

Prior Learning and Ways of Knowing

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Research Purpose and Questions

In 2010, Stevens, Gerber and Hendra published a study on the potential of the UMass Amherst University Without Walls (UWW) prior learning portfolio (PLP) development on promoting transformative learning. In this nontraditional bachelor's degree completion program students describe and critically analyze their learning from work and other life experiences, creating a narrative portfolio that not only demonstrates prior learning and critical thinking but provides an opportunity to create new meaning perspectives (Mezirow, 1991). In creating a portfolio students are asked to reflect on questions similar to those posed by York-Barr, Sommers, Ghore and Montie (2001):

- Identify an event or experience – what happened?
- Why did the event unfold as it did? Why did I behave as I did? How did the circumstances impact what happened? How did the past (personal, socio-cultural, etc.) affect what occurred and how I reacted?
- What learning have I derived from this experience? How do I interpret my actions and those of others?
- What are the implications of this learning for my future actions when confronted with a similar situation – even if in a different context?

In the writing and revising of the portfolio, students describe learning experiences, engage in critical reflection on these experiences and reflective discourse with their peers and instructor, and produce a manuscript that integrates their learning and identifies patterns or themes. Through careful, conscious movement through the phases described by Merriam, Caffarella and Baumgartner (2007), transformative learning may be fostered.

This 2010 study found that many respondents gained increased self-confidence, validation, writing ability and – in nearly one-third of the respondents – a distinct change in perception of self in the context of work, relationships, community involvement or overall life. This last change was considered evidence of transformative learning, in particular a change in psychological meaning perspective (Mezirow, 1991). Other studies, including the doctoral dissertations of Burris (1997) and Lamoreaux (2005), also found a relationship between the PLP and transformative learning.

The results of the 2010 study led to this research, which included interviewing students before they enrolled in the PLP course and after they had completed their portfolios. The purpose was to explore the relationship between the prior learning development process and Kegan's (1994, 2000) theory of constructive-developmentalism. In *Learning as Transformation: Critical Perspectives on a Theory in Progress* (Mezirow and Associates, 2000), Kegan asked: "What form transforms?" (p. 35) and responds that it is a developmental change in one's order of mind or way of knowing. This would seem to be tantamount to a transformation in one's epistemic meaning perspective (Mezirow, 1991).

There have not been many studies that look at the relationship between aspects of transformative learning and orders of mind (Erikson, 2007; Bridwell, 2012). To address this, the following questions were explored:

1. What was the respondent's order of mind (using Kegan's theory of constructive-developmentalism) prior to creating the portfolio?
2. What was the respondent's order of mind after completing the portfolio (PLP)?
3. If the respondent experienced a change, did the respondent attribute this to the PLP process?

Significance

As it was originally conceived, prior learning assessment (PLA) often faces opposition from others within the academy (Wihak as cited in Conrad, 2008, p. 142) and challenges the dominant ideology of higher education that academic knowledge can only be acquired in the classroom. It does the latter by questioning what knowledge is and where it resides (Brookfield, 2005; Merriam et al., 2007) and carefully demonstrating, through rigorous assessment, how experiential learning can indeed represent college-level learning (CAEL, 2010, 2014; Sherman, Klein-Collins, & Palmer, 2012; Travers, 2015). While this recognition of experiential learning is to be applauded, many current-day approaches to PLA sometimes seem focused on testing, ACE (American Council on Education)-evaluated training programs, challenge exams and course equivalency documentation (Zucker, Johnson, & Flint, 1999; Fiddler, Marienau, & Whitaker, 2006). These bear little resemblance to the UWW PLP process in which students demonstrate their learning by critically reflecting on their experiences and exploring the connections between theory and practice, patterns across varied circumstances and overarching themes.

Even among those who support it, PLA is not without its critics, including those who believe that, as in most student-assessor transactions, there is an inherent power dynamic that needs to be explicitly acknowledged and addressed (Hamer, 2010). This is an important point that deserves further consideration, yet there is still tremendous value for the student in the PLA process: earning credit in this manner not only accelerates progress toward graduation but has other benefits (Jimenez, 2015; Lamoreaux, 2005; Lamoreaux & Taylor, 2005; Stevens, et al., 2010). This study focused on the potential for PLP creation to contribute to changes related to transformative learning (specifically change in meaning perspective) and adult development. Of particular concern is whether the PLP may not only result in a change in psychological meaning perspective but also in epistemological meaning perspective (Mezirow, 1991). If so, it may provide a context that facilitates constructive-developmental growth (Kegan, 1998). Studying these processes provides an opportunity to answer the research questions above and contributes to what Erikson (2007) referred to as "a spirited conversation about the relationship between transformational learning and constructive developmentalism" (p. 63). This conversation may promote further refinements to both theories, and thus may result in more precise ways of understanding and applying them in the context of PLA.

These theories do have cultural limitations; they were largely developed on the basis of the experiences of white, middle-class individuals. More research needs to be done to determine their relevance to other populations. In addition, much of the current writing on these theories focuses on change in the individual as opposed to the group. As Brookfield (2005) cautioned, "Adult development [in critical theory] is viewed as a collective process since one person's humanity cannot be realized at the expense of others' interests" (p. 27). Exploring adult development and transformative learning in the context of community or culture may offer additional perspectives on the theories as they stand today.

Constructive-Developmentalism and Transformative Learning **Constructive-developmentalism**

There are many theories of constructive-developmentalism (e.g., Piaget, 1954; Perry, 1970; Magolda, 1992;

Belenky, Clinchy, Goldberger, & Tarule, 1997; Kegan, 1982, 1994, 2000); however, this study focused on Kegan's theory since it has been linked to transformative learning and was used as a theoretical background within the original study. Berger (2006a) noted that much developmental theory is age-linked and/or tied to a specific life task. Constructive-developmental theories, while sequential in nature, have to do less with age or task and more with the ways individuals make meaning of their experiences. Berger (2006a) described these theories in this way:

They are *constructive* because they are concerned with the way each person creates his world by living it (rather than believing, as some theories do, that the world is outside us with some kind of objective truth to be discovered). They are *developmental* because they are concerned with the way that construction changes over time to become more complex and multi-faceted. (p. 78)

Kegan et al. (2001) stated that these ways of making meaning,

... are durable for a period of time; reflect an identifiable inner logic and coherence; and may feel more to us like the way we *are* rather than something we *have*. The world we construct through our way of knowing may seem to us less the way things *look to us*, and more like the way things *are*. (p. 4)

The distinction between *being* and *having* is significant: the movement from one to the other is indicative of growth in ways of making meaning. To *be* at an order of mind is to be *subject* to it, controlled by it; to *have* an order of mind is to be able to make it *object*, to gain perspective on the way of knowing and see that one need not be controlled by it (Kegan, 1982). The subject-object interview (SOI)¹ used in this study assesses what one is subject to and what one can take as object and determines the order of mind of the interviewee. The SOI scale includes not just a single stage designation (the orders of mind described below) but also four intermediate steps ($x(y)$, x/y , y/x and $y(x)$) between one stage and the next. These intermediate steps denote the degree of movement from one stage to the next. This is significant because, as Berger (2006b) noted, "most of our lives are spent in the spaces in between each of the orders – on our way to the next place" (p. 3).

In Kegan's model the individual spirals between orders of mind that emphasize independence (e.g., the self-authoring mind) and those that emphasize inclusion (e.g., the socialized mind). As described by Berger (2006b), the first order of mind (a magical mind) is generally associated with early childhood; the child cannot yet conceive of a self that is distinct from its environment, an environment that exists over time and space separate from the child. This order of mind is closely associated with the work of Jean Piaget (Kegan, 1982). Individuals at the second order of mind (the sovereign mind) perceive the separation between self and the environment and self and others but lack the imaginative capacity for empathy. While adults may be at this stage, it is relatively uncommon. Most adults can be located at the latter stages.

Those in the socialized mind (third order of mind) are characterized by the ability to "internalize the feelings and emotions of others and are guided by those people or institutions ... that are most important to them. ... They are able to think abstractly, be self-reflective about their actions and the actions of others, and are devoted to something that is greater than their own needs" (Berger, 2006b, p. 4). However, their sense of authority has not been internalized as separate and distinct from others.

With the self-authoring mind (fourth order of mind), the individual has the ability to weigh pros and cons and make decisions independent of the views of others. From this place, they can empathize and take the perspective of others without a diminution of a sense of self. Their limitation is that they may be so attached to their view that they are unable to bridge the differences between the perspectives of others and their own. Despite their empathic abilities, those at the self-authoring order of mind may continue to see situations as

either/or.

Individuals at the self-transforming or postmodern mind (fifth order of mind) recognize that all perspectives and ideologies are necessary and part of the evolving whole. They see that each of us harbor these differences within. Referring to fifth order conflict resolution, Kegan asserted that, "Postmodernism suggests a kind of 'conflict resolution' in which the Palestinian discovers her Israel-ness, the rich man discovers his poverty, the woman discovers the man inside her" (1994, pp. 320-321).

Development in Kegan's model proceeds sequentially, but there is no guarantee that a person will move through all orders of mind. Indeed, the key point of Kegan's (1994) *In Over Our Heads: The Mental Demands of Modern Life* is that while most of us may have only achieved the socialized mind, our society requires us to at least be self-authoring. Kegan (2000) referred to these demands as the "hidden curriculum of adult life" (p. 45) and discussed the ways in which the individual in today's society is constrained by his or her socialized mind and the need for movement toward a self-authoring mind.

Transformative learning

Mezirow (2000) defined transformative learning as,

... the process by which we transform our taken-for-granted frames of reference (meaning perspectives, habits of mind, mind-sets, mental models) to make them more inclusive, discriminating, open, emotionally capable of change, and reflective, so that they may generate beliefs and opinions that will prove more true or justified to guide action. (pp. 7-8)

Thus the transformation of meaning perspective (psychological, epistemic or sociolinguistic) is indicative of transformative learning.

While Mezirow's psychocritical approach to transformative learning is still the most common, other perspectives are now evolving (Taylor, 2008). The one that is most relevant to this study is the psychodevelopmental view. As Taylor (2008) described it:

A psychodevelopmental view of transformative learning is a view across the lifespan, reflecting continuous, incremental and progressive growth. Central to this view of transformation is epistemological change (change in how we make meaning), not just a change in behavioral repertoire or quantity of knowledge. (p. 7)

Kegan (2000), who Taylor places in the psychodevelopmental camp, supports the relationship between development and transformation, and said:

Much of the literature on transformative learning really constitutes an exploration of what constructive-developmental theory and research identifies as but one of several gradual, epochal transformations in knowing of which persons are shown to be capable throughout life. ... But constructive-developmental theory suggests that (a) it is not the only transformation in the form of our knowing possible in adulthood; (b) even this transformation will be better understood and facilitated if its history is better honored and its future better appreciated; and (c) we will better discern the nature of learners' particular needs for transformational learning by better understanding not only their present epistemologies but the epistemological complexity of the present learning challenges they face in their lives. (p. 59)

Mezirow (1991) has called transformational learning "a constructivist theory of adult learning" (p. 31). Implicit in the psychodevelopmental view is the notion that constructive-developmentalism is one kind of

transformative learning; others may occur in addition to or within the broader changes in order of mind.

Research Design

The subject-object interview

A subject-object interview (SOI) was used to determine the order of mind of respondents. The standard interview process involves showing the interviewee a series of 10 cards with a different word on each one, such as torn, anxious or success. The words were selected to best assess the interviewee's way of knowing. The interviewee is then asked to select one and describe a recent experience that he or she associates with that word. The role of the interviewer is to listen and probe carefully to determine the respondent's order of mind. The kind of probing is critical. As Lahey et al. (1988) stated in *A Guide to the Subject-Object Interview: Its Administration and Interpretation*, "...if we ask the right questions we can find out not *why* they are angry [as an example] but *how* the self must be constructed to experience the particular violation the speaker expresses" (p. 290). Discovering this construction of self, of mind is the goal of the SOI. The SOI process acknowledges that the interview is also an intervention and may impact the achievement of this goal. Thus, interviewers participate in rigorous training prior to engaging in research.

Data collection

In early March of 2010, all students (except those within the researcher's courses) who had entered UWW that semester were emailed, asking if they would be willing to be interviewed about the ways in which they make meaning of their experiences. Fourteen students agreed and were mailed consent forms to sign, a set of SOI cards for the interview, and a cover note explaining how they were to be used. Interviews were conducted in person when possible and by phone if the respondent was at a distance (13 interviewees were from a variety of states; one was in Central America) and recorded. In addition to data derived from the SOI, respondents provided basic demographic information. The interviews were then transcribed and coded according to the SOI protocol to determine the respondent's order of mind.

The following spring (2011), respondents who had completed the PLP course were contacted for the second interview. Eleven of the 14 original participants agreed to be interviewed a second time. Again the interviews were conducted either in person or by phone, and recorded. The initial part of the second interview was identical to the first but was followed by questions asking if the respondents had changed since the first interview, in what ways and as a result of what. The purpose of the probing was to see whether the respondent described a change in way of knowing and, if so, whether he or she attributed this to the portfolio process.

These interviews were transcribed, then reviewed and coded for order of mind and source of any change. The two sets of interviews were analyzed to compare the order of mind before the PLP process and after. The researcher asked two certified SOI experts to review and code specific transcripts (pre- and post-PLP creation) to ascertain the validity of the researcher's coding. This is in keeping with approaches to ensure auditability recommended by other qualitative researchers (Kvale, 1996; Merriam, 1988; Guba & Lincoln, 1988). In addition, another adult educator familiar with transformative learning was asked to review and validate respondent claims of change in epistemic meaning perspective.

Basic demographics

The student population is largely female and white. The sample used within the study was reflective of the population demographic. Ten respondents were female and one was male. In terms of age, four respondents were between 31 and 40, three were between 41 and 50, and four were between 51 and 59. There were no respondents under 30 or over 59. Ten respondents were white and one was black. The responses of the

single male and the single black student did not appear to be qualitatively different from those of the female and white students, although further students need to be studied to explore possible gender and cultural differences.

Design limitations

Findings from this study were limited by the use of purposive sampling, the relatively small number of self-selected respondents involved, and the lack of diversity with regard to gender and race in the sample population. In addition, timing may have had an effect: respondents were interviewed while the experience of completing the portfolio was still fresh. Had they been interviewed at a greater interval, the results may have been different. As such, the findings, while intriguing, cannot be generalized to adult students in other contexts or from other cultures.

Findings

Orders of mind – Pre-portfolio

As stated above, Kegan's (1994) premise in *In Over Our Heads* is that many in our society are ill-equipped to take on the challenges of modern life, that too many of us are at the socialized stage, while our culture expects us to be at the self-authored stage. He stated, "... the expectations upon us ... demand something more than mere behavior, the acquisition of specific skills, or the mastery of knowledge. They make demands on our minds, on *how* we know, on the complexity of our consciousness" (p. 5).

Given this premise, the assumption was made that most respondents would be at the third order of mind, as given by Kegan. This did *not* prove to be the case: all of the respondents had at least a whisper of the fourth order, and seven were solidly fourth order. One respondent, Irene,² a 38-year-old account representative who scored at the transition from third to fourth order (4(3)), had embarked on professional development activities at the behest of her mentors:

"I work with two wonderful women, my boss and then one of the executives here in Hyannis are wonderful mentors, very professional, very successful, and I want to emulate them and that's important to me. But I also want to be able to do it for my own self to model for the kids that, you know, you shouldn't be afraid of these things and these are opportunities, not things to fear."

With regard to the changing role of the mentors in her life, Irene went on to say that:

"In other words, you're not looking to somebody else to give you permission, you're saying, 'OK, now this is – this is how it's going to be.' Because I think people can only tell you so much themselves, and it has to resonate with you, and you have to take the responsibility for it – the responsibility for it and the onus for it. ... If – if it didn't transition to me taking the responsibility and – and the ownership of it, then you, kind of, become a martyr, you know?"

Irene was moving away from needing the approval of her mentors to becoming more fully self-authoring.

Cate, a 50-year-old child advocate, is an example of a respondent fully of the fourth order. She described how she makes decisions:

"I struggled to maintain – I'm sort of a – I'm an odd person, I take a long time – I can make – take a long time to make a decision. Not just, kind of – not consciously, but unconsciously, but then once I make a decision, I've made a decision. So it's sort of like, I worked on that relationship, and I worked on that relationship, and I worked on that relationship until the day I said, 'Okay, I've worked enough.'"

Cate clearly seems to be the author of her life.

In describing his evolution from an individual dependent on the approval of significant others to a self-authoring order of mind, Jim, a 59-year-old building codes specialist, described a former professor's assessment of Jim's aptitude for work in his field:

"I had philosophical disagreements with a professor in my major, which happened to be architecture, and it happened to be a design course, and I thought I was quite good at that. I'd been told in high school drafting courses that I was really good, that I did good designs. A number of folks had said that and I get into, I think, my second year of college and with this professor, an architect, registered architect, made some designs that I thought were really cool, really good and he ripped my head off. And it really kind of crushed me. ... He's the professional. He's the professor. He's the authority figure, he must know what he's talking about."

Later when Jim became a city building inspector and supervisor to architects and engineers, he was faced with a decision regarding a school renovation:

"So I looked at the mayor and I said, 'Mr. Mayor,' I said, 'you really have two choices.' I said, 'We can stop and go back and retrench and do whatever we do, probably. But you have 800 kids that in two weeks we have no place to put. And you're going to have to deal with the wrath of the citizens, the students and the state because these kids aren't – you know all that stuff. Or you let me continue and finish the job and if I'm wrong you fire me and prosecute me.' I had no problem with it."

Thus, Jim came to "own" – take responsibility for – his work, one of the characteristics of the self-authoring mind (Kegan, 1994).

One respondent, Alice, a literacy educator, seemed to be at the beginning of the fifth order (the postmodern mind). She integrates the various subsystems in her life (e.g., family, work, school) by contextualizing them as elements of her faith – the larger system that she has created after decades of exploration to guide her life. In discussing the role of faith in her decision-making with her husband, Alice asserted:

"... I'm not trying to make it sound like we live a Pollyanna existence. I mean there's plenty of back and forth, you know, on different things but it – it's always, you know, neither of us – I don't know how to explain it, but we – I – again, I think part of it is prayer, you know, when you're praying with a person it's tough to stay angry for a long time. And that is a – that is an element that maybe we share – that – and I think the other thing is the – our love for each other is such that there's nothing that I would want that would be devastating to "N" and there's nothing "N" would want that would be devastating to me. So that's always allowed us to be able to pursue things that were important to us with the support of the other person."

Kegan (1982) has described the fifth order as "interindividual," as "... a comingling which guarantees distinct identities" (p. 105). As Laske (2011) has stated, individuals on the brink of the fifth order are "fully committed to deconstructing their own values, benefiting from divergent others" (p. 148). Alice's relationship with her husband ("N") appears to be a clear example of this capacity on both their parts.

Orders of mind – Post-portfolio

Since the respondents were already pretty far along Kegan's developmental path, the researcher believed she was unlikely to see major changes as a result of the PLP process. Eight of the 11 interviewees experienced no change in SOI score. However, three respondents did appear to have grown developmentally by the time they completed their PLPs. As noted above, the SOI scale includes four intermediate steps between one stage and the next; the three respondents – Irene, Nora, and Cate – who experienced a change moved up a step or more.

Irene, who was originally scored as 4(3) (fourth order with a whisper of three), had moved to a full fourth stage. In discussing turning to her mother for advice on whether to take a new job, Irene and the researcher had the following interchange:

Q. *“Um-hmm. What would happen if she said absolutely, you have to finish your degree and you said, ‘I think not? I think I’m going to take that job’? What would happen?”*

A. *“She would be mad at me for a while.”*

Q. *“And how would that impact you?”*

A. *“I would be upset that she would be mad at me. But if I really felt strongly that I had to take the job then I would.”*

Q. *“Um-hmm. Even if she said no?”*

A. *“Right.”*

Similarly, Nora, a 47-year-old actress, initially was also determined to be at the 4(3) stage. By the second interview she, too, seemed to have become more self-authoring (4/3). In contrast to her first interview, Nora described her decision to leave Hollywood with new understanding:

“... I still think that there are parts of what people do in film today that are – that would – I would be right for ... I think it’s whether or not I had that patience and tolerance to continue to knock on that door ... Which I didn’t; I wanted to take control over my own future, which is why I left. That the – I knew very clearly that I was not ever going to fit into the soft-spoken, sweet Barbie doll category, ever. Even if I might look that way when I was thinner and fit into that mold, my personality, my voice, my presence was too – too powerful.”

When questioned about her new plans, which combine her interests in the arts with community work, this interchange occurred:

Q. *“What if someone said to you, ‘But guess what, you can’t do that,’ how would that impact you?”*

A. *“I would just say, ‘Well, you might not think so.’”*

Q. *“You just wouldn’t accept it?”*

A. *“I wouldn’t accept it at this point.”*

Nora clearly sees herself now as more in charge of her life and decisions.

Cate had been assessed at the fourth order before writing her portfolio. After the second interview, Cate seemed to have shifted slightly. Though most her responses still seemed indicative of the self-authoring mind, there was some evidence of fifth order thinking. In discussing her approach to educational advocacy, which she wrote about in her prior learning portfolio, Cate stated:

“In educational advocacy a lot of times what I need to do to get an outcome is to make everybody in the room realize that they’re not on opposite sides but that they are all trying to work toward a single goal, which is to get that child educated. ... And that they disagree about the means to get there. ... Because once you’re talking about means to achieve the same goal, you can have a useful conversation. ... And you can come up with solutions and solutions that maybe you didn’t think about before you walked in the room. But while you’re still sitting there thinking, ‘Oh, I’ve got to get the school to do this’ ... and then you’re attached to making the school do something that they don’t want to do and the school is attached to not doing what it is that you want them do, and – and you know, you can have that battle forever. ...”

This passage indicates fifth order thinking on Cate’s part in that this order involves more systemic and dialectical thinking and less attachment to one’s own way of perceiving. As Berger (2006b) has stated:

Instead of viewing others as people with separate and different inner systems, those at the Fifth Order see across inner systems to look for similarities that are hidden inside what used to look like differences. Adults at the Fifth Order are less likely to see the world in terms of dichotomies or polarities. They are more likely to believe that what we often think of as black and white are just various shades of gray whose differences are made more visible by the lighter or darker colors around them. (p. 6)

Table: Orders of Mind Before and After Portfolio Writing and Submission

Respondent/Age	Before Portfolio	After Portfolio	Change in Order of Mind – Yes/No
Irene/38	4(3)	4	Yes
Nora/47	4(3)	4	Yes
Cate/50	4	4(5)	Yes
Alice/57	5(4)	5(4)	No
Barbara/35	4(3)	4(3)	No
Donna/48	4(3)	4(3)	No
Edna/32	4	4	No
Geraldine/31	4	4	No
Jim/59	4	4	No
Kitty/54	4	4	No
Lori/59	4	4	No

In summary, 27 percent of the respondents changed by one or more steps along the order of mind continuum, changed in epistemic meaning perspective. This is approximately the same proportion (one-third) that experienced a change in psychological meaning perspective in the previous study (Stevens et al., 2010).

Source of change

When asked about their perception of the PLP process, six respondents stated that they found the prior learning portfolio experience validating, five claimed to have an increase in self-confidence, four described an increase in their writing ability, and one an increase in general communication skills. These views are consistent with the findings of the previous study. But those who experienced a change in epistemic meaning perspective or order of mind also noted that their capacity for reflection and ability to integrate various perspectives and make meaning had developed through writing their prior learning portfolio. For example, Cate claimed that the portfolio creation process made her “realize how much of a piece a lot of [her] experiences are.” She mused about her work,

“... that kind of torn-ness that I was talking about is one that – that has been a theme in my life, you know, what is the best thing to do? Do I focus on the close in or the far away?”

As a result of the reflection that is integral to the portfolio creation process, Cate decided to “ground” (her term) her work in the individual, the concrete, the particular.

Irene stated that a mentor, a life coach, her UWW instructor and the portfolio process all contributed to her development. They helped her shift from being dependent on the approval of others to seeing herself as a professional in charge of her decisions. And Nora credited the writing of her portfolio with helping her move

from seeing herself as an actress to seeing herself as a writer and storyteller. It also resulted in another change in how she saw herself:

"I think people would look at me and say 'How could you not have confidence? How can you not be? You walk around here like, you know, you're so grounded and so together.' And so this ... It's not anything that I owned. It is certainly who I was, but I didn't own it ... I wasn't in control of it. ... [After writing the portfolio] I was able to recognize myself and claim it."

Nora didn't increase her self-confidence; she went from behaving confidently in ways that others perceived (though she didn't) to owning that confidence and being able to use it to her own ends. This is a shift from what Kegan (1982, 1994, 2000) would term subject to object in Nora's view of her confidence.

Discussion

This study has less to say about prior learning *assessment* and more to say about the process of *developing* a prior learning portfolio, in this case, in a course dedicated to this goal. The way in which the course is designed and taught creates the *potential* for transformative learning and developmental progress. The purpose of PLA at UWW is not to promote such changes, but rather to enable students to earn academic credit for college-level prior learning. Nonetheless, the phases that students go through in the creation of the portfolio will result in changes in psychological or epistemic meaning perspectives for some. For these students, the whole is more (and qualitatively different from) the sum of its parts.

The answers to the research questions were somewhat surprising. With regard to the first question (What was the respondent's order of mind in Kegan's theory of constructive-developmentalism prior to taking the PLP development course?), the results indicated that all respondents were at least in the process of becoming more self-authoring. This would lead one to wonder why this might be, given Kegan's contention that most adults are operating from a socialized mind in a society that requires a more complex and developed epistemology. One possible explanation is that the population of students choosing to return to college as adults may be more self-directing. In addition, the sample was small and may not be reflective of the population in terms of developmental levels since this group also elected to go through the PLP process. As known from reading student application essays, many UWW students have had to overcome significant challenges (e.g., learning disabilities) and make serious sacrifices (e.g., less time for family, considerable debt) to resume their education. Their commitment to this venture may be indicative of a more self-authoring order of mind. Anecdotally, many of the UWW students have been observed to not hesitate to question authority (including us) and view themselves less as students and more as "customers" who have chosen our "product." This stance may also be evidence of a more self-authoring stage.

This study also found that while the majority of respondents did not change their order of mind after completing the prior learning portfolio process (the second research question), three interviewees (Irene, Nora and Cate) did change to a degree (Irene and Nora more significantly). These three students attributed the PLP process with contributing to this change (the third research question). While these changes in epistemic meaning perspective may not seem dramatic, Berger's point (2006b) is important to remember: that most of us are in movement between the stages and that developmental change is not simply an increase in information but a transformation (Kegan as cited in Mezirow and Associates, 2000). The emphasis on reflection and analysis of experience in the company of other adult learners may be enough to foster such change in at least some individuals. Another possibility is that the time period, both in length of the program and in when the post-SOI was administered, was not sufficient to capture the impact of the PLP process. Studies that explore additional portfolio opportunities and/or a follow-up interview six-months later may show additional results.

Implications for Facilitating Portfolio Development

For those who do not experience a change in epistemic meaning perspective, it may be fruitful to explore ways to increase the likelihood of such change by working within the context of students' current order of mind. Erikson (2007) concluded her study by saying that "... these study results challenge educators to ask how transformational learning might be constructed within the potentials and limits of varying levels of developmental capacity across the lifespan" (p. 77). Kegan (1982) spoke of creating a culture that provides "confirmation, contradiction and continuity" (p. 258). Daloz (1999) similarly stated that mentors need to provide support, challenge and vision by acknowledging the "ecology of development" (p. 181). Attending to the learner's current order of mind, and the strengths and limitations of that order, is consistent with Kegan's assertion in *Learning As Transformation*: "... we will better discern the nature of learners' particular needs for transformational learning by better understanding not only their present epistemologies but the epistemological complexity of the present learning challenges they face in their lives" (Mezirow & Associates, 2000, p. 59).

This author recently identified a student not in this study whose epistemology was somewhere along the continuum of the socialized mind. She stated that, while she enjoys learning, she is primarily motivated to get her degree by her need for her parents' approval. How might one work with such a learner? Cranton (1994) would say finding ways to relinquish as much position power as possible was important. At the same time, to retain personal power based on expertise, trustworthiness, enthusiasm and conviction would also be important. This stance lays the groundwork for learner empowerment. This deliberate effort to alter the power dynamic may contribute to the learner's experience of being supported, as would the creation of a flexible structure and scaffolding with regard to course assignments, the expression of conviction in the learner's ability to be successful, appropriate self-disclosure, and letting the learner know that she is seen as a unique individual (Daloz, 1999). In addition, the educator needs to model these behaviors with the learner's peers to show how they might effectively mentor each other.

In addition, there is a need for some dissonance to stimulate significant learning. Carefully challenging the student to critically reflect upon her experience is necessary (Mezirow, 1993; Cranton, 1994; Daloz, 1999). She needs to be encouraged not only to demonstrate her knowledge but also to surface assumptions, explore alternative interpretations of events, and imagine alternative responses to the situations described (Brookfield, 1987). This should be supported through listening and gentle questioning.

The student may need to see her learning not as an endpoint but an ongoing process. This might be facilitated by self-disclosure that reveals that the educator is also on a lifelong learning path. Daloz (1999) described this in terms of providing a model, keeping traditions of knowledge and wisdom, offering developmental maps, suggesting new language or metaphors, and holding up a mirror so the learner can see her growth. The hope is that the student will eventually "own" her education and the learning she has acquired.

The above discussion indicates that one can create conditions under which they are more likely to occur. Specifically, educators might:

- encourage students to critically reflect on their experiences by posing questions such as the ones stated in the section above on research purpose and questions
- provide opportunities for peer review of each other's work and mutual mentoring
- acknowledge where the student is developmentally and carefully work within that context to promote growth
- avoid the use of position power, relying instead on personal power and expertise
- engage in and judiciously share one's own critical thinking processes and developmental path.

There is no guarantee that a student will have a change in meaning perspective or shift in her order of mind. Learning and growth are not narcissus bulbs in February that can be forced to bloom before their time. Daloz (1999) noted that this inability to “push” the student to greater learning or higher stages of development may be disappointing to some; he advised that it is “Better to recognize that we are only a part – however important – of a whole set of forces affecting the growth of our students” (p. 183). Nonetheless, creating approaches to the prior learning portfolio development process that encourage the possibility of significant developmental change may serve students in ways that more traditional methods of awarding credit for prior learning cannot.

Research Possibilities

A number of research ideas have been mentioned throughout this manuscript. These include conducting the above study using a larger and more diverse sample and perhaps extending the interval between portfolio completion and the second SOI. One might also investigate more deeply the role of the portfolio course instructor (whether faculty member and/or PLA assessor) and peers in facilitating transformative learning or development. And as noted by Travers, most of the current research on the possibilities of change are relatively small case studies (as cited in Harris, Breier, & Wihak, 2011, p. 273). There is a need for an exploration of how and whether these possibilities are realized across other PLA programs, between students in such programs and those who are not, and between students of different cultures. We need to learn more about who changes as a result of the portfolio development process and how and why they change. This knowledge can help us more fully develop the potential of PLA.

Summary

This paper explored the relationship between the UWW PLP process and constructive-developmental theory. The initial assumption that most respondents would be at the socialized order of mind and that the above processes would result in a dramatic change in epistemology proved untrue. Yet the pre- and post-subject-object interviews and questions regarding changes and their attribution yielded results that indicated that the PLP process may promote some change in epistemic meaning perspective for some students. Possible reasons for these results were explored and approaches to optimize learning and growth were described. Future research might consider what and how factors other than the PLP process (or similar effort) might influence transformative learning and epistemological development and why some learners may be more “ripe” for this kind of change than others.

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Notes

- ¹ The subject-object interview (SOI) allows the interviewer to take the perspective of the interviewee, especially with regard to understanding the interviewee’s ways of knowing or ability to organize and make meaning of experience.
- ² The names provided in this paper are pseudonyms.

References

- Belenky, M. F., Clinchy, B. M., Goldberger, N. R., & Tarule, J. M. (1997). *Women’s ways of knowing: The development of self, voice and mind*. New York, NY: Basic Books.
- Berger, J. G. (2006a). Adult development theory and executive coaching practice. In D.R. Stober, & A.M. Grant (Eds.), *Evidence-based coaching handbook* (pp. 77-102). Hoboken, NJ: John Wiley & Sons, Inc.

- Berger, J. G. (2006b). *Key concepts for understanding the work of Robert Kegan*. Atlanta, GA: Kenning Associates.
- Bridwell, S. D. (2012). A constructive-developmental perspective on the transformative learning of adults marginalized by race, class, and gender. *Adult Education Quarterly*, 63(2), 127-146.
- Brookfield, S. D. (1987). *Developing critical thinkers: Challenging adults to explore alternative ways of thinking and acting*. San Francisco, CA: Jossey-Bass.
- Brookfield, S. D. (2005). *The power of critical theory: Liberating adult learning and teaching*. San Francisco, CA: Jossey-Bass.
- Burris, J. K. (1997). *The adult undergraduate's experience of portfolio development: A multiple case study* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI Number 9803091)
- CAEL (Council for Adult and Experiential Learning). (2010, March). *Fueling the race to post-secondary success: A 48-institution study of prior learning assessment and adult student outcomes*. Chicago, IL: CAEL National Headquarters.
- CAEL (Council for Adult and Experiential Learning). (2014). *CAEL research brief – Holding tight or at arm's length*. Chicago, IL: CAEL National Headquarters.
- Conrad, D. (2008). Building knowledge through portfolio learning in prior learning assessment and recognition. *The Quarterly Review of Distance Education*, 9(2), 139-150.
- Cranton, P. (1994). *Understanding and promoting transformative learning: A guide for educators of adults*. San Francisco, CA: Jossey-Bass.
- Daloz, L. A. (1999). *Mentor: Guiding the journey of adult learners*. San Francisco, CA: Jossey-Bass.
- Erikson, D. M. (2007). A developmental re-forming of the phases of meaning in transformational learning. *Adult Education Quarterly*, 58(1), 61- 80.
- Fiddler, M., Marieneau, C., & Whitaker, U. (2006). *Assessing learning: Standards, principles and procedures* (2nd ed.). Dubuque, IA: Kendall Hunt Publishing Co.
- Guba, E. G., & Lincoln, Y. S. (1988). *Effective evaluation*. San Francisco, CA: Jossey-Bass.
- Hamer, J. (2010). Recognition of prior learning: Normative assessment or co-construction of preferred identities? *Australian Journal of Adult Learning*, 50(1), 100-115.
- Harris, J., Breier, M., & Wihak, C. (2011). *Researching the recognition of prior learning: International perspectives*. Leicester, UK: National Institute of Adult and Continuing Education.
- Jimenez, B. A. (2015). *Phenomenological research findings on adult learners' experiences with the portfolio process*. Paper presented at the Adult Education Research Conference, Manhattan, KS. Retrieved from <http://newprairiepress.org/cgi/viewcontent.cgi?article=1125&context=aerc>
- Kegan, R. (1982). *The evolving self: Problem and process in human development*. Cambridge, MA: Harvard University Press.
- Kegan, R. (1994). *In over our heads: The mental demands of modern life*. Cambridge, MA: Harvard University Press.
- Kegan, R. (1998). A developmental analysis of the gerontological curriculum. In J. Lomranz (Ed.), *Handbook of aging and mental health: An integrative approach* (pp. 197-216). New York, NY: Plenum.
- Kegan, R. (2000). What “form” transforms? A constructive-developmental approach to transformative learning. In J. Mezirow and Associates (Eds.), *Learning as transformation: Critical perspectives on a theory in progress* (pp. 35-70). San Francisco, CA: Jossey-Bass.
- Kegan, R., Broderick, M., Drago-Severson, E., Helsing, D., Popp, N., & Portnow, K. (Eds.). (2001, August). *Toward a “new pluralism” in the ABE/ESOL classroom: Teaching to multiple “cultures of mind”* (Research Monograph of the National Center for the Study of Adult Learning and Literacy, No. 19). Boston, MA: World Education.

- Kvale, S. (1996). *InterViews: An introduction to qualitative research interviewing*. Thousand Oaks, CA: Sage Publications.
- Lahey, L., Souvaine, E., Kegan, R., Goodman, R., & Feliz, S. (1988). *A guide to the subject-object interview: Its administration and interpretation*. Boston, MA: Harvard Graduate School of Education.
- Lamoreaux, A. (2005). *Adult learners' experience of change related to prior learning assessment* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI 3180108)
- Lamoreaux, A., & Taylor, K. (2005). *Prior learning assessment as transformative learning*. Retrieved from <http://ahea.org/files/pro2005lamoreaux.pdf>.
- Laske, O. E. (2011). *Measuring hidden dimensions: The art and science of fully engaging adults* (2nd ed.). Gloucester, MA: Interdevelopmental Institute Press.
- Baxter Magolda, M. B. (1992). *Knowing and reasoning in college: Gender-related patterns in students' intellectual development* (1st ed.). San Francisco, CA: Jossey-Bass.
- Merriam, S. B. (1988). *Case study research in education: A qualitative approach*. San Francisco, CA: Jossey-Bass Publishers.
- Merriam, S. B., Caffarella, R. S., & Baumgartner, L. (2007). *Learning in adulthood: A comprehensive guide* (5th ed.). San Francisco, CA: Jossey-Bass.
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco, CA: Jossey-Bass.
- Mezirow, J. (1993). *Transformative learning in higher education*. Workshop at Brock University, Ontario, Canada.
- Mezirow, J., & Associates. (2000). *Learning as transformation: Critical perspectives on a theory in progress*. San Francisco, CA: Jossey-Bass Publishers.
- Perry, W. G. (1970). *Intellectual and ethical development in the college years: A scheme*. San Francisco, CA: Jossey-Bass.
- Piaget, J. (1954). *The construction of reality in the child*. New York, NY: Basic Books.
- Sherman, A., Klein-Collins, B., & Palmer, I. (2012). *State policy approaches to support prior learning assessment: A resource guide for state leaders*. Retrieved from www.cael.org/pdfs/college-productivity-resource-guide2012
- Stevens, K., Gerber, D., & Hendra, R. (2010). Transformational learning through prior learning assessment. *Adult Education Quarterly*, 60(4), 385-404.
- Taylor, E. W. (2008, Fall). Transformative learning theory. *New Directions for Adult and Continuing Education*, 119(2008), 5-15.
- Travers, N. L. (2015). *Prior learning handbook (PLA) for the Northeast Resiliency Consortium*. Retrieved from https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwjzqvXnjuvKAhVFFj4KHfO3C2MQFggcMAA&url=http%3A%2F%2Fachievingthedream.org%2Fsystem%2Ffiles_force%2Fresources%2FPLA%2520Handbook%2520for%2520NRC.pdf%3Fdownload%3D1&usq=AFQjCNEYxHqzUao-YLOI09kjp5TASjS3Kw&sig2=1W4KnXJC9H8EZq8d_NcT2A&cad=rja
- York-Barr, J., Sommers, W. A., Ghere, G. S., & Montie, J. (2001). *Reflective practice to improve schools: An action guide for educators*. Thousand Oaks, CA: Corwin Press.
- Zucker, B. J., Johnson, C. C., & Flint, T. A. (1999). *Prior learning assessment: A guidebook to American institutional practices*. Dubuque, IA: Kendall/Hunt Publishing Co.