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Instructional designers' observations about identity, communities of practice and change agency

Richard A. Schwier

University of Saskatchewan

Katy Campbell

University of Alberta

Richard Kenny

University of British Columbia

We presume that models and theory in instructional design inform professional practice, but theory has not been consistently built from the professional experiences of instructional designers. This study draws on the observations of five instructional designers who discuss their professional identities, their communities of practice and their roles as agents of social and institutional change. This study is embedded in two theoretical positions: instructional design as a social construct that is expressed in professional communities of practice, and critical pedagogy, in which designers act as agents of social change.

Introduction

Instructional design is richly informed by theory, and much of the theory is practical and applied. Instructional designers have been trained in the theoretical underpinnings of their practice, and they use theory to inform their work. But much of the extensive work describing theoretical models of instructional design (ID) has not been drawn from the practice of the instructional designer and, consequently, instructional design theory is not grounded in practice. It is important to draw on the professional experience of instructional designers, their personal understanding of and values related to learning with technology, and the relation of these to their practice.

The aim of the paper is to understand the roles played by instructional designers as agents of social change in higher education. This study is a preliminary investigation of the professional identities of instructional designers and their communities of practice.

Accordingly, the study had three principal objectives, stated here as key questions:

- How do instructional designers describe their professional identities; that is, where do instructional designers draw their identities?
- Where do designers find communities of practice, and how do instructional designers participate in communities of practice?
- How do instructional designers describe their roles as agents of social change and transformation?

Context and literature informing the study

This study is embedded in two theoretical positions: instructional design as a social construct that is expressed in professional communities of practice, and critical pedagogy, in which designers act as agents of social change.

Context

A cultural shift has been occurring over the past decade in education and instructional design – a shift towards environments and approaches based on the ideas of social constructivism. In this world view, learning is situated in rich contexts, and knowledge is constructed in communities of practice through social interactions. Cobb (1996) argues that knowledge is not held objectively, but is unique, wholly subjective, and passed on by establishing common ground between the knower and the learner. This common ground must embrace interests and personal values, which requires a sharing at both the socio-cultural and the cognitive levels (Ewing, Dowling, & Coutts, 1998, p. 10). Constructivists are interested in prior experience, but prior experience that is shared, through conversation, negotiation, and construction of new knowledge products. In other words, an individual's (designer's) practice, to which self reflection is critical, will reflect his or her values and belief structures, understandings, prior experiences, construction of new knowledge through social interaction, and negotiation within professional communities of practice.

Communities of practice

The theoretical grounding for this study resides in the literature of communities of practice. We suggest that understanding communities of practice is central to the notion of a social constructivist view of the practice of instructional design. There is a rich and growing theoretical literature that explores essential characteristics of communities of practice (Alani, Dasmahapatra, O'Hara, & Shadbolt, 2003; Palloff & Pratt, 1999; Schwen, et al. 1998; Schwier, 2001; Wenger, 1998). We presume

instructional designers use communities of practice to learn, question, critically analyse, reflect on, and negotiate their understanding of this complex field of study. At the same time, we know very little about instructional designers' communities of practice.

Features of communities of practice

Kowch and Schwier (1997) suggested that communities are characterised by negotiation, intimacy, commitment and engagement. Communities create dialog among members "across the boundaries of formal power and status." (Heckscher, 1994, p. 142). They also achieve intimacy with other members that satisfies personal needs through active engagement. Intimacy and engagement engender a level of commitment to the community and its members, and this commitment is often expressed in an alignment of values and knowledge (Wenger, 1998).

Table 1: Elements of communities of practice

Element	Description
Historicity	Communities are stronger when they share history and culture.
Identity	Communities foster a sense of shared identity.
Mutuality	Communities spring from, and are maintained by interdependence and reciprocity.
Plurality	Communities draw much of their vitality from "intermediate associations" such as families, churches, and other peripheral groups.
Autonomy	Within the emphasis on group identity, it is important that communities respect and protect individual identity.
Participation	Social participation in the community, especially participation that promotes self determination supports autonomy and sustains the community.
Integration	All of the above elements depend on supportive norms, beliefs and practices.
Future	Learning communities "open trajectories of participation that place engagement in its practice in the context of a valued future' (Wenger, 1998, p.215).
Technology	In virtual communities of practice, technology facilitates a development of community, but also inhibits its growth.
Learning	Learning is a central element of communities of practice, although the nature of the learning can be broadly defined and contextual.

Elements of community

Communities, whether they are expressed virtually or interpersonally, share some common characteristics. Selznik (1996) and Schwier (2001) identified a number of theoretical elements shared by communities (see Table 1). But these elements are theoretical, and to date have not been confirmed to exist in actual communities of practice. This study begins the task of exploring whether communities of practice in instructional design, whether interpersonal or virtual, actually manifest these characteristics. Is it possible that ID communities of practice emphasise some of these elements and ignore others? Is it also possible that they exhibit unique elements that are not included in this list?

Knowledge management and organisational change

The current interest in communities of practice grew out of an area of study known as knowledge management. Knowledge management is a term used primarily in corporate settings, to describe approaches to managing intellectual capital, social capital and other learning resources in organisations (Sumner, 1999; Takeuchi, 2001). Definitions of knowledge management abound, given its relatively recent appearance; the term was apparently coined by Karl Wiig at a 1986 conference sponsored by the United Nations International Labor Organisation (Liebowitz, 1999). Knowledge management is relatively new to educational technology generally, but knowledge management systems have direct application to instructional design (Spector, 2002).

Recent writers suggest that knowledge management isn't even an adequate term for what is happening in most organisations, and they argue that most knowledge management projects are actually limited to information management (Kimble & Hildreth, 2002; Wilson, 2002). This is because they concentrate on coding, storing and retrieving information and fail to consider people, and how they engage in communities of practice. Our use of knowledge management to inform our understanding of communities of practice is based on the idea that communities of practice develop both intellectual and social resources — what the knowledge management community would call intellectual and social capital. Communities of practice are viewed as dynamic environments where knowledge is created and nourished. Because “the production and use of knowledge is deeply entwined with social phenomena” (Erickson & Kellogg, 2002, p. 329), we suggest that the knowledge that communities develop, and the processes they use to create the knowledge, are inseparable.

Intellectual capital. Intellectual capital refers to the storehouse of knowledge that resides in a community or organisation, and it is made up of explicit and tacit knowledge. Explicit knowledge is formally articulated, public,

shared and is relatively easy to identify. In instructional design it includes our knowledge of instructional models, cognitive design principles, instructional theory and the like. Tacit knowledge, by comparison, is not formally articulated. It is privately held by members of the community, and is difficult to articulate and is not necessarily shared. In instructional design, tacit knowledge includes approaches designers have learned by experience or particular skills they have developed that aren't part of the public professional discourse.

It is one goal of knowledge management projects to transform tacit knowledge into explicit knowledge so that it can be shared and used in the larger community (Kulki & Kosonen, 2001; McInerney, 2002; Schwen, Kalman, Hara & Kisling, 1998). In some cases, tacit knowledge is held subconsciously — community members may not recognise knowledge they hold as significant. It is possible that instructional designers have learned a great deal of craft knowledge that is never shared with the larger ID community because it is so deeply held and dynamic, and because there are few organised channels for sharing this kind of knowledge (Hill et al., in press; McInerney, 2002).

Social capital. Brown and Duguid (1991) and later, Hung and Nichani (2002) emphasised that learner engagement is vital for learning to take place, and that there are three principal ways in which learning takes place in a community: event driven learning; socially driven learning; and identity driven learning. If social processes are at the centre of how communities of practice operate, then successful communities of practice need to be sensitive to visibility, awareness, accountability, language differences and culture, and they need to emphasise people over technology (Erickson & Kellog, 2002; Millen, Fontaine & Muller, 2002; Wenger, McDermott & Snyder, 2002). Systems need to promote engagement among participants, and promote the co-construction of knowledge, and this extends well beyond the information management and traditional approaches used in most “quasi” communities (Hung & Nichani, 2002; Nikols, 2003). We suggest that it includes promoting the development of social capital in the organisation.

Social capital is defined in different ways, but the definitions share common themes (Daniel, McCalla & Schwier, 2002). Social capital is the glue that holds a community of practice together. It includes the stock of active connections among people, and it involves trust, mutual understanding, respect and shared values and behaviours within a community. It binds people as members of human networks and communities and makes cooperative action possible (Cohen & Prusak 2001). Social capital is a residual side effect of social interaction within a community and it facilitates future interactions among participants.

Some scholars have gone so far as to attempt to create measures of social capital (e.g., Fukuyama, 1999), but the resultant formulae are of theoretical, not practical, interest. Employing a less rigorous but more useful approach, Lessor and Storck (2001) stated that communities of practice serve as engines for the development of social capital. They identified four performance outcomes that were associated with communities of practice and that were linked to social capital: connections among practitioners who may or may not be co-located; relationships that build trust and mutual obligation; shared language; and, shared context.

Social change agency and ID

A knowledge management view of instructional design places designers in the role of knowledge managers in higher education. They routinely work with teams made up of clients and a variety of professionals to uncover tacit knowledge and make it explicit for the purpose of training and education.

On a larger scale, we believe that instructional designers are actually engaging in a process of professional and personal transformation that has the potential to transform the institution. Rogoff (1990) argues that participation in learning hinges on communication between people in a group, in terms of shared understanding or shared thinking. Glaser (1991), Ewing et al. (1998), and others (cf. Jonassen et al., 1997; Kanuka and Anderson, 1998) believe that learning is most effective if it is embedded in social experience, and if it is situated in authentic problem solving contexts entailing cognitive demands relevant for coping with real life situations, and occurs through social intercourse. The instructional design process, in which designers and others develop new ideas and understandings through conversation, may be a form of cultural learning or collaborative learning. These collaborations, however formed, may express themselves as communities of practice.

Through the multi-faceted lens of professional practice, communities of practice, and knowledge management, we hope to gain insight into the roles played by instructional designers as agents of social change in institutions of higher education.

Research protocol

This study was constructed as a disciplined inquiry using a grounded theory approach, and the research protocol was designed to actively engage designers in the research process. Grounded theory methodology (Strauss & Corbin, 1997; 1998) was used in this study because we acknowledged:

1. The need to ground the theory in data in order to fully explain the complexity and variability of the phenomena.
2. That instructional designers take an active role in responding to problematic situations;
3. That instructional designers act on the basis of meaning.
4. That meaning is defined and redefined through interaction.
5. A sensitivity to the evolving and unfolding nature of events (process).
6. The importance of interrelationships among conditions (structure), responses (process), and consequences.

While an “emergent fit” strategy was used in this study, the theoretical perspectives of communities of practice and knowledge management constituted a starting place for exploring the process of finding meaning. Therefore, as the instructional designers’ stories unfolded, the emerging themes were compared and contrasted with the literature using constant comparative analysis, and caution was taken to ensure that theoretical views were not imposed on the data.

Sources of data included interviews with instructional designers, email, and group meetings and/or focus groups. Primary data were gathered through semi-structured interviews with five individual instructional designers from four different organisations, each of which lasted from one to three hours in duration, follow up conversations using email, and from a focus group of eight instructional designers at one organisation, that lasted approximately one hour. One participant was unavailable for a face to face interview, so that interview was conducted via email. Initial interview questions were developed based on variables drawn from literature on communities of practice and knowledge management. Additional questions were developed using the language of participants to add detail and clarify their meanings.

Participants were sent interview questions ahead of time, but participants were not required to confine themselves to these questions, nor were they required to address all of them. Participants were encouraged to digress in directions of their own choosing and to ignore questions that were not important to their experiences. The goal was to provide structure to verify and elaborate on known variables associated with professional identity and communities of practice, while at the same time maximising each participant’s control over her or his own story. Interviews were conducted conversationally, and the intention was to explore the questions that had the most meaning to the participants, and that they were able to comment on with the most authority. In other words, we were more interested in the directions that the participants steered the conversations than we were in a prescribed set of questions. Our interview focused on three areas:

1. Personal history as an instructional design professional.
2. How instructional designers practise their craft, including their descriptions of their explicit knowledge, tacit knowledge and communities of practice.
3. How the practice of instructional design promotes personal, social or institutional change.

Transcripts of the interviews were sent to the participants, and they were invited to amend the transcripts in any way they saw fit in order to qualify, clarify or expand on the conversations. Amended transcripts were coded and analysed using *Atlas* software, and as themes emerged, they were used to construct networks of meaning. Coding and analysis were conducted by one member of the research team, and all files were checked by the other two members of the research team for accuracy and reasonableness. We did not conduct formal reliability tests on the coding (cf. Rourke, Anderson, Garrison & Archer, 2000), as this would not be consistent with the goals of the study at this stage. We were not testing theory, but rather, we were trying to uncover ideas and perspectives that would inform later studies and help us build theory.

Constant comparison (Strauss & Corbin, 1997; 1998) was used to discover the central categories that accounted for most of the variation in the data and that integrated the data, codes, and analytic and process memos accumulated during the course of the study. This involved moving back and forth among data sets to discover patterns and to determine the presence, variation, or absence of patterns. As core categories emerged from the data, they were compared to the literature for the purpose of clarifying, extending or refuting previously identified theoretical constructs (Van Neste-Kenny, 2003). This process enabled the principal investigator to compare the degree of fit between study findings and other contexts, settings, and groups (Guba, 1981).

Participants were selected who had at least three years of experience as instructional designers, and who were employed full time as instructional designers in post-secondary education institutions. Participants included two women and three men; three were Canadians (one was working at a university in the United States) and two were Australians. One of the Canadians specialised in usability testing, and his current instructional design role was restricted to that aspect of instructional design. Four of the five participants had held more than one instructional design position during their careers, and three of the participants had significant experience in the corporate sector in addition to the educational sector. One participant held a PhD degree and the other four held Master's degrees. Three were pursuing doctoral level studies in instructional design and technology related programs.

Results and discussion

The research questions defined three areas of investigation, and they were used to help organise semantic networks from the data. Themes emerged from the data, and they created three large clusters for analysis: identity and instructional design, instructional design communities of practice, and social change agency of instructional designers.

Identity and instructional design

Identity is an important part of any community of practice. It embraces a sense of shared purpose. A successful community needs to have boundaries that define its recognised focus. Sometimes the moniker "instructional designer" is adopted by an organisation before that identity is defined, as organisations create the positions and anoint employees with the label. We speculated that people create identities from their experience and background, and in professional communities they draw on institutional culture, professional literature, professional organisations and reflection to understand the boundaries of their practice.

Some of that is fascinating, and now we talk about ourselves as being instructional designers all the time, where I was a project manager when I came here, and I guess I was a manager before that, and a teacher, and a writer. It's only recently that we've talked about being instructional designers, and I'm kind of excited that there's a whole lot of interest and talk about that. (Deborah:18)

The participants¹ made several comments that suggested that ID is an area struggling for identity, a positive image and respect. First of all, there is the issue of whether ID is objectivist and hard nosed. Add to this the expressed concern that ID is expensive and a process that actually slows down organisational efforts to produce resources (Deborah:63; Deborah:52; Eric:41) and worry from instructional designers about the importance or consistency of their contributions (Allen:72; Allen:80; Barbara:45). Does this mean that IDers don't understand the types of contributions they make? No. Instructional designers were able to identify places where they had a personal impact on social change (Deborah:54), or where they brought particular skills or strategies to bear on projects (Eric:37; Allen:82; Allen:83). But instructional designers also recognise that their worth may be misunderstood, and that they will need to be able to respond to challenges from clients about their value.

¹ Pseudonyms were used in the document. Quotations identified during coding were numbered sequentially, and the number is included with the name for each quote. So the number following each quote can be used to identify its relative position in an interview. For example, Deborah: 53 refers to the 53rd coded quotation from Deborah during her interview.

Just ask yourself, what is it that you actually bring to the table? You make an effort not to be skilled in the technologies themselves because you suggest that by doing so, you're going to become just another programmer, or you won't be able to maintain the perspective that you have currently. But, in the eyes of the teams you're working with, what's their perception of your value? What are your skills in their eyes? And so there are a lot of people saying that you really do need to develop more than what you do have in your area. (Allen:79)

Doors to the profession

There seem to be several paths people can take into the profession, only one of which is through professional programs, and this may contribute to the disquiet about identity. An examination of the quotations coded to "experience" reveals that experience is a path to training and the profession as often as it happens the other way around. ID is a profession that doesn't require credentials to practise, and there is no impediment to gaining experience. People come to the profession from many different walks of life, and are "hooked" by the experience of designing something successfully. This often leads them to pursue professional training to understand the processes underlying successful performance.

My experience is not typical instructional designer experience... Up until, the last months I was at [an institution of higher education], I was the only instructional designer who had a teaching background. The others had come through a whole series of routes to being instructional designers. I was working with a physicist, a classicist, a creative writer, a television producer, a mathematician and, oh yes, there was one other person with a teaching background. (Barbara:17)

Teaching background seems to be particularly influential. Several participants commented on the importance of teaching background to the practice of ID, that it lends a valuable perspective to the practice of ID. There is a hint that a teaching background, and perhaps other careers, are super-ordinate to ID theory or experience, that teaching background not only informs the practice of ID, it is somehow more important.

It is also interesting to note the tone of the statement "...it wasn't just some instructional design theory, and it wasn't just based on instructional design experience." The ID identity is wrapped up in value statements about previous positions or careers. In fact, other instructional designers on the team were identified by their earlier roles, and there is the implication that these positions impinged importantly on their identities as instructional designers.

But it is just as significant that teaching experience alone wasn't seen as adequate preparation for instructional design. Other experiences — as a

student, in learning theory, with experienced designers — are all seen as contributing to ID performance.

I also had to remind myself that my teaching practice had been classroom based. Now I was creating distance education materials and new considerations were involved. My experiences as a student in a variety of distance education courses, both print based and online courses, was helpful, but it was not enough. I needed to carefully consider the application of instructional design theory to distributed learning praxis. I needed to synthesise a wide range of experiences and educational considerations in order to make decisions. I often felt the need to vet these decisions with experienced designers; however, I also needed to prove that I was capable of being a designer in my own right. Finding an appropriate balance was a challenge. (Barbara:18)

Institutional culture

Part of instructional designer's identity is embedded in the context of the institutional culture in which ID is practiced. The culture of an institution carries with it very strong embedded values and a unique identity. Three of the participants worked in university settings and three had worked or still worked in organisations devoted to designing instructional courses and resources for open learning. One person had recently left an open learning organisation and moved to a university setting. It was quite apparent that the cultures of the organisations were influential, and that members of the organisations thought a great deal about the implications of those cultures on the practice of instructional design.

Barbara expressed it clearly.

I think every institution has an embedded culture. That culture thrives on shared values and shared perspectives of the world. An open learning perspective of the world carries with it a different set of assumptions than a traditional university carries. (Barbara:5)

How do the cultures differ? For one thing, the open learning organisations seem to pay much closer attention to the audiences, perhaps because they are viewed as customers of their products. (Barbara:10) By comparison, university settings seem to emphasise content in design. (Barbara:12) These instructional designers also reported finding a more business like, project centred ethic at work in the open learning settings. (Barbara:32) This was evidenced in comments about the close attention paid to project deadlines, the union mentality about work hours, and the efficiency of housing production and instructional support services in the same building as instructional design.

University settings were viewed quite differently. Services were seen as more distributed and separated at the universities described by these

participants. University culture was viewed as no less demanding, but the atmosphere and expectations were quite different. Universities seemed to adopt a more contemplative, scholarly approach to instructional design, and expectations emphasised research and best practice. (Barbara:33; Eric:57) Reading these accounts, it is possible to conclude that university life is leisurely and casual, whereas open learning settings are more corporate and demanding. This would be misleading. The workload demands were seen as roughly equivalent, but the time commitment was interpreted differently in the two settings. Open learning organisations ran on strict workday schedules (Barbara:34), whereas universities had little concern or respect for the difference between personal and professional time. (Barbara:37) But the most important conclusion to be drawn from this is not the direct comparison of a business model and university model of ID cultures.

It is appropriate to reiterate that these observations are highly contextual, as are all of the observations in this report. There is no single university structure, nor is there any single business culture that can be generalised. Nevertheless, the comments harvested here point out very eloquently that different ID cultures do exist in various organisations, and these cultures influence the communities of practice.

ID professional organisations, literature and reflection

Professional organisations play an important role in nourishing ID communities of practice, but it appears to be an indirect relationship. By sponsoring conferences, professional organisations contribute to designers' communities of practice. When asked about professional organisations and conferences, participants indicated that they were important for making personal contact with individuals, often for the purpose of making virtual contact with them later. But as important as face to face contact is, conference attendance is sporadic due to the high cost of travel and attendance. And to foreshadow an observation we will elaborate later, professional organisations are formal structures, whereas ID communities of practice are largely informal.

So this whole conference thing again. I'm convinced it's not so much for sharing ideas as it is for pressing the flesh, or shaking someone's hand and saying hello so when you do talk with them electronically, that there's some connection there. (Allen:24)

When asked about ID literature reviewed regularly, participants mentioned web based resources and references. One mentioned two professional journals, but it is apparent that these designers more often look to the web for professional guidance. Formal, printed literature held no particular prominence in the immediate attention of these designers as

a more legitimate source of trustworthy advice than web based resources. But these designers use professional literature and resources, often to reflect on projects underway.

So, if I'm reading something from a professional journal, and somebody's come up with a new way of doing things, that will cause me to reflect on my own project. (Eric:18)

Reflection informs the professional identities of instructional designers, and consequently their communities of practice. Although nobody mentioned using a formal approach to reflection such as journaling, most suggested that they engaged informally and regularly in professional reflection. There was also mention of group events and professional development opportunities that stimulated reflection.

I tend to think that that whole reflective practitioner model is something I've experienced, right from my first career as a teacher, where you find yourself trying something out, based on either your past experience or something you've investigated and made a conscious decision to try. And then you'd make your observations, either formally or informally about how that turned out, and make your adjustments - so, either, you've got a chance right away to implement some changes, or you'd sort of tuck it away and think the next time I do this I'm going to try this. (Barbara:40)

In the final analysis, instructional designers seem to have a clear idea of who they are and a great deal of respect for what they can contribute. That clarity and respect is not shared by the organisations they serve. Instructional designers come from many professional walks of life, and there doesn't seem to be a central rallying post for them. They appear to be very competent people caught up in doing a good job. They attend conferences, read literature (mostly on the web), and reflect informally on their performance and how to improve it. But the focus is close to the ground, for the most part, not in the clouds.

Instructional design communities of practice

Collaboration with other designers is a key element in developing a community of practice, and before starting this research, we assumed that instructional designers would be working in very solitary, very isolated settings. We were wrong. Collaboration is identified as important to instructional designers (Allen:17; Barbara:36) for a number of reasons and they actively seek convenient opportunities to engage others. It expands the pool of experience on which designers draw, and there is evidence that people include collaboration as part of the social fabric of the organisation.

If you were going to walk away from your desk, there was only one social place to go and that was the cafeteria. What would you find down there? Designers talking about design...I believe that everyone involved benefited

from these discussions, by re-opening and unpacking previous assumptions, re-visiting alternative options. So this became the community of practice, as such, and after lunch everybody headed off to their desks, and again, worked in a rather isolated fashion. (Barbara:36)

Communities of convenience

It is quite apparent that communities of practice, as defined by participants, were born of convenience more than through formal structures, encouragements or agendas. Every participant in the study indicated that their communities were informal and convenience seemed to be a core issue in their formation.

So, in that case, again it was very much a convenience situation. I mean, who do I know that can shed some light or shed their experience, and I think it's easier for me now than it would have been 10 years ago, because I have more contacts. Your circle of people you're able to contact, that you're comfortable contacting and that you're likely to get some feedback from. (Allen:18)

They were also often tied to social gatherings as predictable as a coffee klatch (Barbara:36) or as inventive as an exercise group (Deborah:42). The notion of convenience was central to participation in virtual communities of practice too. (Eric:29) They are fitted into spare time, and participants mention that they design the way they participate in online communities so that the material is convenient to use. When communities are inconvenient to use, they are seen as being of lesser value. (Allen:40). In most cases, participants mentioned that other members of their groups were called on to advise on specific project challenges or issues (Deborah:37), but there was also mention of discussions of larger business, cultural, pedagogical or theoretical issues (Barbara:53)

Physical proximity of people within an organisation influences the membership in an informal community of practice, probably because it supports the convenience factor. If people sit near each other, they naturally interact. This informal engagement leads to shared experience and the development of a shared culture.

And apart from that, the way the whole space is set up, on a daily basis you kind of informally collaborate. Like, in my corner there is [one designer], and there is [another designer], and a few others around there, and that section is kind of the online section. This is more print, so collaboration is there within that group. (Eric:14)

Physical proximity also draws artificial boundaries around the community, and it excludes some others who work in other areas. This, of course, is no surprise; management literature is rife with advice about

where to place employees in workgroups. But it is not necessarily considered by managers of instructional design. It may be that adjusting the physical seating of individuals in ID workgroups may be one of the single most important contributions to promoting the development of a community of practice. How does this translate to online communities? Virtual proximity may include how immediate or apparent the community is in the routine workspace of the user. For example, a list that pushes email to the user, or a chat space that is always available and alerts the participant when someone logs on may create a proximal virtual environment for the participant.

Trajectories of participation

Trajectory of participation is a phrase coined by Wenger (1998) to describe the direction that people in communities of practice are moving. Are they orbiting the periphery of a community? Do they occupy a medial or peripheral position?

The amount of time one is in a community of practice mediates the position in the community. A new person in a community is naturally on the periphery, given that the designer is struggling to learn the cultural conventions that are second nature to more experienced members of the community. This is evident, even when a very experienced designer joins a new community of practice. This suggests that communities of practice are localised and contextual; one can't transport experiences from one community of practice to another, especially when the embedded cultural values of the communities differ substantially.

I think I'm still on the outside of this community of practice. I say that because experienced designers do not think much about institutional practices that I'm still learning. Or at least they have not had cause to do so prior to the hiring of the new designers. The senior designers have long understood the relationships among the various departments involved in distance education. (Barbara:41)

There is a sense that it is necessary to get experience with a particular community of practice in order to be accepted into its inner circles. At least, that is the perception of some participants — that they are isolated when they are new to a community, but they will move to a more central position once they gain experience with the community.

So when I got back last November, I had to upskill myself in this changing world of design, moving into learning objects. So, at the moment, I think I'm more towards the middle. If that's a circle, and here's the centre, I'm more here [gestures mid way on the radius] than at the periphery. When I came back, I think I was at the periphery, but I've gone through a very steep learning curve and I've spent a lot of time on my own hours to come up to speed. (Eric:59)

Sometimes, the position in a community is defined by the formal role or position held in an organisation. Dynamic communities of practice don't automatically accept them as leaders or participants, but ultimately, they require social acceptance in order to perform effectively in the community of practice.

I have to be at the centre, because that's part of our education officer role, like Bob, Henrietta and Georgina. We expect to be up at that level so we can be mentors to the rest of the team. When we do high profile projects, we need to assure that our clients are getting the best products possible.
(Eric:60)

Features of ID communities

History. Communities are supposedly stronger when they share history and culture. Conversely they are weak when they are based on general interests and abstract ideas. If this is the case, then the communities of practice within instructional design would seem to be characteristically weakened by their lack of a sense of shared history. There were no explicit comments about the shared history of instructional designers within a particular community of practice, with the exception of a comment about how the military roots of systems models of instructional design contribute to suspicions by people outside our communities.

The whole nature of instructional design with its military origins, and the connotations that it has of putting people in straight jackets so they'll sit right, I think has turned a lot of people off. Eric:44)

But this doesn't mean that the communities don't share a history; it is just that the participants don't think to talk about it as a prominent feature of their communities. The fact that most communities of practice identified by participants were in house communities may mean that the shared history is so rich or intimate that it is taken for granted.

Participation. Participation, even passive participation as a spectator, was seen as a key element of community. It can be interpreted as the frequency of contact with other members of the community. This feature was common to face to face and virtual communities. In virtual environments, evidence of participation included the number of messages, their length and whether conversations continued. This is consistent with the notions of engagement and alignment described by Schwier (2001). Members of communities of practice go beyond interaction and engage each other in meaningful conversations. This engagement, over time, leads participants to align themselves with the community and its central values and messages.

Like I said, the two communities that I use as examples, even though I value one more than the other, I feel they are both communities, based on the amount of participation the number of messages being posted, the length of some of the threads. I think, yeh, there's a community there. (Allen:63)

Mutuality. Participants mentioned that mutuality is an important feature of participating fully in a community of practice. Communities spring from, and are maintained by interdependence and reciprocity. Participants typically construct purposes, intentions and the protocol for interaction. But mutuality appears to be something that is "grown into" by participants. One spoke to the notion of growing into a position where it was possible to make contributions that were as valuable as the ones received by the community.

I've been a lurker more than I've been a contributor, but I've contributed maybe a half dozen times, you know, over the last while. And I find for me it's just a matter of gaining confidence and thinking, okay, I've got enough experience in this role I'm in, and I feel I've learned a few lessons myself, thanks to trial and error or whatever, that obviously, based on the questions being asked, other people haven't quite learned that yet. So now I'm in a position where I can share my experience with them, and be of value to someone else as others have been of value to me. So, it's very much a matter of wanting to feel as if you've made your contribution, because you've benefited from others who were willing to share their experience. (Allen:52)

Another participant mentioned that experience with the group was just as important as having a fresh perspective or unique knowledge to share. New members of communities may have ideas that are useful, but they expressed concern that established communities may be reluctant to welcome them.

Well, I was the only person, really, who had ever studied learning theory. Other people had only taken graduate work, often in adult education, and they may have skimmed over learning theories, but bring up a word like "meta cognitive strategies" and a glazed look would go around the group. And I would feel like, okay, yet again I'm coming from a perspective that's not understood in the group. You know, maybe people who have been doing this for 23 years or more aren't all this interested in a novice explaining a term they haven't heard before. (Barbara:24)

Plurality. Communities draw much of their vitality from "intermediate associations" such as expert and authoritative contacts, and other groups in areas peripherally related to instructional design. Participants spoke frequently and passionately about the associations they had with groups outside their organisations and immediate instructional design roles, and how those groups informed their ID work.

...but for me it would also be the people I did documentary with - to still be talking with those people about how to make documentaries. They wouldn't consider themselves instructional designers but the issues are really similar. We're still talking about design. (Deborah:49)

But plurality is also a feature within some organisations. It was clear that some organisational cultures encouraged, and even mandated, that various departments within the organisation that had influence on the learner's experience, broadly defined, were brought into the instructional designers' teams, and by extension, their communities of practice.

Back at [an earlier organisation], all of the design and delivery people worked within a single building. So, if we had a planning meeting, for example, a representative from the Registrar's Office was there, someone from the Help Desk, someone from Student Services would be there. It was this all encompassing idea - what do the students need, if you make this decision, what effect is it going to have on the Help Desk folks. (Barbara:42)

Plurality appears to have importance, not just for the particular learning challenges being faced, but also for the institutional culture. When plurality has strong influence in an instructional design community of practice, it means that instructional designers will be bringing a wide range of considerations and solutions to bear on learning problems. When complex learning systems are designed in a culture that encourages plurality, there is a higher likelihood that all important variables will be considered.

Tacit knowledge. As reviewed earlier, knowledge management literature pays particular attention to tacit knowledge and its role in communities of practice. Tacit knowledge is what an experienced practitioner knows internally, but that isn't part of the explicit knowledge held by the community or organisation. In a profession as complicated and distributed as instructional design, moving hidden tacit knowledge to public, explicit knowledge is important to the growth of the profession, and is one of the unstated goals of many communities of practice.

Participants were asked about tacit knowledge they held - ideas, procedures, strategies or tactics they had invented or learned, but that weren't common knowledge in instructional design. Interestingly, they had little to offer at first. It was possible that they were humble or the question was intimidating, but at any rate, participants had little to say immediately.

But elsewhere in the interviews, the designers offered dozens of examples of unique or creative solutions and observations about instructional design. Examples of their tacit knowledge included such things as how to

deal with difficult clients, job aids for applying criteria to projects, or how to gather expert advice to address difficult design problems. It just wasn't thought of as tacit knowledge. Instructional designers are problem solvers, and they invent solutions as a routine matter in their daily work lives. But they don't necessarily see that this type of knowledge as significant or substantial, nor do they think of ways to move it into the public arena.

At the same time, it was clear that members of in house communities of practice constantly probed for and shared solutions to design problems they faced in projects. It appears that the process of transforming tacit knowledge into explicit, shared knowledge is an informal, serendipitous occurrence in the organisations we've included so far. These are healthy organisations that promote interaction among designers, and this naturally leads them to share new ideas. But one could speculate that in unhealthy or highly competitive organisations, such knowledge would not be shared as easily or informally. Tacit knowledge could be seen as strategically important, or offering a competitive advantage.

Repositories of knowledge. We think of communities of practice as groups of people. This is most certainly what most instructional designers mentioned when asked about their own communities. However, one person considered online resources to be an important, if unidirectional, part of the community of practice. Can shared resources and forum archives act as communities of practice? They don't fit formal definitions easily, but they certainly can be thought of as repositories of thought from communities of practice. There is really very little difference in searching a repository of information and lurking in a chat session. If one is primarily an observer, that action can still satisfy the requirement of participation in the community.

But increasingly, I'm looking wider to the online community out there. I always try to use my computer at lunchtime, surfing the net, go to my favourite bookmarks of instructional design resources, forums on designing. Just going and seeing what people are thinking, especially in this new area of learning objects. (Eric:29)

Virtual communities of practice

It was clear that participants relied heavily on online repositories of information, and to a lesser degree, participants mentioned that they participated in active online communities of practice. These included listservs and email lists for the most part - asynchronous communication environments. Comments from the participants suggested that they viewed virtual communication and interpersonal communication as functionally equivalent.

So, when some fail and some succeed, in terms of having a successful communication, it makes me think that there's, well, nothing magical about the virtual environment necessarily. It still boils down to just people and whether they connect with the words you say or the words you write. (Allen:31)

The people interviewed are experienced users of technology, and they view virtual technologies as another mode of expression, with concomitant strengths and weaknesses. One can speculate that instructional designers, as a group, are probably more experienced and sophisticated with using online communication technologies than most other professional groups. Given that many instructional designers are creating online learning resources, it isn't surprising that they see virtual communication as a natural extension of their face to face communities of practice.

Not that there aren't limitations; indeed, one participant struggled with the uncertainty that accompanies electronic communication. Uncertainty and ambiguity plague virtual communities of practice. For example, if someone asks a question or makes a comment in a virtual community of practice, and there is a limited response from other members of the community, the silence can be interpreted by the sender in a number of ways.

So I think there's that uncertainty. I mean, I have posted once or twice to the list and have gotten a good response, but I've also gotten next to no response. You, you think, "What am I supposed to make of that. Is this just a dumb question, or nobody had any experience with it, Whereas, if we were in a face to face environment, I would have been more certain about why I didn't get a response. (Allen:61)

Similarly, it is misleading to speak in gross terms of the characteristics of "online communities." They differ from each other as much as they differ from other kinds of communities. They differ in tone, intensity, usefulness, number of subscribers and content among other things. In these interviews, participants described general networks, professional resource repositories and forums, intranet discussion groups in organisations, student societies and email exchange groups. It is important to keep in mind that when we discuss online communities, we are really talking about a wide array of entities that operate on several levels and within a bewildering number of contexts.

Purpose. Virtual communities of practice, just like other communities of practice, don't just happen; they form when individuals share a purpose that has importance either personally or professionally. The clearer and more important the purpose, the stronger the adherence of individuals to the group. In education, and perhaps in virtual communities of practice, we sometimes make the mistake of thinking that individuals will be drawn

to a community merely because it is there and people have interests in common. Of greater importance seems to be the issue of whether the community will contribute something tangible to the participants. This "social capital" may be common to the members of the group, but it is more likely that a strong community will speak to the individual needs of participants, needs that hover around a central purpose, but that take on a variety of meanings for individuals. At any rate, it is vitally important that communities of practice can answer the question, "What will I get out of it?" to be successful.

The listserv would be a tool built into the class to be used as a sort of community device. And my sense was, in my own case and from hearing students and instructors talk about it, "Why would I invest any time and effort in this virtual environment when the class is already structured to allow us to meet face to face on a regular basis?" And, or, outside of class, you see these people on a regular basis. So, it really seemed to be an example of trying to force a tool and approach - a kind of square peg and round hole sort of thing - where it just didn't seem to add anything (Allen:64)

Managing online communities. Online communities can be managed differently than most face to face communities, mainly because of the control and anonymity provided by technology. For example, one can filter messages from an online community and look at them when there is time, or one can route messages to a dedicated mailbox. Some online lists permit participants to receive a digest (single message) that contains all of the messages on the list that day. That can be very useful for managing time, but presumably reduces the immediacy and spontaneity of the interactions with the groups. At any rate, designers reported managing their interactions online in skilled and deliberate ways.

I subscribe to one of them through my Hotmail account, and the other one comes to my personal email account. In addition, all of the messages that come to my Hotmail account. I only check that account on a sporadic basis. And because it is a free Hotmail account, I'm always getting messages that I'm just about over my limit, because it piles up, and I don't keep as close tabs on that. And I think it's a conscious decision because I don't feel that list is quite as valuable as the other one. (Allen:38)

The trinity: people, context, content. The context of a virtual community of practice and the people involved in the community are most important to its success according to one participant. But this position was qualified by others, who identified content as the central feature that drew them to communities. The impression this left was that for virtual communities, all three things are vital. Content is of course important — it provides the substance around which discussions form. But in virtual communities, it appears that participants are looking for more. They are looking for a

context that is convenient to use, and they are looking to expand the number of qualified people they can engage, or access to leaders in the field who are otherwise inaccessible. This trinity forms much of the social capital of virtual communities, the glue that holds them together.

So, to me it isn't so much the content that would make me pause to say, "Is this appropriate for a virtual community." It's much more the context, or the people having the discussion. And, where's the value in having that virtual community over having a more traditional one? (Allen:66)

Receiving a great deal of advice is typically desirable, and when several people give similar advice, one interprets the advice as more reliable. By definition, it is, but caution was expressed about the seeming reliability of converging advice in a virtual environment. Contrary advisors may be silent. In fact, silence may cloak several different interpretations of the item under discussion (Allen: 57). Therefore, it is reasonable to think of converging ideas as less representative of the population from which they are drawn.

Anonymity and social distance. An interesting issue is the role of social distance in building credibility. A common joke is that an expert is someone from more than 25 miles away with *PowerPoint*. There are old saws like "absence makes the heart grow fonder" and "familiarity breeds contempt." The participants made some interesting comments that suggested something similar happens within a virtual communication system. Is the development of a strong community of practice necessarily dependent on participants becoming more intimate and reducing the amount of social distance? Maybe there are advantages to promoting a certain amount of distance. Perhaps social distance contributes to the attraction of some members to a community of practice, and thereby strengthens the glue of the community (increases the collective social capital of the group). One individual mentioned very clearly that anonymity is an important part in how he participates in virtual communities (Allen: 69). It is important to this person that he is able to dip into and out of a community, use it for what he needs, and then leave. In professional communities of practice, he isn't looking for personal or intimate associations.

At first glance this seems counter-intuitive; we think of communities as places where people make personal investments. But that isn't necessarily the case for professional communities of practice. In these settings, the agendas may be more utilitarian, at least for some participants. In all cases, it is clear that personal agendas will shape the nature of communication in a virtual community of practice in much the same way as personal agendas influence temporal communities.

I can think of two people in the past six months that I've never met, but I've communicated with enough online, and just through that communication (and in one case some phone calls as well). Just through that communication, they have felt confident enough in me, without ever having met me, to recommend me for jobs, and to serve as references, and that still kind of blows me away. (Allen:25)

Social change and agency

There was a clear message that there was a need for the types of social change that ID can provide, and evidence of the influence of ID generally on institutional policies and issues. There were also a number of frustrations and worries that were articulated about the lack of influence instructional designers felt in their organisations.

There are some really huge issues that are moving forward in distance education, especially technology enhanced learning issues. If the institutions - the academies - do not look at these issues very seriously, very soon, they're going to find themselves in policy nether land, where nothing works. (Barbara:62)

Barbara's comment warns of a problem identified by Kowch (2003), where the traditional policy making structures in most institutions of higher education are not positioned to address emerging pan-institutional issues effectively; that addressing pressing, multi-dimensional socio-political issues requires changes that fundamentally challenge the policy making structures of institutions. In this section of the paper we will consider the kinds of social change that instructional designers identified, the kinds of contributions they make to them, and some of the unresolved issues that organisations face.

Social change: Types and examples

Instructional designers described different types of social change that they influenced, and for convenience we group them into institutional issues and professional issues. By institutional issues, we mean those things that engage the organisations or structures of society; by professional issues we mean those things that engage individuals and groups, independent of their organisations.

Institutional issues. Designers mentioned projects that had wide influence, such as changing social attitudes about stereotyped groups (Deborah:54). They also mentioned institutional growth in the prominence of instructional design positions (Allen:75), different levels of responsibility to clients, learners and humanity (Deborah:53), and a growing appreciation for instructional design by management (Eric:46).

Professional issues. Participants stated that they had seen evidence of transformed practice among educators as a result of their involvement in instructional design, particularly on technology enhanced learning projects. These were often characterised as a shift from content centred design to learner centred design (Barbara:79). But changes were noted in how instructional designers encouraged organising and structuring learning by modeling good practice (Deborah:58) and focusing attention on important learning outcomes (Eric:33).

A consistent message was that as instructional designers, people felt they were able to influence larger groups of people than they could in other educational roles.

I found it hugely satisfying that I could write materials that would affect more people than just my class. And I found it most annoying as a teacher that I could do a good job in my own class, and Joe Blow next door could do a really shocking job, and you know, we were having about the same kind of impact on about 30 people each. So I found that once I got into doing resources that I didn't want to go back to teaching. (Deborah:20)

But there was a measure of caution, expressed as a concern that in order to have a sustained influence over an extended period, one would need to be working on content areas that they felt were important. Perhaps this suggests that the supposed content free nature of ID doesn't permit designers to connect to substance they value. Is the personal value of what we contribute significantly bound with the content areas in which we design? Do designers hunger to work on content they value?

But if someone said that's what you're going to be doing for the next ten years. Look, I'll do it for a year because I think there's a lot to learn, but then I think I'll move on. Because I do need that. I don't know if it's a kind of megalomania driving it I want to have an impact on a lot of people, but it has to be on a topic I want to be working with. (Deborah:22)

One of the most provocative statements spoke to the irregularity of personal impact. It is likely that instructional designers feel as though their contributions are uneven. They make an important difference sometimes, but not necessarily often enough to feel a high degree of personal satisfaction.

It's one of those things where you feel you know you make a difference. You know you have an impact at times, and sometimes you come away feeling really good about it. But rarely do I feel like it's a consistent difference. Rarely do I feel like it's a widespread margin of difference to my liking. So, I'm more frustrated than I am satisfied with the level of difference I make. I'm always looking to have impact on a large scale. (Allen:72)

When we consider the effect of ID on social change, and look for large influences, we may overlook the fact that small contributions may have a large effect in the long run, as illustrated by Deborah's comment.

So I do think we can have an impact. And certainly, in terms of when I'm working on (it might be a minor thing), but I'm working on something and I think the writers have used a whole new stereotype. They've referred to this person who was really difficult, and said "of course he was the union rep." And just by saying that's not a reasonable thing to do and changing it, I think, "I was lucky to have spotted that. It's going to go out to thousands of people. It's just a minor thing, but I just think it's good for us to be informed and to be aware of those types of issues around stereotyping and to talk about goals and what we want education to be like. We may get frustrated with one little unit, but a lot of students are going to have to engage with that unit for a long time. (Deborah:53)

This may be especially true of ethical stances and higher values, and how holding to them can have profound effects. Perhaps humility about our influence is reasonable and sufficient, even admirable. Instructional design may not be so important on a grand scale, but the contributions made can have wide and profound influence in the long run. For example, if we insist on gender neutral language, we may in the long run, contribute to a new understanding of equality.

Unresolved change issues

Instructional designers, particularly Barbara, recognised many important emerging issues that will influence how educational institutions will respond to social and technological change. One very large issue is intellectual property. If instructors are given release time to design courseware for an institution, what intellectual property rights does the individual retain? When an educator works on courseware in spare time, what rights does the institution have to the product? Who has the right and responsibility to ensure the currency and accuracy of content in courseware designed for institutions? Will royalty payments be made or other rewards be provided to educators whose products are used, in much the same way as royalties are permitted for academics who write books?

Well, it's a joint effort. Who owns what? How much does the instructor own at the end of the day, given that it was a team that created it? While it is likely that a shared ownership agreement will eventually come into play, just now intellectual property rights are gray area. Subject matter experts are concerned about that. When clients ask these sorts of questions, I have no answers. (Barbara:66)

Other important issues include intellectual freedom, and what happens to the instructor's permission to change courses to fit a personal vision or preference (Barbara:73; 74). Related to the issue of intellectual property is

portability. Will an educator who designs courseware have the right to transport the product to a different university or institution?

Further, what happens to an instructor who moves to a new university? Most likely, he or she will lose access to a course in which hours and hours of thoughtful development time has been invested. Should these instructors be granted permission to take copies of this work with them? Again, the specter of intellectual property rights raises its presence. (Barbara:75)

Another issue for instructors is to open up the process of design to move instructors into a collaborative approach instead of a craft approach to designing instruction. Educators typically work alone when they design classes, and it can be very challenging to open the process to the ideas and criticisms of a team. At one level, this is a process of persuading individuals to take personal risks; in a larger sense, it is a process of opening the private culture of teaching and learning.

I guess the other issue would be the insecurity of some of the teachers who are not used to working in teams and the collaborative approach. And being a teacher myself, I know we tend to be a bit selfish at times, and have this notion that unless I create it, it isn't good enough. I cannot use other people's designs. (Eric:39)

In terms of the role that will be played by instructional design in the process of social change, there is one very complex issue to be addressed. Several participants suggested that ID is regarded as a luxury, at best an expensive, time consuming process that confounds the process of generating educational products. (Eric:41)

The other issue would be with regard to budgets and schedules. Some people think instructional design is an add on that is very expensive and time consuming. Some of our teachers downstairs complain that our resources take so much time to complete because someone called an instructional designer is putting all of these hurdles along the way. (Eric:41)

Designers know that they have a great deal to contribute, and that they make a big difference in the quality of instruction they influence. But they work in a shadow profession, one that is not fully understood or appreciated by those in management. In order to be effective in promoting social change, instructional design needs to clarify the kinds of contributions it can make, and make other educators aware of those contributions. It isn't enough to work quietly and effectively in the shadows, and hope that the profession is understood and appreciated.

Issues not mentioned

Schwier (2001) posited that learning communities had a future orientation, an idea complemented by Wenger's trajectories of participation in communities of practice (Wenger, 1998). In the interviews with

instructional designers to date, little or no discussion of the future direction of the profession or its communities of practice emerged. There is immediacy, a descriptive rather than interpretive tone to discussions about the practice of ID. Where is it going? What is its direction? Where is it leading? These are items about which the discussants were less vocal.

The interesting question, though, is why were participants reticent on this issue? It is entirely possible that the questions and directions of the interviews did not encourage this kind of observation. Maybe the participants were thinking so carefully about describing the nature of their work that they didn't consider whether the communities of practice had a future orientation. On the other hand, it is possible that this is characteristic of instructional design. Designers work so closely and intensely in the immediate, that they fail to consider the direction they are following to the future.

When asked directly about the significance of instructional design, individuals spoke about their influence on immediate projects, or reflected on specific projects they influenced in important ways. Nobody spoke of how instructional design might be influencing the future of education or training, at least, not specifically.

Related to this, something else seemed to be missing in the interviews. When asked about social change agency, and their perceptions of what the role of the instructional designer is in that process, every participant's perspective was on the local context or the profession. As mentioned earlier, there was mention of how we contribute to some positive social movements, such as eliminating stereotyping and institutional change, but most comments described local rather than global concerns.

In a follow up question to participants via email, we put the question to them directly. We asked participants to articulate clearly in a sentence or two what they saw as the "larger purpose or grand mission of ID?" Some responses included:

The larger purpose or grand mission of ID is to represent learners and to integrate learning theory into the development of learning materials and activities. (Barbara)

To ensure that educational resources help people achieve their learning goals (Deborah)

I think the overall mission of ID is to help in the design of learning experiences/resources which facilitate learning easily and effectively. (Eric)

I would say the mission of ID is to "optimise the effectiveness and enjoyment of the learning experience through thoughtful, well designed instructional methods and materials." (Allen)

But Allen, on reflection, offered a refreshing coda:

Of course, a less academic sounding one might be "to help people learn well without making them cry...or swear."

There was considerable similarity in the responses. Instructional designers have a clearer sense of shared identity, when pressed, than earlier responses may have indicated. Their statements reveal a strong commitment to the learner and an orientation toward empowerment. But that identity is tied to the development of resources and learning systems, not to any lofty purpose served by instructional design. Nobody commented on the importance of the profession to creating social change, for leading educators in a mission to improve education, learning or society. We seem to lack a vision of our role in more important issues. Are instructional designers cogs in the education machine, or are they change agents? Our guess is that instructional designers may be acting as change agents more than they realise; that they are participants in moving educational agendas and sweeping societal change. But instructional designers are not necessarily participating in setting the agenda for change. They see themselves as significant participants rather than as leaders, and they are even somewhat bewildered about why people come to them only as an afterthought.

Is this a story of power and influence in the educational hierarchy? Was Heinich (1998) right when he charged that in our profession we have aligned ourselves with labour when we should have aligned ourselves with management? More importantly, how is a profession sustained? What role does a sense of larger purpose play in nourishing a profession and its participants? Although there are certainly exceptions, medical doctors view themselves as healers, lawyers see themselves as protectors of justice, teachers see themselves as improving the future through children. What is the simple vision of instructional designers? What is their larger purpose? What is their grand agenda?

Summary

This study unveiled a number of intriguing issues and challenges about instructional designers and their communities of practice, and how instructional designers perceive their participation in sweeping changes underway in education. We see a profession that knows itself, but is struggling for identity and acceptance in the larger educational community. We find that instructional designers invent and participate in communities of practice in ways that challenge our understanding of models of communities. We learned that there isn't a single or global community of ID practice, but rather, hundreds of small, local,

effervescent and convenient communities of practice. We see instructional designers struggling to identify their own tacit knowledge, and without systematic avenues for sharing their tacit knowledge with other designers. We find that instructional designers recognise that they have a role to play in the changes currently underway in education, but less understanding of how to express that role forcefully and demonstrate leadership. We see that the focus of designers is institutional more than societal, but that they exhibit high standards of performance and care for the appropriate integration of technology into learning environments.

We emphasise that this is a preliminary study. We are encouraged by the high degree of professionalism, and the thoughtful reflection designers shared with us. If the participants in this study are representative, instructional design is a profession populated by highly competent, intelligent and dedicated individuals who are looking for a way to influence important changes in education and society.

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Dr Richard A. Schwier
Professor, Educational Communications and Technology
College of Education, University of Saskatchewan
Email: richard.schwier@usask.ca
Web: <http://www.usask.ca/education/people/schwier.htm>

Katy Campbell
Associate Dean (Research)
Faculty of Extension, University of Alberta
Email: katy.campbell@ualberta.ca

Richard Kenny
Course Developer, Distance Education and Technology
University of British Columbia
Email rick.kenny@ubc.ca