

An update of transformative learning theory: a critical review of the empirical research (1999–2005)

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The last significant review of research about transformative learning was in 1998 and was mostly focused on unpublished dissertations. In response, this paper reviews an exhaustive body of research conducted since that time, involving 40 studies, published in peer-review journals with a lens of analysis of new findings and insights on transformative learning theory. The review finds less research less about identifying transformative experiences in different setting, and more about fostering transformative learning and the complex nature of critical reflection, relationships, the nature of a perspective transformation and the role of context. Furthermore, even though qualitative designs still dominate, they have become more sophisticated and creative, including longitudinal and mixed-method designs and the use of video and photography.

Introduction

Transformative learning in adult, higher and continuing education has been around for over 25 years and continues to be the most researched and discussed theory in the field of adult education. Most significant, is the preponderance of literature, both conceptual and empirical, framed within the seminal work on transformative learning theory by Jack Mezirow (2000, 1991). Transformative learning offers a theory of learning that is uniquely adult, abstract and idealized, grounded in the nature of human communication. It is a theory that is partly developmental, but even more it is about where ‘learning is understood as the process of using a prior interpretation to construe a new or revised interpretation of the meaning of one’s experience in order to guide future action’ (Mezirow 1996: 162). Transformative learning theory continues to be a popular area of research in the field of adult education as indicated by an increase in the number of peer-review journal publications and the initiation of a bi-annual international conference specifically on the study of transformative learning.

Despite the continued interest, there has been little effort to critically review the latest research on transformative learning theory. The last significant review was in 1998 and at that time there were few peer-review research publications beyond what was found in unpublished dissertations and conference proceedings (Taylor 1998).

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Consequently, many of the studies cited were difficult to access, leading to a lack of continued critical review of relevant research on transformative learning. Since that last review many studies have been published in peer-review journals in a variety of disciplines (e.g. medical education, environmental assessment, higher education, cooperative extension, health education, educational administration, distance education and business communication). In addition, there has been a significant increase in research, internationally, outside the USA. This increase in empirical studies raises a number of questions: What are the research trends in the study of transformative learning theory? What new understandings have been discovered about its essential components, such as the centrality of experience, critical reflection and the role of relationships? How are research designs evolving? In response to these questions as well as others the purpose of this paper is to critically analyze the growing body of empirical literature on transformative learning theory.

Before delving into the current review it is important to summarize some of the key issues that emerged from the 1998 review. In general it revealed a supportive, but critical picture of transformative learning theory. To its favor, transformative learning was found to be effective at capturing the meaning making process of adult learners, particularly the learning process of paradigmatic shifts. Much of the research confirmed the essentiality of critical reflection, a disorienting dilemma as a catalyst for change, and many of the phases of the transformative process described by Mezirow (1991). At the same time, the research revealed a learning process that needs to give greater attention to: the role of context, the varying nature of the catalysts of transformative learning, the increased role of other ways of knowing, the importance of relationships and an overall broadening of the definitional outcome of a perspective transformation. Furthermore, it found that there had been little investigation into the practice of fostering transformative learning and questioned to a great extent its applicability as a guide for classroom teaching (Taylor 1998).

Methodology of the review

Literature searches were conducted on several databases (e.g. ERIC, Wilson, Proquest, Medline, Lumina) using three criteria for selecting the studies. Each study: (a) used transformative learning as its primary theoretical framework (e.g. Freire 1984, Mezirow 1991, 2000, Cranton 1994, Boyd and Meyers 1998), (b) had a definitive methodology section and (c) offered findings that informed the study of transformative learning theory. These criteria were broadened somewhat from the previous review (e.g. Taylor 1998) in order to recognize the evolution of transformative learning beyond the dominant conception established by Mezirow, by including studies, if available, that were framed theoretically by other conceptions of transformative learning (e.g. Cranton, Boyd and Meyers, Freire and O'Sullivan). This purposeful sample of studies allowed for a more consistent interpretation of transformative learning, whereby all the studies were critiqued within a shared framework. Also, conceptual pieces were not included.

In all, 41 peer-review journal studies were identified, with most using Mezirow's conception of transformative learning as their theoretical framework. However, there were five studies that were framed within related conceptions of transformative learning (Jarvis 1999, 2003, Pohland and Bova 2000, James 2002, Kovan and

Dirkx 2003, Lange 2004). These studies included conceptions of transformative learning from the perspective of depth psychology (e.g. Boyd and Meyers 1988, Cranton 1992, Dirkx 2000), critical theory (Freire 1984) and identity development (Wenger 1998). Each study was obtained, read in its entirety and reviewed, with the analysis of each study framed within transformative learning theory.

Findings

The review begins with an overview of the various purposes, settings and methodologies that emerge from the different studies. This is followed by a discussion, thematically organized, of findings about the role of reflection, relationships, the meaning of a perspective transformation, fostering transformative learning and the relationship between context and transformative learning. The paper concludes with an in-depth discussion of the implications the findings have for the field of adult education and for future research on transformative learning.

Purposes and settings of research

To begin to understand the varying intent of these studies they are grouped in how they best inform our understanding of some aspect of transformative learning. Some studies provided insight about a particular aspect or the application of transformative learning in practice, while others focused on factors that influence or shape transformative learning. The largest group contributed to our understanding of fostering transformative learning (Jarvis 1999, 2003, King 2000, 2004, Pohland and Bova 2000, Christopher *et al.* 2001, Scribner and Donaldson 2001, Sinclair and Diduck 2001, James 2002, Pugh 2002, Franz 2003, MacLeod *et al.* 2003, Mallory 2003, Taylor 2003, Berger 2004, Cohen 2004, Feinstein 2004, Garvett 2004, Lange 2004, Goldie *et al.* 2005). Most settings for these studies were situated in formal higher education inclusive of graduate students, faculty or workshop participants involved in professional and leadership development, with little exploration in non-formal educational settings. Despite the tendency for a higher education setting, the disciplines vary widely. They include, for example, medical education, environmental education, cooperative extension and a Bachelor of Arts completion program. Closely related to the previous purposes and a new context of exploration are four studies, which look at transformative learning in relationship to some aspect of distance education and/or integrating technology in higher education setting (King 1999, 2001, Cragg *et al.*, Zieghan 2001). These studies, although only initial efforts begin to shed light on an educational context that is ripe for greater research. At present little is known about the potential and the means of the on-line setting as avenue for fostering transformative learning.

Moving from understanding the application of transformative learning in the classroom, recent research offers insight into some of the essential components as well as factors that influence transformative learning, such as the nature of critical reflection (Liimatainen *et al.* 2001, Cranton and Carusetta 2004, Kreber 2004) and relationships (Eisen 2001, Lyon 2001, Carter 2002). In addition, three studies looked at power (McDonald *et al.* 1999), purpose and life mission (Kroth and Boverie, 2000. Kovan and Dirkx 2003) in relationship to transformative learning.

The remaining studies focus on particular transformative contexts, two of which are a follow-up to a study in the previous review. The contexts include five studies that look at meaning making of societal and/or personal crises (e.g. life threatening illness and health behavioural change) (Courtenay *et al.* 2000, Baumgartner 2002, Kilgore and Bloom 2002, King 2003, Dubouloz *et al.* 2004). Similarly, there were two studies that explored the impact of transformative learning, personally and socially, with individuals involved in relationship-based organizing (Scott 2003) and others involved in a second chance educational program (Bennetts 2003).

The most significant changes observed in the research purposes since the last review is that there is less research about the possibility and process of transformative learning occurring in a particular context or result of a particular life event, and more research about the nature of a learning experience and how it informs our understanding of transformative learning. There is greater attention given to investigating the complexities of essential components of transformative learning such as the characteristics of relationships and critical reflection. In addition, there has been a growing international interest in transformative learning, over 35% of the studies were conducted by researchers outside the US (e.g. Australia, Canada, Finland, New Zealand, South Africa, and the UK). Even though there is not a shared focus among these international studies, it does reflect a significant change from the previous review and demonstrates that transformative learning (e.g. Mezirow) is developing a growing acceptance among adult educators outside the boundaries of the USA. Despite these trends, similar to the previous review, most studies failed to critique previous empirical studies as well as Mezirow's theory itself after reporting the findings of their study. This lack of critical evaluation continues to lead to a reification of transformative learning as it is presently understood and contributes to a redundancy of research.

Research methods

The majority of studies continue to employ qualitative research designs similar to what was found in the previous review (Taylor 1998), that of 'capturing a single (often retrospective) snapshot of their learning experience' (Baumgartner 2002: 56). However, while there is still a strong reliance on a qualitative approach, the research processes have become more sophisticated through the use of longitudinal designs, action research, scales, surveys, content analysis of various documentation (e.g. emails, journals, portfolios) and the use of stimulated recall via video recordings and photo-elicitation interviews.

Most of the longitudinal studies (Courtenay *et al.* 2000, Liimatainen *et al.* 2001, Baumgartner 2002, Taylor 2003) looked at transformative learning or related concepts (e.g. critical reflection) over a time of 2 to 5 years. Of these studies, the most significant was initiated in 1995 by Courtenay, Merriam and Reeves (1998) on how HIV-positive adults make meaning of their lives. Since the original study, two follow-up studies have been conducted with the same participants. The third study uses a narrative design, drawing on psychological, biographical and linguistic approaches to data analysis (Baumgartner 2002). The challenge for the longitudinal studies is separating out what is related to transformative learning and what is not a product of normal development of the individual and/or socio-cultural change within society. For example, the study involving HIV positive participants, who over

time, transformed their view of themselves and found a commitment to helping others, does not account how the change in society (e.g. greater tolerance towards HIV positive individuals, improvement in medical treatment) contributed to the transformation. This limitation further affirms the criticism raised by other scholars of transformative learning's decontextualized view of adult learning (Clark and Wilson 1991, Brooks 2000a)

A second trend, not found in the previous review, is the emerging use of action research and transformative learning. Action research is seen as having 'a natural affinity with transformative learning, as it allows the study of how understanding develops in the midst of bringing about change' (Lange 2004:123–24). Three studies were identified, each using a formal educational setting (e.g. workshops, continuing education, undergraduate education) generally following variations of planning, acting, observing and reflecting phases of action research (Feinstein 2004, Garvett 2004, Lange 2004). They offer good models for future researchers interested in action research and transformative learning. However, they provide little insight into the challenges associated with this type of research, particularly how to manage both the highly emotive consequences associated with transformative learning and the learner-centered approach often inherent to action research, within the context of a clearly defined research agenda.

A third trend is the growing number of studies that involve the use of scales, surveys and/or open-ended questionnaires in the study of transformative learning. Most of these instruments are seen in the context of mixed methods studies (King 1999, 2000, 2001, 2003, 2004, Cragg *et al.* 2001), accompanied by interviews. For example, all of King's studies involve a survey instrument (Learning Activities Survey) that use objective and free response questions to identify students who experienced a perspective transformation, along with other relevant information. Once identified interviews are used for a more extensive evaluation. In addition, there are a growing number of studies that are using different scales and surveys exclusively to measure change in perspective about a particular phenomenon. For example, Cragg *et al.* (2001) used the 'Professional Values Scale' to identify which nursing students developed new professional perspectives from participating in a RN-BSN degree program. Two other studies, used the Ethics in Health Care Survey (Goldie *et al.* 2005) and the Frommelt Attitude Toward Care of the Dying (Mallory 2003) scale as an alternative means to measure significant change in perspective about palliative care among medical and nursing students. Even though these studies did not offer much insight about the nature of transformative learning, their research approach is quite informative. Scales and surveys offer valid tools to identify individuals who have experienced a change in perspective about a particular phenomenon. These instruments help address the need for research designs that involve the selection of participants based on criteria characteristic of transformative learning theory and could potentially lead to greater reliability in the identification of essential components (e.g. critical reflection, perspective transformation).

In addition to the more traditional research methods mentioned previously, there were a number of creative approaches (e.g. student portfolios, email, photo-elicitation and stimulated recall interviews via video) to collect data, that offer further means to better understand transformative learning (Liimatainne *et al.* 2001, Ziegahn 2001, MacLeod *et al.* 2003, Taylor 2003). For example, Taylor (2003) conducted a longitudinal study of teaching belief change of entering graduate students in adult education asking participants to capture their images of teaching

through photography. These photographs were used as interview prompts (photo-elicitation device) to explore the participants' beliefs (meaning schemes) about teaching adults. Similarly, Liimatainen *et al.* (2001) explored the development of reflective learning among nursing students by using video recordings of their health counseling sessions with clients to stimulate recall within interviews in order to evaluate their level of reflective learning over a three-year-period. These two studies, particularly the use of videos, make great strides at addressing some of the shortcomings (e.g. memory loss) associated with retrospective interviews, which predominate the study of transformative learning.

Also similar to previous reviews of transformative learning, the role of culture and/or difference and transformative learning continues to be poorly understood. Several studies in this review designed the selection of participants with the potential for greater understanding of cultural difference, such as gender and age and transformative learning, however, they unfortunately did not make difference a central focus of their research (Jarvis 1999, Kroth and Boverie 2000, Lyons 2001, Carter 2002, Kilgore and Bloom 2002). In addition, the large number of studies conducted outside The USA did not attempt to explore differences of nationality that might exist in relationship to transformative learning.

Reflection and transformative learning

Prior research on reflection and transformative learning focused primarily on identifying the relevance and presence of reflection in relationship transformative learning (Taylor 1998). Having established its essentiality, several studies in this review shed light on the nature of reflection (e.g. levels, developmental), influencing factors (e.g. relevancy, experience) and indicators of reflection in relationship to transformative learning (Liimatainen *et al.* 2001, Cranton and Carusetta 2004, Kreber 2004). Beginning with Cranton and Carusetta (2004: 20–21), who in a longitudinal study on authenticity in teaching found teachers who critically reflect on 'self, other, relationships and context are more likely to be working towards being authentic'. With more research, authenticity might be found to be another outcome of ongoing critical reflection.

Kreber (2004: 30) with greater specificity explores reflection as a form of self-regulated learning, from the perspective of two models (e.g. Mezirow and Schön) questioning whether reflection 'necessarily leads to valid knowledge about teaching'. By looking at the levels of reflection identified by Mezirow (e.g. content, process, premise) in relationship to three domains of teaching knowledge (instructional [design/processes], pedagogical [student learning], curricular[goals, purposes of courses]), Kreber found that premise reflection (e.g. critical reflection) was the least common among participants of any of the domains of teaching knowledge and teaching experience seems to be a factor. More experienced staff found knowing through process and premise reflection within the certain forms of knowledge (e.g. pedagogical, instructional) more relevant than their younger counterparts, giving reason to speculate that motivation plays a role in fostering reflection. She concludes that when learning about teaching, teachers need to begin with premise reflection in 'order to be more meaningful' (Kreber 2004: 41), that is being more concerned with *why* they teach than with *how* or *what* to teach. A strength of this study is the development of clear indicators of levels of reflection, illustrating

how previous research on reflection could be questioned due its often arbitrary and poorly defined efforts at identification. On the other hand a limitation with this study as well as others, is the challenge of participants to both recall from memory and verbally articulate reflective moments during their teaching practice, particularly about a phenomenon (teaching) that often operates at a tacit level.

In response to this concern, Liimatainen *et al.* (2001) as previously discussed, used stimulated recall interviews through the use of video-taped health counseling sessions with nurse educators. The video helps with the challenge of remembering reflective moments and provides a medium to stimulate reflection, or lack of, which is analyzed via a coding schema of levels of reflection (e.g. nonreflective active thought to theoretical reflectivity). Additional findings of Liimatainen *et al.* (2001) reveal the developmental nature of reflection among nursing students and begins to give credence to Merriam's (2004: 65) position that 'mature cognitive development is foundational to engaging in critical reflection and rational discourse necessary for transformative learning'. It also provides a means by which to further test and explore this assumption of cognitive development and transformative learning.

Transformative relationships

Previous research found establishing relationships with others as one of the essential factors in a transformative experience (Taylor 1998). It is through trustful relationships that allow individuals to have questioning discussions, share information openly and achieve mutual and consensual understanding. Until recently not much was known about the nature of these relationships. However, recent research begins to offer insight into the complex nature of transformative relationships. There are typologies (Carter 2002), essential qualities (Eisen 2001), chronological stages (Lyons 2001, Carter 2002) and new insights about the nature of dialogue and relationships (Baumgartner 2002). For example, Carter (2002), who explored mid-career women's learning in work-related developmental relationships, identified four categories of relationships as significant to women's learning at work, they include utilitarian relationships (acquiring skills and knowledge), love relationships (enhance self-image, friendship), memory relationships (former or deceased individuals) and imaginative relationships (inner-dialogue, meditation). Love, memory and self-dialogue relationships proved significant to transformative learning, with intimate relationships as most significant.

In addition, Eisen (2001) investigated peer-learning partnerships used as a professional development tool for community college teachers, and identified a 'peer dynamic' important to transformative learning indicative of seven relational qualities: trust, non-evaluative feedback, nonhierarchical status, voluntary participation and partner selection, shared goals and authenticity. Particularly important to establishing authentic relationships was the equalization of power between teaching partners, allowing for learner autonomy and the development of trust.

Inherent in relationships, is the engagement in dialogue with others, which is also seen as essential to transformative learning in general. For example, Baumgartner (2002: 56–57) found that social interaction and dialogue led to consensual validation (valid by the process of discussing it) among people whom were diagnosed HIV-positive 'realized they were not alone on this transformational journey'. Further, the dialogue is not so much analytical, point-counterpoint-dialogue,

but dialogue emphasizing relational and trustful communication – ‘highly personal and self-disclosing’ (Carter 2002: 82).

A perspective transformation

The previous review on transformative learning found that one of the most elusive concepts is defining a perspective transformation (Taylor 1998). A number of significant findings emerge from this review about the meaning of a ‘perspective transformation’ (e.g. a change in frame of reference) that help address its historic lack of clarity, provide greater understanding of what constitutes a frame of reference and describe its inherent characteristics. In particular, these studies offer insight about the issue of irreversibility, sustainability, meaning scheme change and epistemological change.

Before discussing the specific findings it is important to discuss two studies that used other conceptual models of transformative learning not found in previous work besides the predominant definition framed by Mezirow’s (2000: 19), where a perspective transformation is seen as the development of a more dependable frame of reference – ‘one that is more inclusive, differentiating, permeable (open to other viewpoints), critically reflective of assumptions, emotionally capable of change and integrative of experience’. Conceptually, these frameworks are fairly consistent with the previous definitions, such that they emphasize a psychological view of change, but also they are more explicit about the need to act on the change and its value to the individual. For example, James (2002), in a study on competency-based training in Australia, used Wenger (1998) (e.g. community of practice) to explain transformative as a form of identity development, opening ‘new dimensions for the negotiation of the self’ (Wenger cited in James 2002: 371). Pugh (2002) goes even further in a study examining the effectiveness of teaching elements (e.g. reanimation, apprenticeship) on fostering transformative learning in a high school zoology class by using Dewey’s (1988) conception of a transformative experience to frame the study. ‘Individuals undergo transformative experiences when they actively use a concept, find that it allows to see aspects of the world in a new way, and personally value this way of seeing’ (Pugh 2002: 1104). Although both are informative, they don’t offer much that broadens what is presently understood about the nature of transformative learning.

Other studies begin to provide some clarity to the nature of a perspective transformation and meaning scheme change (King 1999, 2000, 2003, Christopher *et al.* 2001, Cragg *et al.* 2001, Eisen 2001, Lyon 2001, Carter 2002) framed within Mezirow’s conception of transformative learning. Most significantly, is the enduring nature and irreversibility of a transformation, revealed in two studies: a survey of recipients of small grants used to change their direction in life for their own benefit and their community (Bennetts 2003) and a longitudinal study of how adults make meaning of HIV (Courtenay *et al.* 2000, Baumgartner 2002). In addition, these studies, along with others (Carter 2002) offer insight into the transformation of meaning schemes, where participants retain their larger world view (frame of reference), but their ‘immediate beliefs or expectations (meaning schemes) may continue to change’ (Baumgartner 2002: 45). However, embedded in this affirmation and ongoing research, are remaining assumptions that need to be researched. They include, for example, the often-unquestioned celebratory nature of transformative learning,

and the overlooked negative consequences, both personally and socially, of a perspective transformation (e.g. McDonald *et al.* 1999).

A third point of clarity about the meaning of a perspective transformation is epistemological change. Kegan (2000: 53) finds epistemological change central to transformative learning both in meaning and meaning form, where 'we change the very form by which we are making our meaning'. However, three studies found that transformation is not just an epistemological process of change but much more (Kilgore and Bloom 2002, Garvett 2004, Lange 2004). Lange (2004: 137) in a study on fostering citizen action toward a sustainable society found transformative learning 'is not just an epistemological process involving a change in worldview and habits of thinking, it is also 'an ontological process where participants experience a change in their being in the world including their forms of relatedness'. Imperative to transformative learning for her study participants, was finding ways to enact their sense of social and environmental responsibility.

Similarly, in a study on mission and life purpose by Kroth and Boverie (2000: 145), which focused on adults who had a positive impact on their community's quality of life, found that 'without the continuing interplay between directed purpose and inquiry into that purpose, life mission may become rigid, or life itself directionless'. It is a 'lived stance towards a sense of call, a form of practice reflective of deep spiritual commitment' found among environmental activist (Kovan and Dirkx 2003: 114). This is consistent with Lange's emphasis on transformative learning as an ontological change. In addition, by understanding one's mission or call in life helps shed light on an implicit and rarely discussed aspect of transformative learning—what is its purpose?

The relationship between transformation and action is further supported by a number of studies (Courtenay *et al.* 2000, King 2000, Baumgartner 2002, MacLeod *et al.* 2003, Feinstein 2004, Garvett 2004). Other factors prove to be essential if participants are able to act on epistemological change. For example, Garvett (2004), in a study fostering a dialogic approach to teaching among higher education faculty, found that critical reflection and dialogue do not always provide the foundation for teachers to act on epistemological change. Even though her participants had an acute awareness and appreciation of the benefits of the dialogic approach to teaching, that of itself was not adequate to implement change in their practice. They needed 'explicit guidance' instrumental instruction and institutional support to enact dialogic teaching in their practice.

Fostering transformative learning

The most significant change found in this review was the greater attention given to the practice of fostering transformative learning in the higher education classroom or a workshop setting. Nineteen studies in this review attempted to foster transformative learning directly and/or use it as a theoretical framework to help make meaning of teaching within a particular context. The focus of these studies cover a variety of areas, such as professional development of faculty and administrators (Pohland and Bova 2000, Garvett 2004, King 2004), palliative care and medical education (MacLeod *et al.* 2003, Mallory 2003, Goldie *et al.* 2005), ecological and restorative learning (Sinclair and Diduck 2001, Pugh 2002, Feinstein 2004, Lange 2004), intense group learning experiences (Scribner and Donaldson 2001, Cohen

2004), learning online (Cragg *et al.* 2001, Ziegahn 2001), learners in crisis (Kilgore and Bloom 2002, King 2003), ESL (English as a second language) education (King 2000), teaching belief change (Taylor 2003), successful extension staff partnerships (Franz 2003), the power of romantic fiction among recurrent students (Jarvis 2003) and the identification of thresholds of transformations (Berger 2004).

In comparison to an earlier review on fostering transformative learning (Taylor 2000), these studies both confirm and provide greater depth to several of the findings from the previous review. They identified the importance of providing direct and active learning experiences (e.g. service learning, hospice care), the availability of varied medium for fostering transformative learning, the importance of 'pedagogical entry points' (Lange 2004: 129) and the nature and importance of support when fostering transformative learning. In addition, barriers to transformative learning in the classroom are discussed.

One of the most powerful tools for fostering transformative learning is providing students with learning experiences that are direct, personally engaging and stimulate reflection upon experience (Pohland and Bova 2000, MacLeod *et al.* 2003, Mallory 2003, Feinstein 2004, King 2004). Two studies both dealing with training students (doctors and nurses) in palliative care demonstrate the power of direct learning experiences and related consequences by requiring students to visit hospices, funeral homes and anatomy laboratories. MacLeod *et al.* (2003: 58) went even further by requiring students in a palliative care module to spend time with a dying patient and family members, 'hearing their stories and exploring issues of importance to them'. A consequence of this experience is an emotional one, and in particular seem to lead to empathy, both knowing what they have experienced, but also recognition of the emotions generated by the situation.

A second factor is the varied medium available to foster transformative learning. For example, Jarvis (1999: 49) used romantic fiction with women in an Access Higher Education Program and found novels to be a powerful tool in helping women question traditional conceptions of romantic relationships and redefine power located in relationships. She concluded 'literary texts offers scope for examining and validating experience, but also for challenging the way experience is constructed and understood'. Similarly, the use of writing as a medium when promoting transformative learning is significant. A number of studies revealed the power of journaling (King 2000, 2004) and writing theses (Cohen 2004) as providing a place for students to interject their own voice and a tangible product of the educational experience. The written format potentially strengthens the analytical capability of transformative learning. The material sphere opens up new forms of communication, creating artifacts of ideas of the mind, making them available for others beyond the individual writer to analyze and contemplate. In essence it 'forces an externalization of communication, wrests discussion away from the merely affective and/or psychological domains and forces a kind of reconciliation with the material-inherently perspective altering, socio-communicative activity' (Burke 2006: 85).

Another medium that also involves a great deal of writing is the on-line setting (Cragg *et al.* 2001, Ziegahn 2001). Although, these studies are only initial efforts with few significant findings, factors that seem to contribute to the transformative experience while on-line are the degree of life experience among the participants and the significance of having time to reflect on 'written accounts of the intellectual and emotional connections' (Ziegahn 2001: 149) during asynchronous discussions. The

greater life experience provides a 'deeper well' from which to draw upon and react to discussion that emerged among on-line participants.

A third factor to consider when fostering transformative learning is how to recognize when students are susceptible to or desiring a transformative experience, much of which can come from paying close attention to their discourse in response to personal questions. Lange (2004: 131), in a study on revitalizing citizen action, found students using terms such as 'crossroads,' to describe their life as they began a cooperative extension course titled Transforming Work and Living. She referred to the student's disillusionment and fragmentation not only as signs of a disorienting dilemma, but as 'pedagogical entry points,' where students' were consciously engaging their personal dilemma as a potentially transformative experience. Similarly, Berger's (2004: 338) research involving graduate students in a master's in education program helped identify the 'edge of [their] meaning,' a transitional zone, of students' knowing and meaning making. 'It is this liminal space that we can come to terms with the limitations of our knowing and thus begin to stretch those limits' (Berger 2004: 338). Interviews reveal students at their edge having difficulty articulating ideas and coherent thoughts, particularly when discussing ontological issues about their personal lives—the way they make sense of their world. Also, the affective tone of the students varied widely, from frightening and unpleasant feelings to excitement and joy. The implications for practice is the importance of developing an awareness of students who are at the edge of their knowing, as well as helping them become self aware, and providing support as students work through the discomfort.

Speaking of support, as a practice by educators for students as it has been discussed both by Mezirow (1991) and in an earlier review as significant when fostering transformative learning (Taylor 2000). However, little is known about the nature of that support. For example, support as comfort is not transformative, instead it needs to be in the form of 'good company,' helping students sustain the courage needed (e.g. living with the discomfort) and recognizing their own narrative while at the edge of their learning (Berger 2004: 347). Similarly, support can manifest as validation when fostering transformative learning (Bennetts 2003, King 2003). For example, King, in a study of using transformative learning in tandem with grief theory (e.g. Kubler-Ross 2005) in helping students make meaning of the 9/11 experience in the USA, found that this approach validated their feelings and provided clarity and understanding of other's feelings. Support also has been found to be crucial when sustaining transformative experiences beyond the classroom (Pohland and Bova 2000, Cohen 2004, Garvett 2004). In Garvett's (2004: 267) study on fostering a dialogic approach to teaching among higher education faculty, she found that teachers who were successful in engaging this new form of teaching 'attributed their relative success to the enthusiastic support of the management team, and the mutual support, solidarity and empathy among teachers who participated in teaching development process'.

Finally, several studies reveal factors that inhibit transformative learning in the classroom. For example, they include: rules and sanctions imposed on welfare women returning to work in a family empowerment project (Christopher *et al.* 2001), the downside of cohort experiences where there is often an unequal distribution of group responsibilities and an emphasis on task completion instead of reflective dialogue (Scribner and Donaldson 2001) and rigid role assignments and the need to be deliberate, both by the teachers and program designers, for transformative

learning to occur in graduate education (Taylor 2003). Further, Scribner and Donaldson (2001) found member closeness, due to external professional relationships within a cohort doctoral program, to compromise learning opportunities where some members were unwilling to flesh out complex political issues and examine their own assumptions related to education policy.

Context and transformative learning

Context and the role it plays in shaping transformative learning has been identified as a concept that has been historically overlooked in Mezirow's conception of transformative learning theory (Clark and Wilson 1991, Taylor 1998). Previous research has identified both personal (e.g. prior life experiences) and sociocultural (e.g. historical events) contextual factors as significant in transformative learning. Consistent in this review, a number of studies begin to provide greater clarity to the nature of context and the varying nature of a perspective transformation. By looking at the varying characteristics of a perspective transformation (outcomes) seems to demonstrate that many were a product of a particular transformative context. For example, HIV positive individuals engaged in 'service to others' (Courtenay *et al.* 2000, Baumgartner 2002), international sojourners developed intercultural awareness (King 2000, Lyon 2001) and students developed an awareness of inequitable power in romantic relationships through studying romantic fiction (Jarvis 1999). All of these outcomes were products of the unique context in which the transformation manifested, highlighting the role of context in shaping a transformative experience. On the other hand, there seem to be shared transformational characteristics that transcend context, such as greater self-directedness, assertiveness, self-confidence and self-esteem, which support the emphasis of autonomy found in Mezirow's (2000) interpretation of transformative learning. Context has implications both at the personal and social level.

A way to make further sense of the role of context is revealed in Scott's (2003) study about national community organizers and how they go about organizing broad based organizations. She developed a social constructivist view of transformative learning through the exploration of social action within the medium of storytelling, demonstrating the essential interplay between the personal and the social in making meaning of transformative learning. Scott found that transformation includes both structural changes in the psyches of the individual and in the structures of society. She sees the transformation of an individual's perspective (rational worldview) as change in surface structures of the psyche, while the 'social construction of transformation co-emerges in the learner and the setting, that is, the personal and the social in dialectical relationship transform' (Scott 2003: 283).

Other ways context is further illuminated is through the exploration of power and social change, both of which had been theoretically discussed in the past (Collard and Law 1989, Cunningham 1992, Hart 1990). In a study involving the transformation of individuals who become ethical-vegans, power proves central to shaping the transformative experience (McDonald *et al.* 1999). McDonald *et al.* (1999: 20) found that transformative learning does not adequately account for the enormous interpersonal and socio-cultural challenges associated with confronting the effects of power. As individuals became successful vegans 'the sustained power of normative ideology, brought subtle changes....[They] were no longer shocked

by animal cruelty, and worn by social-cultural and interpersonal challenges to veganism, their praxis was less outspoken'. They never became completely free of the dominant ideology raising the concern that transformative learning from Mezirow's (2000: 22) perspective gives too much attention to the individual and not the individual within his or her soci-cultural context. In addition, transformative learning 'runs the risk of becoming a mechanism for self-control, evident in the gradual social conformance of vegans, even as their personal commitment increased'.

This mechanism of self-control is also seen in the Kilgore and Bloom (2002) study on the lack of a perspective transformation following a disorienting dilemma among women in crisis (e.g. on welfare, prison) who were a part of a mandated ABE program. They found that the participants, even though they successfully expressed the master discourse learned in an educational program (e.g. I am a new person), did not truly experience a transformation. In order to survive in the various contexts of their lives, these women often held many contradictory perspectives while learning the script of those in power. It is transformative learning theory as described by Mezirow who fails to 'recognize the non-unitary self and voices of women.... Because women in crisis are in constant state of fragmentation, they cannot be the subjects of a transformational pedagogy that assumes a unified self' (Kilgore and Bloom 2002: 131).

Progress has been made in better understanding the role of context and transformative learning. However, questions remain, such as: What are the ways to effectively recognize the influence of context? How do educators capitalize on context when fostering transformative learning? How do historical events in society shape transformative experiences? Furthermore, much could be learned about the role of context, by exploring the role of culture and transformative learning, an area of research greatly overlooked.

Discussion

The present research continues to affirm Mezirow's conception of transformative learning, through its stability over time, its relationship to expanding the self and pursuit of autonomy, and the applicability for informing classroom practice. However, it has shifted its focus away from identifying transformative experience in various settings and stages of transformation, and more towards making sense of factors that shape the transformative experience and how it can be fostered in practice. Similar to the earlier review (Taylor 1998), which concluded that there was a need for a more holistic interpretation of transformative learning, the findings of this review seem to return to the fundamentals of transformative learning, exploring many of the concerns identified in previous theoretical critiques (e.g. action, relationships, context, critical reflection, and power). This sets the stage for the final section of the paper, that of discussing new insights gained from this review, but also what has been overlooked and needs greater exploration. In particular, the discussion will focus on the role of critical reflection, fostering transformative learning, power, other ways of knowing and research methods.

Beginning with the concept of critical reflection, research continually demonstrates its essentiality to transformative learning. However, there are concerns identified in this review, most significantly is the lack of discrimination when

identifying critical reflection among study participants and assuming that all forms of reflection are equally significant (Liimatainen *et al.* 2001, Kreber 2004). Studies raise the possibility that previous research might have been too generous in assuming the presence of critical reflection (premise reflection) among participants while making meaning of a transformative learning experience. Possibly researchers relied too strongly on the ability of participants to articulate critical reflective thought and also recall critical thought retrospectively. These findings should challenge researchers to provide more substantive data of critical reflection and at the same time explore other means for capturing its presence in relationship to transformative learning. Further, researchers are encouraged to develop similar frameworks (Kreber 2004) and coding schema (Liimatainen *et al.* 2001) that help codify the presence and/or levels of critical reflection among study participants.

Part of the problem may also rest with treating the various types (e.g. content, process, premise) of reflection as equally significant and not recognizing that there are important differences between types. For example, Kreber (2004) argues that too often when advocating critical reflection, educators predominantly reflect 'within' a taken-for-granted set of assumptions (context reflection), instead of testing validity of those assumptions as in process reflection and critically interrogating them as in premise reflection. She goes on to say:

Reflection on teaching begins with identifying the assumptions and beliefs we take for granted, but it must not stop there. It needs to go further and involve engaging in particular learning processes (instrumental, communicative and emancipatory) that will either lead to a new validation or rejection of our assumptions. (Kreber 2004: 43–44)

In addition, the shortcoming of accurately capturing critical reflection is not only a lack of recognition of different types, but as well could be an issue of development, as discussed by Merriam (2004). For example, students and teachers as in Kreber's case possibly must mature and reach a level of cognitive development before they can engage in premise reflection, particularly in a self-directed manner. Research is needed in identifying factors that contribute to this development, along with longitudinal research to better understand how a critical reflective capacity evolves over time.

A second discussion point of this review concerns the practice of fostering transformative learning. Most significant has been the varied disciplines that found this pedagogical approach to teaching adults helpful in guiding practice and explaining the change in perspective among students. Despite the varied disciplinary perspective, the research has almost exclusively confined itself to formal settings (e.g. universities, workshops). There is a definitive need to explore other settings particularly where the teaching contexts are more informal, less controlled by the instructor, and more susceptible to external influences (e.g. natural environment, public).

Regardless of these shortcomings, a number of significant findings emerged that further refine the practice of fostering transformative learning. One of the most interesting was the recognition that epistemological change among some participants was not adequate for a transformation to reach fruition. In other words, cognitive awareness of underlying epistemic assumptions and changing the form of

meaning making was not enough, other factors needed to be in place. Those factors include ongoing institutional support to act on this new understanding as well as, at times explicit guidance on how to act on this new understanding in practice (Garvett 2004). This should remind educators that when fostering transformative learning communicative learning is in itself not adequate. Instrumental learning (specific steps, direction) is needed as well to ensure that students have the necessary skills to act on their new understanding. A good example of the inherent relationship between communicative and instrumental forms of learning can be found in Jarvis' (2006) research involving women returners studying romantic fiction. She makes a particular effort helping students develop the necessary technical skills (critical analysis) needed to understand the way literature is structured. She 'introduced students to the connotative properties of language and to features such as metaphor that challenge their beliefs about the singularity of meaning' (p. 70).

Another finding that helps address a concern raised in previous reviews is that of determining student readiness for transformation. More specifically, it is recognizing pedagogical entry points (e.g. disillusionments) or as Berger (2004: 339) so aptly discusses of helping students find the 'edge of [their] meaning'. Essentially, these studies remind educators that fostering transformative learning is much more than implementing a series of instructional strategies (small group activities, experiential learning), it involves the development of an acute awareness of student attitudes, personalities and preferences over time, and as signs of change and instability begin to emerge, educators can respond accordingly. It also means developing a sense of trust in the process of transformative learning, allowing for students to live with some discomfort while on the edge of knowing, in the process of gaining new insights and understandings.

Despite the abundance of studies in the area of fostering transformative learning, key questions raised in previous reviews continue to be overlooked. First, is the need for greater understanding about the student's role when fostering transformative learning in the classroom. What are their responsibilities? Why do some students openly engage in the process and others refuse to participate? What can educators do to lessen resistance? Second, there is lack of understanding of peripheral consequences of fostering transformative learning in the classroom. For example, how does the transformation of students affect other students, the educator, the institution and other significant individuals in the students' lives? Finally, there is little understood about the impact of transformative learning on learner outcomes. For example, as a result of fostering transformative learning in an ABE (adult basic education) classroom, are adult learners more successful at reading and writing? Evidence for support is needed if educators are going to advocate that that it is a worthwhile teaching approach.

A third point of discussion is the relational nature of transformative learning. The findings in this review, as well as previous reviews, have found the role of relationships in transformative learning most significant. This questions the high degree of emphasis given to the autonomous and formal nature of transformative learning and reveals a learning process dependent upon the need for support, trust, friendship and intimacy. Unfortunately, until recently little has been known about the nature of these relationships. Researchers need to start asking, 'what is a transformative relationship?' Carter's (2002: 76) typologies start to address this question, particularly 'love' relationships that 'enhances self-image, boost confidence, and

create special friendships borne of mutual trust, respect and love the other' (p. 76). This research furthers the need for greater understanding of the role of the more subjective and harder to capture aspects of relationships such as intimacy, trust and empathy and their relationship to transformative learning. More specifically, what is the nature of these relational aspects? How are they fostered appropriately and professionally, particularly within the context of teacher-student relationships? (e.g. Robertson 1996).

Closely related to the area of relational knowing and transformative learning is the important role of affective learning, the role of emotions in the process of a perspective transformation. Likewise, Mezirow (2000: 11) has accepted their importance, making the statement that 'effective participation in discourse and in transformative learning requires emotional maturity, awareness, empathy, and control.... [and] knowing and managing one's emotions, motivating oneself, recognizing emotions in others and handling relationships—as well as clear thinking'. However, despite all the research affirming the essentiality of affective ways of knowing little is known about how to effectively engage emotions in practice, particularly in relationship to its counterpart critical reflection, and the role of particular feelings (e.g. anger, shame, happiness) in relationship to transformative learning. Dirkx (2006: 17) begins to address this concern by concluding that it is important 'to think of a learner's emotions in a transparent or literal manner, as windows that reveal experienced realities'. Based on the interpretation of particular emotions among student(s), the educator would be directed towards varied pedagogical strategies within the instructional process.

The last topic of discussion is the growing sophistication of research methods and approaches to transformative learning. One area that emerges in this review is the unique compatibility between action research and transformative learning. It provides a pedagogical framework for classroom teaching action research. They share similar assumptions and outcomes about teaching for change, such as a participatory approach, the emphasis on dialogue, the essentiality of a reflective process in learning, and the need for action. More research is needed that simultaneously engages action research and transformative learning to better understand their relationship, ultimately resulting in a more informed practice for fostering transformative learning and an effective method of classroom research. For those interested in reading more about this relationship Percy (2005) offers a conceptual discussion about the contribution of transformative learning to the practice of participatory research, a close relative to action research.

Another emerging research phenomenon has been the engagement of photography and video when researching transformative learning. They (photography and video) help with 'the express aim of exploring participants' values, beliefs, attitudes, and meanings and in order to trigger memories, or to explore group dynamics or systems' (Prosser 1998:124). In addition, these mediums can assist study participants who sometimes lack the necessary verbal skills and reflexive ability to adequately describe their beliefs, values and/or feelings since they often operate at a subconscious level. Further, photography and video-recording provide a medium that helps stimulate reflection through a mutual visual context for both the participant and researcher, promoting a more collaborative research experience (Taylor 2002). These creative approaches as well others need to be continually explored in an effort to find better ways of understanding the nature of transformative learning.

Conclusion

Transformative learning continues to be a viable and active area of research regarding adult learning, both within the field of adult education and variety of related disciplines. In addition, with the growing interest in the practice of fostering transformative learning, it seems to have replaced andragogy as the iconic educational philosophy of the field, offering adult educators proven teaching strategies based on substantive research framed within sound theoretical assumptions. In addition to the increasing number of empirical studies, there is also an emerging presence of divergent conceptions of transformative learning theory being engaged in the field (e.g. Daloz 1986, Boyd and Meyers 1988, O'Sullivan 1999, 2002, Brooks 2000a, 2000b, Cranton 2000, Kegan 2000, Tisdell 2003). With this growing interest from various quarters, it should challenge educators and researcher alike to not rest on their laurels. There is still much that is not known about transformative learning and much to learn about how people revise their interpretations about the world around them.

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