Road Map or Mosaic: Relationships among Learning, Context and Professional Practice

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Abstract: This qualitative interpretivist study analyzed the interrelationships among professional practice, the knowledge gained in continuing professional education programs, and the context of employment. Social workers, lawyers, adult educators and nurses participated in this study.

The intricate and dynamic relationship among learning, context, and professional work is one that has recently begun to be explored from a new perspective. Research in the transfer of knowledge (Broad & Newstrom, 1992), adoption of innovation (Hall & Loucks, 1981; Lockyer, 1991), and diffusion of innovation (Rogers, 1995) has laid the groundwork for the study of learning and context. Recently, researchers and program planners (Black & Schell, 1995; Eraut, 1994; Grzyb, 1997; Kozlowski, 1995) have begun to understand that professionals engage in an interactive process with the context of their practice and tend to combine elements of the context, information from continuing education, and experience in practice to construct their own individual knowledge base. The purpose of this paper is to describe a research study designed to further explore the connections professionals make between educational programs and the context of their practice.

Theoretical Framework

The interrelationships of three major concepts; knowledge, context, and professional practice were explored in this study. Knowledge, for the purpose of this study, was viewed as a social construction of information that occurred through a process of constructivist learning and perspective transformation.

Constructivists (Ausubel, 1986, Brunner, 1990; Novak, 1998; Novak & Gowin, 1984) believe that individuals create knowledge by linking new information with past experiences. Within a constructivist framework, the learner progressively differentiates concepts into more and more complex understandings and also reconciles abstract understanding with concepts garnered from previous experience. New knowledge is made meaningful by the ways in which the learner establishes connections among knowledge learned, previous experiences, and the context in which the learner finds themselves. Thus, constructivists believe that learning is a process of probing deeply the meaning of experiences in our lives and developing an understanding of how these experience shape understanding. Learning activities, then, are designed to foster an integration of thinking, feeling and acting while helping participants to learn how to learn (Novak & Gowin, 1984).

Learning in the context of professional practice is also informed by the growing body of work in the area of situated cognition (Brown, Collins, & Duguid, 1989; Lave & Wenger, 1991; Wilson, 1993). Situated cognition can be conceptualized as having four interrelated learning aspects: (1) learning that is situated in the context of authentic practice, (2) transfer limited to similar situations, (3) learning as a social phenomenon, and (4) learning that relies on use of prior knowledge (Black & Schell, 1995). In this view, the authentic “activity in which knowledge is developed and deployed ... is not separable from, or ancillary to, learning and cognition. Nor is it neutral. Rather, it is an integral part of what is learned” (Brown et al., 1989, p. 32).

Transformative learning (Mezirow, 1990, 1991, 1994, 1997) expands our understanding of constructing knowledge by defining learning as a critically reflective process where the learner ultimately reflects on assumptions that frame previous understandings and determines whether those assumptions are still valid in the learner’s present situation. Adults learn within this framework by adding to old meaning schemes, acquiring new meaning schemes, transforming meaning schemes, or transforming perspectives. According to Mezirow (1997), “a significant personal transformation involving subjective reframing, that is, transforming one’s own frame of reference, often occurs in response to a disorienting dilemma through a three-part process:
critical reflection on one’s own assumption, discourse to validate the critically reflective insight, and action” (p. 60).

The issues in the relationship of context to professional practice are particularly important in today’s environment because professionals are often considered employees of organizations rather than free, autonomous decision-makers (McGuire, 1993). Grzybk et al. (1997) point out that these changing conditions necessitate a deeper understanding of organizational professions, the impact of bureaucracy, and changing organizational dynamics on professional work.

To provide a framework for examining the context of professional practice, Bolman and Deal’s (1997) framework was selected. Bolman and Deal (1997) demonstrated that organizations can be viewed through four different lenses or frames, including the structural, human resources, political, and symbolic frame. The structural frame draws on concepts from sociology and emphasizes formal roles, defined relationships, and structures that fit the organizational environment and technology. Within the human resources frame it is believed that organizations have individuals with needs and feelings that must be taken into account so that individuals can learn, grow, and change. The political frame analyzes the organization as groups competing for power and resources. Finally, the symbolic frame (similar to organizational culture) abandons rationality and sees organizations as tribes with cultures propelled by ceremonies, stories, heroes, and myths. This framework was selected for the research reported here, because it provides different lenses by which the researchers can examine and analyze the context in which professionals conduct their practice.

**Research Questions**

The following research questions were advanced to guide this inquiry.

1. What makes knowledge meaningful in the context of professional practice?
2. How is the construction of knowledge affected by the different frames (structural, political, human relations, symbolic) of the context in which professionals practice?

**Methodology**

To analyze these research questions, individuals from four different professions were interviewed 9-24 months following their attendance at a CPE program. A purposive sample (Patton, 1990) of 20 social workers, 20 lawyers, 20 adult educators and 20 nurses was recruited.

**Data Collection**

Data in this study were collected through semi-structured interviews and document analysis. Data were collected from participants who had attended a one or two day CPE program on topics that were pertinent to their particular profession. Following a document review of the CPE planning information, participants were then interviewed to determine what they had learned or not learned, how they incorporated or did not incorporate that information into their practice, and what aspects of their practice they determined to be significant in fostering their learning. Participants were also questioned about the context of their practice, including its organizational structure, human resources, politics, and culture.

**Data Analysis**

Verbatim transcripts were created from the tape-recorded interviews. Subsequently, three data analysis strategies were employed. First, the researchers created a concept map (Novak, 1998) that depicted the connections the study participant described among learning, context, and professional practice. The maps were returned to study participants for their review. Study participants were asked to determine if the maps accurately represented the meaning they portrayed in the interview. Second, a category system was created and all data were coded within categories. The categories were used to identify thematic areas articulated by participants. Third, a system of matrices (Miles & Huberman, 1994) was created to examine what different groups of participants expressed about each of the research questions under study. The combination of these three data analysis strategies allowed the researchers to examine connections between concepts under study, to compare and contrast different groups in the sample, and to examine both individual and group findings related to the different research questions.

**Results**

**Knowledge and Professional Practice**

Study results indicate that professionals who attended CPE programs used this new information to
continually construct and reconstruct their knowledge base. Yet, each profession described the process used to construct knowledge differently. Social workers framed their understanding and construction of knowledge from CPE programs through their advocacy role. Social workers described themselves as "stewards" of the information and explained how they actively sought out ways they could help their clients by using information learned in CPE.

I went to that session thinking about the future more and wanting to know what was going to be happening with the social work profession in the near future especially . . . with the W2. I guess it was a broader thing, a more political interest that I had, how could I use what I learned to help defend my clients needs in the system.

Lawyers, on the other hand, saw CPE as providing a “road map” for their practice. During attendance at a CPE program, lawyers would often create their own individual ways to link new legal information to the cases on which they were currently working by developing note taking or filing systems. For example, one lawyer indicated:

I had represented a guy who had custody of his children but he owed support from 16 years ago . . . I heard something in the seminar that made me think there is some ammunition here that I could use in a motion for the court to reconsider. So I jotted that down and made sure to include it in his file and used it when I filed the motion.

Adult educators, provided yet another view on knowledge development for professional practice. Adult educators indicated that from attendance at CPE programs they would often get one idea that was the “spark for a creative process”. This spark initiated a process of connecting the new information to other ideas and experiences. Yet, adult educators were different from other professions, in that they felt sharing this creative process was part of their knowledge construction. Adult educators described how they often took on the role of “hummingbird” in that they felt obligated to take this new information and “drop a little bit here and there” with different groups. Adult educators indicated that this sharing process was vital to their knowledge construction.

Finally, nurses described how they linked client needs with new information from CPE so that the entire knowledge base became integrated. This knowledge base functioned more like a web of information that nurses would draw on when presented with new clients. Consider the nurse who described this process as follows.

I think of it more like creating mosaics. I mean, you have all these little pieces that come from all over and in and of themselves they don’t mean much . . . but, I take little pieces of what I learn from many places and put them together until I have my own picture.

In summary, each profession indicated that knowledge became meaningful through a process they used to link the information with their practice. Because of their advocacy role social workers saw themselves as stewards of information, conversely, lawyers described the CPE process as a road map for their practice, adult educators explained how they shared new ideas as part of the knowledge construction process, and nurses saw themselves as creating mosaics.

As indicated previously, constructivist learning theory can help us understand how professionals acquire knowledge, how they make use of their experiences and how they learn through their practice. But the results of this study indicated that there is another level of learning that goes beyond what we can understand from constructivist frameworks. Professionals described how they learned topics in educational programs only to have their ideas on those topics changed in the context of practice. In other words, these encounters were as important in transforming professionals’ perspectives as was the knowledge acquired in CPE courses. For example, a social worker in this study described how her understanding of resistance in working with involuntary clients changed her views on the connections between social work and politics. She indicated that her basic education “labeled people as resistant.” She explained the impact of her practice on this perspective:

When somebody comes to you with a problem, I learned that you don’t have to spend as much time fixing that person as you do fixing the things around them in the environment. If you listen, you know it is not so much resistance; but it’s racism,
it’s poverty. I learned to reconceptualize resistance and focus not so much on the individual in a therapeutic sense, but to focus on the system, and to be an advocate at the system level.

In another example, a lawyer in this study indicated how his views on dealing with divorce cases had changed. He indicated that during his initial education process he had learned to be very aggressive in assuring financial security for his clients. He explained that after dealing with many divorce cases his perspective changed.

When I first started practicing, I would become very aggressive in divorce cases about dividing up assets. That was what I learned, I made sure that I evaluated assets to maximize my clients side of the ledger. . . When I look at things now. . . there are other more important things such as preserving relationships with the former spouse and children, such as peace of mind, such as not spending so much money on attorney fees. . .

This lawyer indicated that he had constructed a new understanding of divorce outcomes and shifted his practice from a focus on the financial aspects, to a focus on the human aspects of the process.

Adult educators also changed their perspective following significant interactions with clients. This adult educator explained how she had learned to do instructional planning in her graduate school experience, only to have those ideas changed in her practice.

I went into that experience with some preconceived notions about people who can’t read as being uneducated and unable to do many things. But this man was so interesting, we would have wonderful discussions. . . He had a job, and was able to negotiate his world and nobody at work knew he was illiterate. He wanted to learn to read so he could drive a car, so he could find a better job, so he could read the newspaper. He loved knowing what was going on in the world. When we talked I learned many lessons from him. I was teaching him how to read, but he was teaching me about life.

This adult educator changed her practice based on a new understanding and respect for the learner, indicating that to her education was more than instructional plans and program, it was about the two-way relationship established with the learner.

Finally, a nurse in this study described how she saw herself as a relatively good communicator. She had learned communication theory in her basic preparatory program, reviewed it in CPE programs and practiced the skill with her clients while doing assessments, interviews and treatments. When she worked with a client who was dying, however, this client taught her what it meant to communicate. Her understanding of communication shifted from saying the right thing, to being available on the client’s terms.

My assumption was that if I said the right words, I was communicating well. After this experience I recognized that I was basing my actions on a view of communication that was not really accurate in my practice. I now believe that communication is about presence, caring and time, not just words.

In this example, the professional learned by constructing an understanding of the concept of communication and by changing her perspective and assumptions about what communication meant following a significant practice experience. Thus, a major component of how knowledge becomes meaningful in professional practice is determined by how the professionals’ perspectives change following client interactions.

Context

The complex process of knowledge construction and transformation described above occurred in a particular practice context as well. So not only did the content of the CPE program, and the professional practice shape the construction of knowledge but the context in which professionals worked added another level of complexity to the process.

Structural frame. Each of the four professions, lawyers, nurses, adult educators and social workers described the impact of the structural frame in a unique way. Lawyers, for the most part, indicated that the structural frame had little impact on their use of knowledge. Lawyers indicated that because of the autonomous nature of their practice, if they learned new information that they wanted to use with a client, they did so with very little concern about the structure of the firm. Nurses, on the other hand described the structure of their organizations as a “hurdle”, and indicated that to use new infor-
information in their practice they often had to find creative ways to go around the organizational structure. Social workers seemed to feel that the use of new information that would benefit their client was an individual responsibility and they felt obligated not to let the structure of the organization get in the way. Adult educators expressed two different views on the structure of their organizations. When an adult educator was in the role of direct teaching, the structure of the organization did not impact how they used knowledge from CPE programs. However, if an adult educator was in an administrative role in their organization, then they described how they had to be much more aware of the organizational structure.

*Human resources frame.* All four professions indicated that other people in the organization were for the most part encouraging and supportive to using new information in their practice. Nurses, social workers, and adult educators indicated that their “bosses and colleagues” were usually open to new ideas and willing to try new things, as long as “the ideas weren’t too far out”. Lawyers, however, were often in individual and solo practices, as a result, the human resources issues affected them differently. Lawyers indicated that they often had to seek out other people so that they had a colleague to talk with about new ideas. Lawyers indicated that people they worked with did not get in the way of using new information, but rather the issue was not having enough easily accessible colleagues with whom to talk. Many lawyers in this study developed informal colleague networks of individuals with whom they could interact. Sometimes these were infrequent lunch or breakfast groups that met when an issue arose and other times they were structured groups that met on a routine basis. The interesting finding here was that these were groups created for the express purpose of sharing ideas in practice, but these groups were created outside of a CPE mechanism.

*Political frame.* In each of the professions interviewed, the political frame was used in a different manner. Lawyers seemed to ignore the political frame and incorporated whatever information they needed in their practice. Social workers were well aware of the political frame and used information from CPE programs in what they saw as their advocacy role. Social workers expressed that their role as an advocate was political and as such, they felt it imperative that they not only understand the politics of the contexts in which they worked, but that they be able to work in the political realm to help meet their clients’ needs. In contrast, nurses would literally screen out information from CPE programs if they believed the political context would prevent its use. Nurses indicated that they would not even share information from CPE programs if they felt they did not have the power, money or time to use the information. Adult educators seemed to describe the political issues of the organization as mostly time and resources. Adult educators would describe how lack of time, staffing and people would often hinder their using new information from CPE programs.

*Symbolic frame.* For nurses, adult educators and social workers it appeared that the political issues of their practice seemed to define the symbolic frame in many ways. The issues of gender, power, change, money and time all initially arose from the political frame but became imbedded in the organization as part of the symbolic frame. So for nurses, adult educators and social workers there did not seem to be a clear distinction between these frames. Lawyers described one element of the symbolic frame that did have an impact on their use of knowledge. Lawyers described how their work was set within an adversarial system and that their use of knowledge was often done as a mechanism to “defeat the other side” or to “win the case”.

**Implications for Practice and Research in Adult Education**

This study raises a number of questions and implications for adult education specifically, in the area of continuing professional education. First, it suggests a major research question in the field of continuing professional education: Is application of knowledge an outcome of continuing education or part of the knowledge construction process?

Second, this study suggests implications for the practice of CPE. It is clear in the study results that knowledge, context and professional practice interact to foster a process of constructing knowledge and using information. Yet, most CPE programs are created on the premise that simply providing information in an educational context will impact practice. What this implies is that CPE providers need to be much more creative in employing teaching and learning strategies that foster this complicated knowledge construction process. In other words, “the unheralded importance of activity and encultu-
ration to learning suggests that much common educational practice is the victim of an inadequate epistemology” (Brown, Collins, & Duguid, 1989, p. 41). As professionals continue to be integrated into organizations the linkages between context and practice need to understood, defined and analyzed so that learning and professional practice can continue to grow in these new contexts.

References