Four categories of answers emerged from the qualitative analysis. The first category describes the expression of a new awareness of equity issues in training: the different needs of men and women, sexism in classroom environment, the diversity inherent in the learning clientele, the existing reality and practices and the need for participants' perfecting their abilities regarding the issue. Here is one excerpt representative of this category:

"Participating in the sessions allowed me to see that this issue touches other people and that things are being done, but it's still vague in people's minds. We know we have to keep these things in mind, but we tend to forget."

A second category describes the practical applications that the volunteers claim to have made after having participated in the training session. These applications concern the use of an equity grid in their own courses, that of presented concepts, sharing of content with colleagues, raising awareness among supervisors and modification of one's own behaviour and expectations regarding equity in their organization:

"I participated in something that constantly makes me think that it's true it's there, I have to think about it when I practice."

A third category concerns the recall or confirmation of notions already learned regarding the specific needs of learner groups, equality and equity in training, and systemic discrimination in organizations:

"It was like a wake-up call, an increased awareness. I had received it in the past, but it becomes latent. But now, it has resurfaced."

The last category relates to an expression of resistance and feeling of frustration regarding the treated subject during training, followed by the realization of a high degree of satisfaction as to the relevance of the training and its content:

"I'll start by saying that at first, I was disappointed, but that at the end, I was satisfied. So I made some headway. I was disappointed at first because the type of training was very different from my own, specifically."

This first phase in the content analysis affirms that following the training, the participants testify to the influence it has had on their representations regarding equity. This influence is expressed by the recognition of personal resistance regarding the issue of equity in training, a gained awareness and recall of the diversity of concerns and needs of learners, and willingness to change and improve educational methods.

Interview Results: Pre And Post-Training Discourse

In this section, we present a comparative analysis of participants' discourse before and after the training, compared by gender. This allows us to answer the second research question attempting to ascertain if participants' representations vary depending on their gender before and after training.

Pre-Training Interviews

Presentation of the descending hierarchical classification schematic. The class schematic is obtained from the specific vocabulary ordered as a function of the degree of decreasing meaning of its distribution measured with Chi^2 . The descending hierarchical classification of the pre-training verbatim underscores four principal classes with their specific variable and describes the way in which these classes are linked and opposed (see Figure 1).

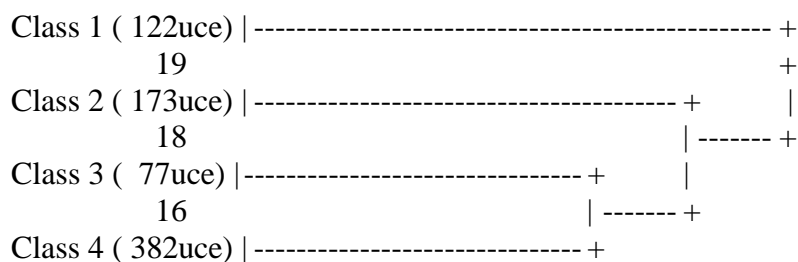


Figure 1. Descending hierarchical classification, pre-training interviews

Study of Figure 1 shows the procedure first distinguished class 1 from classes 2, 3 and 4. The two discourses from this first division are thus more distinct. Then, classes 2, 3 and 4 are distinguished from one another, but still related, while class 1 is opposed to the other three. Table 1 describes the content of each of these classes by listing the principal terms associated with them in order of decreasing Chi^2 .

Table 1

Classes And Their Main Vocabulary According To Chi^2 , Pre-Training Interviews

Class 1		Class 2		Class 3		Class 4	
Vocabulary	Chi^2	Vocabulary	Chi^2	Vocabulary	Chi^2	Vocabulary	Chi^2
employee	71,55	level	54,40	write	35,36	love	22,82
council	41,89	value	44,42	wait	35,27	class	19,34
Call	40,72	ease	30,59	read	34,75	say	17,63
training	37,21	action	28,53	day	31,66	group	16,75
center	36,60	program	26,80	prefer	28,88	subject	16,16
management	31,72	climate	25,77	tendency	26,48	talk	13,40
secondary	31,33	communication	25,77	materiel	22,18	do	11,61
designer	31,33	evaluation	25,73	director	21,02	discussion	11,87
leadership	31,33	criteria	23,73	keep	20,42	accept	10,87
Moncton	31,33	must	21,08	usual	20,05	learning	10,80

cooperative	30,43	language	20,31	coffee	18,41
director	30,43	document	20,31	return	17,50
administration	30,33	situation	19,40	word	17,50
department	26,07	respect	19,40	rare	16,97
service	25,86	presenter	19,02		
course	25,81	Physical	19,02		
financial	25,48	always	18,68		
Public	25,19	present	18,68		
entreprise	24,34	particularly	16,90		
Year	21,60	succeed	15,75		
Canada	20,83	life-experience	15,75		
development	20,83	variety	15,75		
school	20,83				
project	20,83				
specializer	20,83				
translate	20,83				
volunteer	20,83				
Skills	20,83				
responsible	17,12				
English	18,54				
international	15,60				
Adult	15,60				
commerce	15,60				
Lot	15,60				
member	15,60				
province	15,60				
French	15,12				
BA	15,12				
Sector	15,12				
certificate	15,12				
association	15,12				
* male	25,72	* female	79,27	* male	5,08
				* male	5,70

Note. The * refers to the gender variable and its Chi².

Description of Classes

From an analysis of the vocabulary present in each class, themes were identified for each. Analysis of the vocabulary in class 1, which is more characteristic of men (Chi² = 25.72), indicates that their discourse relates to structural and organizational concerns, either linked to the training process or to management in general. The following presents each theme from this class accompanied by its terms:

Organizational management concerns: employee, council, director, leadership, administration, department, service, finance, public, enterprise, development, project, specialized, sector, association, member, commerce;

Organizational training concerns: training, secondary, designate, course, French, English, skills, school, certify, Bachelor's degree, specialize, year;

Organization identity: Moncton, province, Canada, international.

The vocabulary of class 2, more representative of women (Chi² = 79.27), is focused on human considerations and relational elements and on personal performance and its evaluation:

Human and relational considerations: values, comfort, climate, communication, language, situation, respect, physical, experience, particular, present;

Personal performance and its evaluation: must, succeed, action, level, rating, criterion, variety, difficult, always, program, document.

Class 3 is also more representative of men ($\text{Chi}^2 = 5.08$) with themes that refer to planning of one's time, place, material and action:

Planning: material, framework, coffee, rare, day, tendency, usual;

Action: write, wait, read, prefer, keep, return.

Finally, class 4, again related more to men ($\text{Chi}^2 = 87.82$), focuses on educational activity and knowledge transmission:

Educational activity and knowledge transmission: like, say, talk, do, accept, discuss, class, apprentice and group.

In short, of these four identified classes, three possess discourse more characteristic of men while a fourth is more specific to women. Moreover, while male participants' representations relate to concerns linked to management, planning and the process of transmitting knowledge, female participants' refer to the evaluation of their own performance and relationships between people.

Post-Training Interviews

Analysis of the discourse from the post-training interviews also identifies four classes (see Figure 2).

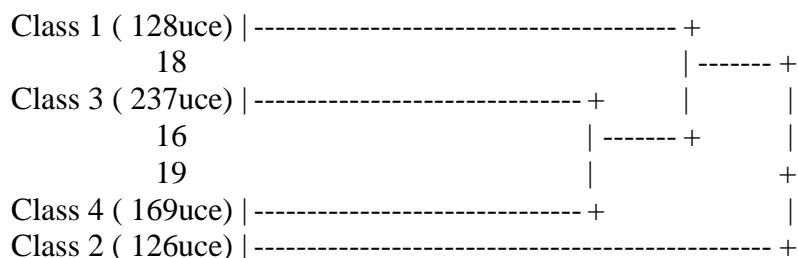


Figure 2. Descending hierarchical classification, post-training interviews

Class 2, more significantly characteristic of men ($\text{Chi}^2 = 84.99$), is the most distinguishable. Class 1, distinguishable from classes 3 and 4, is more characteristic of women ($\text{Chi}^2 = 60.11$) as is Class 3 ($\text{Chi}^2 = 44.76$), while class 4 is linked to men ($\text{Chi}^2 = 68.73$).

Description Of The Four Classes

In Table 2, the content of each class is presented by giving the principal terms associated with them in decreasing Chi^2 order.

Table 2
Classes And Their Main Vocabulary According To Chi², Post-Training Interviews

Class 1		Class 2		Class 3		Class 4	
Vocabulary	Chi ²	Vocabulary	Chi ²	Vocabulary	Chi ²	Vocabulary	Chi ²
French	59,45	woman	69,59	computer	27,55	content	29,50
evening	55,12	industry	43,03	try	27,43	person	26,51
place	42,20	value	41,74	exercice	23,12	idea	23,74
English	37,92	company	33,05	big	21,99	put	21,66
climate	36,09	department	29,98	help	21,81	bring	79,18
interest	29,41	man	28,15	know	21,44	allow	19,18
language	32,28	young	25,66	session	21,33	good	18,53
joke	28,19	vision	25,66	training	19,92	aggressive	14,64
lady	25,17	chief	25,66	information	18,96	rule	14,64
talk	21,89	human	21,35	subject	16,92	meeting	14,64
reinforce	20,94	management	21,35	understand	16,92	take	14,63
ambiance	19,90	sensitive	20,35	product	15,42	animation	14,64
good	17,99	huge	17,06	ask	15,42	together	14,48
location	16,73	hold	17,06	people	15,29		
presentation	16,73	scenario	17,06				
organize	16,73	keep	17,06				
available	16,73	entreprise	16,18				
phonetic	16,73						
call	16,02						
minute	15,84						
* female	103,99	* male	84,99	* female	44,76	* male	68,73

Note. The * refers to the gender variable and its Chi².

Table 2 shows that Class 2, more representative of men, contains a vocabulary in part similar to that of pre-training Class 1, also shown to be representative of men. The themes are again related to a discourse centred on organizational responsibility dynamics. However, a change is noted since a new world of representations appears, one that talks of human beings and organizational gender issues:

Organizational responsibility dynamics: industry, company, department, vision, leader, management, enterprise, keep, scenario;

Human beings and gender issues: woman, value, young, man, human, sensitive.

Analysis of Class 1 vocabulary, which is more representative of women, reveals a world of representations still focused on the quality of the educational environment, one's own performance, communication tools and time. However, these seemed to be located more precisely in the specific context of learning as indicated by the terms related to time, performance and communication:

Quality of the learning environment: climate, ambiance, place, reinforced, available, interest, good;

Performance: presentation, organize, talk, call;

Communication tools: French, English, language, phonetic;

Time: evening, minutes, place, location.

Class 3, also more representative of women, contains discourse linked to adaptation and performance during the teaching and learning processes:

Adaptation: try, exercise, help, know, understand, pose;

Performance: computer, session, training, information, subject matter, product.

Finally, Class 4, more related to men, focuses on action and its process:

Action: content, idea, rule, put, bring, allow, take, livening, meeting, good, aggressive, together.

Discussion and Conclusion

At the beginning of this article, we noted the issue of the continued absence of women in traditionally male employment sectors, as well as in jobs and professions connected to sectors of the new economy. According to many researchers, this absence is partly tied to the lack of teacher training in equity.

The approach proposed in the pedagogical guide developed as part of this research can be compared to the one presented by Théberge (1999), inspired by the Conway-Gerhardt model comprising four steps: awareness, analysis, action and evaluation. Results indicate that training following this logic appears to produce a positive outcome. Indeed, in response to the first question asked in this study, results indicate that equity training initiates a modification of trainers' representations concerning the needs of learners belonging to equity groups. Furthermore, overall results indicate that even after short-term training, representations of trainers appear to be modified and an increased awareness is observed. It appears that, as Sadker (2000), Théberge (1999), Knupfer (1998) and Franceskidès (1998) maintain, in order to favour women's integration in leading professional sectors, such training, once inserted into programs offered by schools and faculties, would improve the acquisition of skills and knowledge necessary to the design of equitable instructional programs.

As for the second research question, focusing on verifying if the gender variable is linked to representations related to equity in training, it is noted that trainers' discourse differs according to gender. Among other things, comparative analysis of pre- and post-training discourse reveals that the training influenced men's and women's representations differently. Particularly, though many similar elements find their way into the discourse from both series of interviews, one can observe among women's post-training discourse a more precise description of the educational context to which they attach human and relational values already identified in pre-training discourse. However, it appears that men's discourse has been modified the most since it evolves from being mostly focused on management and the learning process to a vocabulary pertaining to human and gender concerns in organization.

This study was conducted with trainers working mostly in the business sector. Since that environment favors the acquisition of "leading" knowledge and skills, it is important to take into account the needs and concerns of various groups, including women, in learning situations. Experts in training recognize that when human resources are valued, a higher degree of employee satisfaction is attained. Taking into account the specific needs, concerns and experiences of female trainees can therefore be highly beneficial to organizations and the whole

of society.

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Book Review

TAKING LEARNING TO TASK

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“A common pattern of teaching has been for the professor to lay out the content (skills, knowledge, attitudes) and then design exercises so that learners work with what they have heard or seen in order to learn it. This pattern is not only what teachers expect to do. It is what learners expect as well” (p. XIV).

“In this book, we examine a different approach, where teaching and learning are integrated and where the learning task is the overall design, incorporating the lecture or input along with practice. Once you have completed reading this book and doing the learning tasks, you will, I trust, think about using learning tasks as you design your courses, seminars and workshops for adults. This is the goal of the book”(p. IV).

This book expresses a new thought process or concept concerning learning. It talks of placing learning at the center of education; not the teacher, or the learner. Emphasis is placed squarely on providing opportunities for the learner to be involved and active in their own learning via learning tasks, rather than the current approach of passive education via lecture and instruction.

Traditionally, teaching plans have been designed around teaching tasks; meaning the teacher would teach by doing this, telling that, explaining the situation, and so on. Using Vella’s concept, designing teaching plans would shift to designing learning plans; meaning the teacher would organize and facilitate learning by involving the learners in their own learning, teaching, and education through the use of learning tasks. By involving learners, they become participants rather than observers, we invite dialogue rather than performing a monologue, we get learner excitement rather than learner disenchantment; all of which results in a better learning environment and thus improved knowledge acquisition and quicker assimilation.

Based on twenty years of Cooperative Extension Service, it is thought, by this reviewer, that Vella is on target with her ideas of a learning-centered educational system. Two examples to support the reviewer’s thoughts are the learning-by-doing approach that Extension Educators use when working with 4-H Club Members and the demonstration technique that they use when working with those involved in food and fiber production. Both of these educational techniques are very close to Vella’s concept and both of these approaches have been extremely successful. The 4-h Clubs, whose motto is “Learn –by-Doing,” is the largest youth organization in the

United States and, as we all know, the United States leads the world in the production of food and fiber products.

Seaman A. Knapp, the American agriculturalist who originated the farm-by-farm demonstration teaching method, stated, “What a man hears, he may doubt; what he sees, he may possibly doubt; but what he does, he cannot doubt” (cited in Rasmussen, 1989, p.35). Vella’s thoughts and ideas concerning teaching, education, and learning closely parallel those of Knapp. Thus, based on the success of the Cooperative Extension Service learn-by-doing and demonstration approaches to education, it would follow that Vella’s concept of a learning-centered educational system via the use of learning tasks has a solid base and foundation for implementation and success in the formal educational system currently in use in the United States.

Rethinking the teaching model that has been entrenched in us for many decades and retraining ourselves to move from the traditional teaching plan to the new concepts of a learning plan will not be easy and it will take courage to risk changing from the status quo to the innovative. However, Vella has realized this and offers a smooth transition via her simple definition of a learning task, seven simple steps of planning learning tasks, examples of traditional teaching activities versus the new concept of learning tasks, a simple synthesis of each chapter at its conclusion, and several valuable insights and personal experiences into the use of learning tasks. Clifford Baden, Director of Programs in Professional Education at Harvard University, sums it up by saying, “Reading this wonderful book is like having Jane Vella at your side. She encourages, she coaches, she inquires, she models—and ultimately she gives us the courage to risk changing our established habits of teaching. An important book, to be read and reread” (back cover).

According to Vella, “this book is designed to be a practical guide to an epistemology for learning-centered teaching that considers adult learners as subjects or decision makers in their own learning” (p. XVI). In the opinion of this reviewer, she has not only succeeded in presenting an epistemology for her thoughts and views, but has presented them in a manner that makes for easy reading and easily understood concepts due to the use of easy-to-understand language. Monica Rector, Professor, University of North Carolina at Chapel Hill, summarizes the book by expressing not only her thoughts, but also considers it from the students perspective and in the opinion of this reviewer; this is a most important and valuable input. Rector states, “Vella has inspired me to rethink my teaching and move in a new direction. Instead of merely giving a lecture, I now weave theoretical information into creative learning tasks. It’s a dynamic new teaching-learning approach, and your students will thank you for it” (back cover).

References

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