

Instructional Designers' Perceptions of Their Agency: Tales of Change and Community

Richard A. Schwier, University of Saskatchewan

Katy Campbell, University of Alberta

Richard Kenny, Athabasca University

Chapter for Keppell, M.J. (2006). *Instructional design: Case studies in communities of practice*.

Hershey, PA: Idea Group.

Introduction

In addition to the important role instructional designers play in the design and development of instructional products and programs, they also act in communities of practice as agents in changing the way traditional colleges and universities implement their missions. Designers work directly with faculty and clients to help them think more critically about the needs of all learners, issues of access, social and cultural implications of information technologies, alternative learning environments (e.g., workplace learning), and related policy development. As such, through reflexive practice, interpersonal agency and critical practice they are important participants in shaping interpersonal, institutional and societal agendas for change.

This chapter will draw on the stories of instructional designers in higher education to highlight their interpretations of their own agency in each context. In essence, this chapter deviates from the understanding of a case study as occurring in a single setting in that it draws on the experiences of several instructional designers in several contexts.

Rather, we accept Yin's (2003) definition of case study as a research strategy, that is, as an empirical inquiry that "investigates a contemporary phenomenon within its real-life context" (p. 13) and view our study in this regard as a multiple-case design with the instructional designer as the unit of analysis. Taken as a group, these designers tell a strong story of struggle and agency in higher education contexts, and it is a story that portrays designers as active, moral, political and influential in activating change. So from their rich descriptions of practice, we attempt in this chapter to weave a composite case study of an instructional designer's experience that is true to the collective narrative of the designers we've interviewed. Any single person's story of agency is by necessity narrow and contextually bound, and these are both the greatest strengths and limitations of individual cases. We hope that by viewing the stories of instructional designers through the macro lens of narrative, we can better illustrate the scope of agency and community that instructional designers practice each day.

Background

Conventional literature in instructional design concentrates very intensively on process—how instructional design is carried out, what strategies and approaches work in various contexts, and how designers should systematically practice their craft (e.g., Dick & Carey, 2005; Morrison, Ross, & Kemp, 2004; Seels & Glasgow, Shambaugh & Magliaro, 2005; Smith & Ragan, 2005). Models no doubt serve a useful purpose, one part of which is to help ground our identities as practitioners. Bichelmeyer, Smith & Hennig (2004) asked ID practitioners what instructional design and technology meant to them, and while the most frequent response was that it was broad and diffuse, the second most frequent response was the ADDIE (Analyze, Design, Develop, Implement, Evaluate)

model or systematic design of instruction. This may signal the possibility of developmental levels—stages of development or growth in an individual's agency. It seems overall that that younger or less experienced designers tend to talk about tasks and technologies rather than larger implications of their work (Schwier, 2004). But the actual use to which ADDIE and similar systematic models of instructional design are put, and the worth of such models, has been called into question many times and for several reasons over the years (Gordon & Zemke, 2000; Molenda, 2003; Rowland, 1992; Tripp & Bichelmeyer, 1991). Systematic models of ID have been accused of not reflecting actual practice, of being cumbersome, ineffective, inefficient and costly to implement. So, what is the value? Elizabeth Boling offered a fresh interpretation: "I was so puzzled when I started in this field – the ADDIE model is just exactly like every other generic description of the design process in every other field that ever was. To me, this discussion is a little bit off the mark – it's not about whether ADDIE stays or goes, but whether or not ADDIE may be viewed appropriately – we're trying to make it serve as a roadmap – you can't use it effectively as a literal road map for ID – we're looking for something that doesn't exist – it's a quality of designer." (Bichelmeyer, 2004, pp. 4-5)

Recent research examining the actual practice of instructional designers suggests that designers do refer to conventional processes in instructional design, but practice varies significantly according to context (Cox, 2003; Cox & Osguthorpe, 2003; Kenny, Zhang, Schwier & Campbell, 2004; Rowland, 1992; Visscher-Voerman & Gustafson, 2004). Other critics argue that the field lacks focus (Bichelmeyer, Smith, & Hessig, 2004), and still others argue that key aspects of instructional design have been overlooked in conventional literature. For example, Gibbons (2005) argues that we need to re-

examine the assumptions and foundations of instructional design and align it more closely to other design sciences such as architecture and engineering, while Schwier (2004) calls for instructional designers to consider the larger purpose or vision that guides their practice. Wilson (2005) and Patrick Parish (2004) further suggest that craft and aesthetic issues, while important, haven't been included in our training or incorporated meaningfully into our practice. And Bichelmeyer, Boling and Gibbons (in press) argue forcefully that the continuing focus in our field on ADDIE as a "model" of instructional design has a detrimental impact on both what we research and what we teach, and that the goal of faculty should be to develop instructional designers rather than to teach design models. We are sympathetic with these arguments, and in this chapter we join their voices; in our interviews with instructional designers we have heard many stories of transformation and courage that transcend the technical and systematic boundaries of conventional ID, even when instructional designers aren't necessarily aware of this transcendence.

We suggest that clients working with instructional designers in development projects are actually engaging, as learners, 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), Tergan (1997), Ewing and his colleagues (1998), and others (cf. Jonassen and others, 1997; Gunawardena, Carabajal & Lowe, 2001; Thomas, 2002) 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 faculty, designers, and others develop new ideas and understandings through conversation, may be a form of cultural learning or collaborative learning.

In essence, we are arguing here that clients (e.g., faculty, in our research), while having high status in the institution, are actually novices in the teaching-learning community and are being invited to engage in legitimate peripheral participation in this arena. IDers may never achieve full participation in the university communities because they never learned their skills there as novices (Keppell, 2004). But the converse may be true as well; faculty participating in a *design* community of practice may not achieve full participation in the instructional design community of practice because they did not learn instructional design skills as novice academics. There seem to be multiple reciprocating or overlapping communities of practices in the process of instructional design—the community of designers, the community of the client's academic discipline, and the teaching-learning community within which projects are embedded. In this chapter we acknowledge that multiple communities of practice exist, but we concentrate on the ID community of practice and how it expresses change agency.

This chapter, and our entire program of research, is embedded in two theoretical constructs: instructional design as a social construct and critical pedagogy, in which designers act as agents of social change. A cultural shift has been occurring over the past decade in education – a shift towards environments and approaches based on the ideas of social constructivism. In this worldview, 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.

Our team of researchers conducted a three-year program of research to investigate the roles of instructional designers as agents of social change and transformation in higher education. Very little of the extensive work describing the development of theoretical models of instructional design (e.g., Reigeluth 1983; 1999) has been drawn from the lived practice of the instructional designer and, consequently, instructional design theory is not grounded in practice. Institutions of higher education increasingly seek the expertise of instructional designers to facilitate the strategic development of technology-based instructional programs, and the professional development of involved faculty who themselves become critically reflective designers of learning. Therefore it becomes important to examine the theoretical and experiential backgrounds of these agents of instructional technology, their personal understanding of and values related to learning with technology, and the relation of these to their practice and continuing professional development in the higher education setting.

This program of research investigated the nature and relation of instructional design practice to cultural change within higher education institutions, and implications

for socio-cultural change leading to agency in the global knowledge economy. More specifically, can instructional designers be viewed as agents of social change and transformation, promoting the cultural shift “required” of emerging learning systems? As part of this larger program of research, we argue that the practice of instructional design is collaborative, and the effective practice of instructional design requires that instructional designers draw on current and emerging knowledge and experience. In this chapter we address how instructional designers describe their roles as agents of social change and transformation.

Research Design

Two different approaches were used for gathering data. Initially, instructional designers in higher education institutions were interviewed using a semi-structured interview protocol, and participants were asked to discuss their backgrounds, identities, practices, communities and concerns. Participants were also encouraged to tell stories of their practice. Transcripts were sent to participants for correction, clarification, elaboration, and approval. Post hoc analysis of transcripts was done using Atlas ti software, and data were analyzed to identify shared themes and understandings. Two researchers reviewed each transcript and negotiated the units of meaning that were extracted from the data.

For most interviews, we used narrative inquiry and the storying of experience because they are socially and contextually situated interpretive practices, starting from the personal as “personal knowledge has a practical function, not in a technical sense, or as an instrument for previously determined outcomes, but leading back to Aristotle, as a source for deliberation, intuitive decisions, daily action and moral wisdom” (Conle, 2000,

p. 51). Narrative inquiry is transformative, because as we critically examine ways to understand our own practice, the practice itself is examined and understood. In this way, thinking about and telling stories of practice requires a critical, reflective engagement leading to changed or transformed practice. Thus the methodological approach for the study mirrors a social constructivist framework for instructional design practice, which is one of social interaction and construction of meaning through conversation and within a community of practice.

Findings

The data, and especially the stories told by instructional designers, suggested that instructional designers think deeply about their practice, and their professional and personal identities are intertwined in a zone of moral coherence, although they are sometimes required to practice outside that zone. The importance of values and how they informed the practice of instructional design emerged as a resonant theme that ran through stories that instructional designers told.

The Importance of Moral Coherence

Instructional design is more than a technical or systematic process; we contend that it is a moral practice that embodies the “relationship between self-concept and cultural norms, between what we value and what others value, between how we are told to act and how we feel about ourselves when we do or do not do act that way” (Anderson & Jack, 1991, p. 18). Agency refers to doing and implies power (Hartman, 1991). Designer agency is at its most powerful when it is acted out from a foundation of moral

coherence, where the designer's values are aligned with the values of the clients and their institutions.

Can instructional design be practiced in a morally incoherent environment? Yes, and it often is; instructional designers with whom we spoke often felt at odds with the value systems of clients, their presumptions about learning, and even the motivations of the sponsoring organizations. Sometimes instructional designers must deliver products they don't believe in, and in some cases they work on projects that offend their own value systems or challenge their identities as moral actors. Moral incoherence causes dissonance for instructional designers, particularly when they feel powerless to challenge the source of the dissonance, and it sometimes leads instructional designers to question whether they can stay in the profession. On the other hand, a strong sense of moral coherence among designers, clients, organizations, and ultimately learners contributes to a feeling of purpose and meaning, and probably leads to a high degree of contentment and commitments. Where instructional designers share similar interpretations of moral coherence, this probably contributes to shared identity and a more coherent community of practice. Our own sense of it is that instructional designers sometimes operate within a zone of moral coherence and sometimes don't, but the more they find themselves in a morally coherent environment, the more satisfied they are with the work they do.

The Multivariate Nature of Agency

It became clear to us from the stories we heard from designers that what we initially thought of as change agency was actually multivariate. There were several different types of agency in play, and individuals expressed their agency in quite different

ways. We categorized the expressed types of agency as personal, professional, institutional and societal as a convenient way to discriminate among the stories of agency we were hearing.

Interpersonal agency is characterized by the moral commitment made by instructional designers to the other people involved in projects and it is, at least, bi-directional and directed to clients and to learners who will eventually experience the product directly. Collegial advocacy is often directed to subject matter experts, but it may include other team members on projects, for example, among participants on a small scale, project-level community of practice or a larger “improving teaching and learning at the university” community of practice. The emphasis in this type of personal agency is on collegial engagement and advocacy, and our interviews suggest that instructional designers have a strong sense of responsibility to their clients; their desire to do a good job is felt deeply and personally. In addition, they see themselves in a professional development role, often helping clients to view teaching and learning in new, transformative ways.

And I think that that's really important and not only because faculty then begin ... this cross-fertilization, if you will, and a deeper understanding of what the issues are in teaching and learning within a multitude of disciplines. I think the effect of that might be that people who maybe have never thought about what their process is to teaching and learning, or how it might be thought or how it might be improved, made it more positive... But what are the values

... that work together and [clients] get exposed to-- I think this has an opportunity for transformation.

But interpersonal advocacy is more than just collegial; it is also expressed as a responsibility felt to learners—those whose learning will be influenced by the success of the instructional design project. This level of advocacy is deeply held, morally entrenched, and profoundly reflects the personal values and philosophy of the designer. One designer described his role this way:

"I need to be the learner before there is one. I design for people who don't usually have a voice in what happens to them in their educational lives, and I have to be their voice until they can speak for themselves."

And in some cases, the agency takes on the flavour of advocacy

I am working on a Palliative Care project. There's meaning in this.... I don't think I would have stayed as long as I did ...If I couldn't find meaning in the project ... if I didn't find meaning in the people; if I didn't find meaning in supporting their success.

So, we argue that at the personal level agency is a moral relationship with others. Essentially, we extend Christians' (2000) observations about qualitative research, and

believe that instructional design practice is not primarily a rational process, but rather an intimate social process in which caring values are contextualized in webs of relationships.

Professional agency is characterized by a feeling of responsibility to the profession and the ID community of practice to do instructional design well and to be acting in a professionally competent manner. In many cases, this is expressed as pride taken in doing a good job through the "war stories" shared among colleagues. It is clear to us that the instructional designers with whom we spoke took their positions very seriously, and even if they were not formally trained to be instructional designers, they saw themselves as part of a larger community of practice. It was even expressed as a concern about "doing instructional design the right way." There was some discomfort about whether the models of instructional design that designers learned about in their formal training actually described the processes they employed in their work-a-day lives. They puzzled over whether ADDIE and similar models of instructional design were relevant to their work, yet worried that they weren't performing their roles as designers well if they augmented or ignored particular parts of the conventional ID process. The fact that instructional design practice is such an ill-structured problem domain (Jonassen, 2004) filled with conceptual and practical ambiguity, is also a source of stress and doubt for designers.

I needed to synthesize 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.

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.

Institutional agency includes responsibility felt by instructional designers to advance the agenda of the host institution. If universities, for example, are promoting a teacher-scholar model, then instructional designers may emphasize activities that tie the research programs of faculty to their teaching, or help them see ways to include the scholarship of teaching (Boyer, 1990) as part of their research programs. If the institution emphasizes a cost-recovery model, instructional designers may see themselves as leaders in developing learning environments that the organization can market to a wide audience. In any case, this type of agency considers the way that instructional designers align their work with institutional goals, or with institutional needs and wants, and it may be expressed in tension they feel between organizational needs and personal values. For example, if instructional designers feel a moral/ethical responsibility to provide the best possible learning experiences for students, and they feel that an institutional emphasis on cost recovery is in conflict with that goal, the instructional designer may feel in conflict with the organization, what we have elsewhere called a lack of moral coherence (Campbell, Schwier, & Kenny, 2005). The designer's effectiveness is also related to the

broader university community of practice, and the instructional designer's status in the institution.

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.

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.

Societal agency is characterized by a need to see beyond the confines of immediate work, and to know that the work of instructional design is contributing to a larger, more significant societal influence. In many organizations, instructional designers are considered "instructional support" instead of "instructional leaders" and this translates into an important disconnect between their perceived responsibility and their perceived authority to influence change on a meaningful scale.

I see ... the same parallel in working on a project in instructional design as doing development work in emerging countries ... this comes from my studies in global and human rights education and critical theory ... this has been fundamental in shaping my own philosophy of design and education. Any time (an OECD country) went in and said, 'This is the way we think you should develop... This is the right way, this is our way' ... there has been no success.... Social change requires that people change how they are in the world-their thinking-their feelings-their actions- and this is extremely personal. Dr. B. could have come out of that (project) hating technology... but the major change he experienced ... wasn't really his attitude towards technology, but rather his view towards instructional design-- it was like, 'Wow, instructional design is an area of expertise that is necessary and important!'

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.

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.

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.

Interactions among Types of Agency

We suggest that the different types of agency necessarily interact. Interpersonal, professional, institutional and societal categories of agency are not mutually exclusive; in fact, we speculate that they seldom work in isolation. As areas of agency interact, we use three levels to describe the types of interactions that take place: micro-level, meso-level,

and macro-level interactions, and these interactions can be based on coherent, incoherent or conflicting expressions of the types of agency.

We classify micro level interactions as those that stay within the personal or professional contexts of instructional design performance. This agency is typically local, intimate and concrete and often tied to particular projects, although the level of influence is bounded only by the size of the communities within which the practice occurs. Examples of micro level interactions include instances where interpersonal dimensions conjoin professional dimensions. For instance, if a client advocates an instructional methodology that can interfere with learning, the instructional designer might draw on persuasion based on the trust within their relationship (interpersonal), but might also draw on the experiences of other instructional designers and the literature to recommend alternative approaches (professional). As agencies interact, so do the communities of practice that bound each type of agency.

"...as developers and designers, we then went back and said, 'Ok, how can these learners feel valued? What can they bring to the learning that they feel is of value and how as a designer do you build on that?'"

At the macro level of interaction, we see the interplay of societal and institutional agency. Examples of macro level interactions are characterized by instances where institutional needs and goals interact with societal influence. For instance, if an institutional goal is to increase access to courses and programs, the societal influence

might be the intention to increase the literacy and productivity of the population, and through that, effectively contribute to a robust economy. But in most cases in our research, macro level interactions revealed a recognition that institutional and societal issues interacted to allow the instructional designer to have a wider range of influence than other educational positions allowed.

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.

And meso level interactions occur when interpersonal or professional agency engages institutional or societal agency. For example, if institutional goals are in conflict with individual goals, the effectiveness of any agency may be threatened. Interpersonal agency, for instance, might be based on advocacy for equitable treatment of French and English students, but institutional agency might emphasize marketing to one group to increase the cost-benefit to the organization. Or an interpersonal level of agency can give rise to a concern for a much larger issue, one that has institutional or societal implications.

In one conversation, a participant told a story about a campaign to get the central computing support group on his campus to make some changes in WebCT and student lab support to shift the orientation of the support group from emphasizing technology/security/software to emphasizing the faculty and students who use WebCT. The instructional designer spoke about “using the professors’ voices” to make these changes because they were politically aligned with the issue and in a stronger strategic position to influence change. The end goal was better learning support, and it was the instructional designer who was the catalyst for change at the intersection of personal and institutional levels of agency.

Another instructional designer spoke of paying attention to language in products, and how careful language can contribute in small ways to much larger societal concerns.

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.

In cases where there is agreement among agencies concerning the values, ethical and functional dimensions of agency, we suggest that the overall agency is operating in a zone of moral coherence. Where the agencies are incoherent or in conflict, we argue that the overall effect of agency at every level is tempered, and potentially negated. And instructional designers often find themselves navigating levels of agency that are in competition with each other, and the resolution of these interactions, if recognized at all, requires personal and moral courage.

These interactions illustrate that a great deal of agency is tied to a strong sense of responsibility—to colleagues, students, the profession, institutions, and society. It is not surprising that instructional designers sometimes feel conflicted about what they do. But we are reminded in our research that instructional designers feel responsibility for more things than they have authority to influence, and that they regularly find themselves in positions that require them to act beyond their authority, or in a vacuum of authority. A dramatic example of this was illustrated by an instructional designer who was on the verge of leaving her position after a series of deep staffing cuts were made in the organization. She was the only remaining instructional designer in the organization, and yet her commitment to her clients and responsibility to the organization was firm.

I have about three weeks to wind down our unit and complete two contracts for external clients. As of July 1, it's just me in [this organizational unit] (the sole survivor), so if I don't do it, it won't get done. I've basically dropped everything else in order to complete those contracts before I quit.

There are also a few projects we were working on for the college that someone will have to accept responsibility for, or the work will have been for nothing. But I know what to do about those. I am burning the projects onto CDs and requesting the deans or department heads sign a deliverable acceptance form. A couple of departments don't have a dean (actually 3 were fired) so the president will have to sign off on them. He feels so bad about our unit right now I think he might actually do it. Then at least someone will be thinking about what to do with those courses, and hopefully they'll assign an instructor to them in the fall.

Intentional and Operational Dimensions of Agency

When we considered the types of agency and the interactions among the various types, it became apparent that instructional designers make decisions that emphasize intentional dimensions and operational dimensions of their work. By intentional, we

refer to those dimensions of instructional design that are related to the intentions, principles or values associated with actions – deciding which things are important and those things we mean to do. In this sense, intentional dimensions include personal judgments about what is significant, preferential, moral or ethical. By contrast, operational dimensions include the practical implications or the expression of particular intentions, principles or values. In other words, intentional dimensions deal with what we feel we should do, whereas operational dimensions deal with concrete actions or outcomes.

These are significant dimensions because instructional designers often find themselves under pressure to emphasize the operational aspects of their work—the tangible decisions that are made in projects. Intentional dimensions are often assumed, but unless both the intentional and operational dimensions of agentic decisions are considered explicitly, the instructional designer runs the risk of making design decisions that are inconsistent with the underlying intentions of the work. For any single intentional dimension, there can be several operational expressions that are consistent with it. For example, an intention of efficiency can spawn a host of efficient practices depending on the context of the decision, such as choosing inexpensive media for production, building a boilerplate for a development team, or using outlines in lieu of text wherever possible.

We suggest that the greater the propinquity of intentional and operational dimensions of agency, the greater the possibility that decisions will be made within a zone of moral coherence. In Table 1, we provide simple examples of how intentional and operational dimensions might be manifested in various types of agency. These are simple

examples and aren't meant to be epitomes of the categories, but we hope they illustrate the relationship between intentional and operational dimensions of agentic actions.

As an example of the use of intentional and operational dimensions of agency by designers, one participant related her experiences working with marginalized groups early in her career, over time reflecting on the interaction between that background and her value system. When working in a university with health professionals, her background influenced her to write case studies/narratives with social justice bent, working with faculty to get them to think about this in the institutional context. She used design projects as an opportunity to challenge an ethnocentric understanding of access, actually writing about digital divide issues. All the while she problematized her role/identity/agency as a designer in higher education, but she found a way to advocate for social issues through her work and relationships at the intentional and operational levels:

So I don't know if I do that in a meaningful way. I think the chance to write about it in this book chapter is important to me just because I think digital divide issues, the fact here's a person who is developing a book on technological and information literacy and had a list of chapters, calling for proposals for these and nothing on digital divide, nothing on it. So just keeping that at the table ... A lot of people don't want to look at it though. ... I think a lot of professors think everybody's got a computer, everybody's got high speed, everybody ... I think the university would love to

close the institutional labs but you really can't. And there's an argument for that. Let's face [it that] a lot of students are using those computers for chat and things like that. I can see the other side of that too. I guess we just live in an era where education continues to be under funded for what it's expected to do. So as a result ... it's easy not to look at let's say groups who don't fit into your top 5 percent...

	Intentional	Operational
Interpersonal	The learner's experience is central to how instruction should be designed, and is more important than measured learning outcomes. Clients should be treated respectfully and instructional designers should protect the interests of participants in the process.	Lucid, fluid and frequent communication with end-users and clients. Create a climate of trust and mutual respect among members of the design team.
Professional	Complete projects on time, on budget and beyond expectations. Treat clients fairly and never participate in deceptive activities or designs. Above all, do no harm.	Prepare project time lines and project blueprints that communicate tasks, assignments and deadlines. Employ usability tests and universal design strategies.
Institutional	Subjects of usability testing should be treated ethically.	Usability test protocols should be subjected to review and approval by a research ethics committee of the

	<p>Instruction should be cost-effective and should promote the idea that the institution is progressive, dynamic and professional.</p>	<p>institution.</p> <p>Designs should be minimalist, particularly in their use of media that are expensive to produce. Professional visual designer should be employed in all projects.</p>
Societal	<p>Pay attention to equitable treatment of end-users. Be sensitive to unfair or stereotypical treatments.</p> <p>Seek out projects that can make a positive social contribution beyond the confines of the immediate instructional experience.</p>	<p>When using pseudonyms or characters in projects, deliberately employ people of different ethnicities, and challenge gender stereotypes that find their way into instructional designs.</p> <p>Communicate with the media; write feature articles for the print media or participate in interviews with electronic media. Use websites, blogs and podcasts to discuss the societal importance and implications of projects.</p>

Table 1. Discrete examples of intentional and operational dimensions for interpersonal, professional institutional and societal types of agency.

A Tentative Model and Advice to the Designer

The stories we are hearing from instructional designers are leading us toward a model of change agency, and we offer a tentative picture of what the model is beginning to look like. We do not want to suggest that this model is complete; it is emerging as our investigations continue to alter and elaborate our understanding. But we propose it as a departure point for discussion and as a method of organizing our preliminary conclusions, many of which have been discussed in this chapter.

Yet, many questions remain. Do different types of agency share variance? Can you have societal agency without interpersonal agency? Can either institutional or professional agency exist on its own? Does professional agency or some other type of agency have to be in place before the designer can work on another? Does a matured level of agency lead to leadership in the profession? If we are each fully integrated does that allow us to be scholars of, and leaders in, ID?

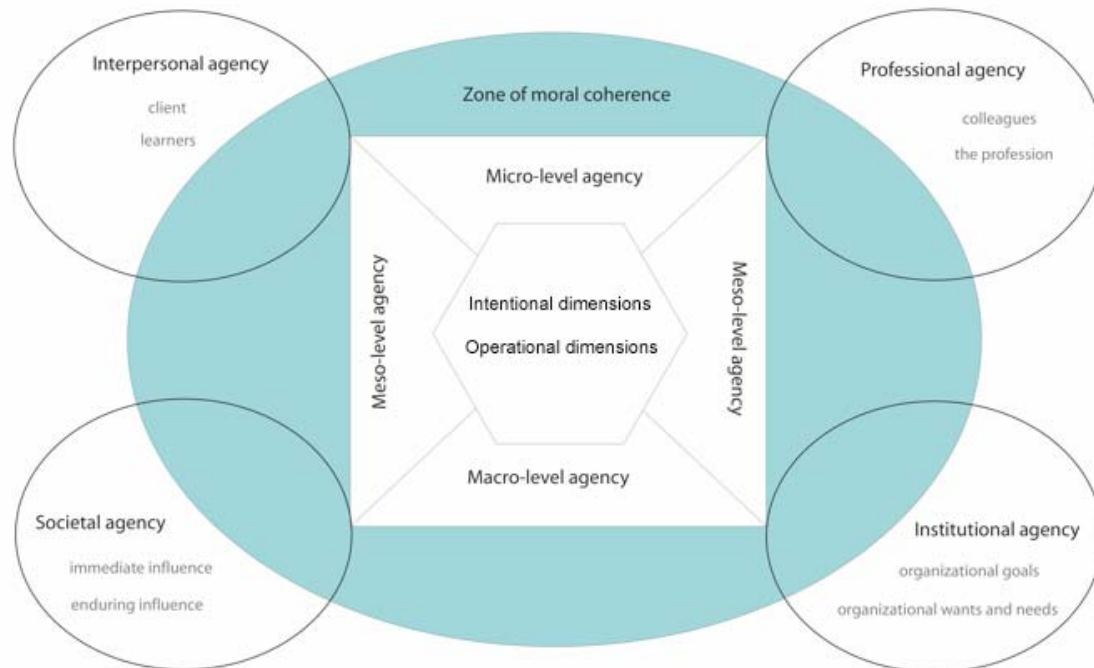


Figure 1. Emerging model of change agency in instructional design.

If instructional design is intimately bound up with moral agency, what are the implications for practice? The answer to this question is also still emerging and may well lead to recommendations for the development of communication and team-building skills, at the very least. Based on our work so far, we can certainly say that instructional designers should at the very least engage in some serious reflection about these aspects of their practice. Perhaps more importantly, scholars, teachers and coaches of instructional designers should examine their own embodied practices and begin to challenge our dearly-held beliefs about the shape and sequence of graduate programs and early enculturation into the field. Here are some tentative principles to consider:

1. Designers should be aware that instructional design is a social practice and that designing is not simply the rote application of instructional models, but to engage in the process of change. Designers, both individually and in conversation with their peers, should reflect on what types and levels of agency – interpersonal, professional, institutional or societal – they engage in.
2. Designers should also be aware that change agency necessarily involves a moral relationship with others and that their actions are not value neutral. Rather, one always acts purposefully on the basis of one's personal values. Designers should, at a minimum, reflect on their own perspectives on the teaching – learning process and what these mean for their interactions with others in their practice.
3. Designers should keep in mind that there are intentional, as well as operational, dimensions of their practice and consider ways in which these may conflict. In essence, designers should reflect on the how to move into the zone of moral coherence.
4. Graduate curricula might include opportunities to engage pre-service designers early in identity work through approaches such as autobiographical writing, providing more situated experiences that are then deconstructed in group conversations, working with cases based on ethical dilemmas, developing international links and project teams that challenge cultural assumptions about learning, and internship placements that either align with or challenge the designer's developmental stage, experience and beliefs..
5. Re-examine the focus in many programs and courses on the mastery of tools.

6. Centers or units of faculty development and support should work closely with faculty and designers to align values and goals, or at least to acknowledge when values and goals are in conflict.
7. Given the growing acceptance of instructional designers in higher education and increased mobility designers could seriously consider matching their own expectations to institutional values, mission and goals.

In our research, we have found that instructional designers recognize that they have a role to play in the sweeping changes currently underway in education, but less understanding of how to express that role forcefully and demonstrate leadership. We see that the agency focus of designers is interpersonal and institutional more than societal, but that they exhibit high standards of performance and care for the appropriate integration of technology into learning environments.

Designers know that they have a great deal to contribute, and that they make a significant 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 sufficient to work quietly and effectively in the shadows, and hope that the profession is understood and appreciated. The discussion of agency provides language for discussing the roles played by instructional design in the larger context of education and society.

References

- Anderson, K., & Jack, D.C. (1991). Learning to listen: Interview techniques and analyses. In S.B. Gluck & D. Patai (Eds.). *Women's words: The feminist practice of oral history* (pp. 11-26). NY: Routledge.
- Bichelmeyer, B. (2004). *The ADDIE model: A metaphor for the lack of clarity in the field of IDT*. Paper presented at the annual conference of the Association for Educational Communications and Technology, Chicago, IL. Retrieved June 11, 2005 from http://www.indiana.edu/~idt/shortpapers/documents/IDTf_Bic.pdf.
- Bichelmeyer, B., Boling, E., & Gibbons, A. (in press). Instructional design and technology models: Their impact on research and teaching in IDT. *Educational media and technology yearbook 2005 (vol. 30)*. Westport, Connecticut: Libraries Unlimited.
- Bichelmeyer, B., Smith, K., & Hessig, J. (2004). *Graduate students' perceptions of the field of IDT*. Paper presented at the annual conference of the Association for Educational Communications and Technology, Chicago, IL.
- Boyer, E. (1990). *Scholarship reconsidered: Priorities of the professoriate*. The Carnegie Foundation for the Advancement of Teaching: Princeton University Press.
- Cambridge, B. (1999). The scholarship of teaching and learning: Questions and answers from the field. AAHE Bulletin. Retrieved July 27, 2005 from <http://www.aahe.org/dec99f2.htm>.

- Campbell, K., Schwier, R.A., & Kenny, R. (2005). Agency of the instructional designer: Moral coherence and transformative social practice. *Australasian Journal of Educational Technology*, 21(2), 242-262.
- Christians, C.G. (2000). Ethics and politics in qualitative research. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed.) (pp 133-155). London: Sage Publications, Inc.
- Cobb, P. (1996). Where is the mind? A coordination of sociocultural and cognitive constructivist perspectives. In C.W. Fosnot (Ed.), *Constructivism: Theory, perspectives and practice*. New York: Teachers College Press.
- Cox, S. & Osguthorpe, R.T. (2003, May / June). How do instructional design professionals spend their time? *TechTrends*, 47(3), 45-47, 29.
- Cox, S. (2003). *Practices and academic preparation of instructional designers*. Unpublished master's thesis, Brigham Young University, Provo, UT.
- Dick, W., Carey, L., & Carey, J.O. (2005). *The systematic design of instruction* (6th ed.). New York: Allyn and Bacon.
- Ewing, J.M., Dowling, J.D., & Coutts, N. (1998). Learning using the World Wide Web: A collaborative learning event. *Journal of Educational Multimedia and Hypermedia* 8(1), 3-22.
- Gibbons, A.S. (2003, September / October). What and how do designers design: A theory of design structure. *TechTrends*, 47(5), 22-27.

- Glaser, R. (1991). The maturing of the relationship between the science of learning and cognition and educational practice. *Learning and Instruction, 1*(2), 129-144.
- Gordon, J., & Zemke, R. (2000). The attack on ISD. *Training, 37*(4), 42-54.
- Gunawardena, C., Carabajal, K., & Lowe, C. (April, 2001). *Critical analysis of models and methods used to evaluate online learning networks*. Paper presented at the annual conference of the American Educational Research Association, (Seattle, USA).
- Gustafson, K. L. & Branch, R. M. (2002). What is instructional design? In R.A. Reiser & J.V. Dempsey (Eds.). *Trends and issues in instructional design and technology* (pp. 16-25). Upper Saddle River, NJ: Merrill Prentice Hall.
- Jonassen, D.H. (2004). *Learning to solve problems: An instructional design guide*. San Francisco, CA: Jossey-Bass.
- Jonassen, D., Dyer, D., Peters, K., Robinson, T., Harvey, D., King, M., & Loughner, P. (1997). Cognitive flexibility hypertexts on the Web: Engaging learners in making meaning. In Khan, B.H. (Ed.) *Web-based instruction* (pp. 119-133). Englewood Cliffs, NJ: Educational Technology Publications.
- Kenny, R.F., Zhang, Z., Schwier, R.A., & Campbell, K. (2005). A review of what instructional designers do: Questions answered and questions not asked. *Canadian Journal of Learning and Technology, 31*(1), 9-16.

- Keppell, M. (2004). *Legitimate participation? Instructional designer-subject matter expert interactions in communities of practice*. World Conference on Educational Multimedia, Hypermedia and Telecommunications, Vol. 2004, Issue. 1, 2004, pp. 3611-3618.
- Molenda, M. (2003). In search of the elusive ADDIE model. *Performance Improvement*, 42(5), 34-36.
- Morrison, G.R., Ross, S.M., & Kemp, J.E. (2004). *Designing effective instruction*. Hoboken, NJ: John Wiley & Sons
- Parish, P. (2004). Embracing the aesthetics of instructional design. *Educational Technology*, 45(2), 16-24.
- Reigeluth, C.M. (1983). *Instructional design theories and models, volume I*. Mahwah, NJ: Lawrence Erlbaum.
- Reigeluth, C.M. (1999). *Instructional design theories and models, volume II*. Mahwah, NJ: Lawrence Erlbaum.
- Rogoff, B. (1990). *Apprenticeship in thinking*. New York: Oxford University Press.
- Rowland, G. (1992). What do instructional designers actually do? An initial investigation of expert practice. *Performance Improvement Quarterly*, 5(2), 65-86.

- Schwier, R. (2004, October). *A grand purpose for instructional design*. Paper presented at the annual conference of the Association for Educational Communications and Technology, Chicago, IL. Retrieved June 11, 2005 from http://www.indiana.edu/~idt/shortpapers/documents/IDTf_Schwier.pdf
- Seels, B. & Glasgow, Z. (1998). *Making instructional design decisions* (2nd ed.). Upper Saddle River, NJ: Merrill Prentice Hall.
- Shambaugh, N., & Magliaro, S. G. (2005). *Instructional design: A systematic approach for reflective practice*. Boston, MA: Allyn & Bacon.
- Smith, P.L. & Ragan, T.J. (2005). *Instructional design* (3rd ed.). Hoboken, NJ: John Wiley & Sons.
- Tergan, S.O. (1997). Misleading theoretical assumptions in hypertext/hypermedia research. *Journal of Educational Multimedia and Hypermedia*, 6(3/4), 257-283.
- Thomas, M. (2002). Learning within incoherent structures: The space of online discussion forums. *Journal of Computer Assisted Learning*, 18, 351-366.
- Tripp, S. & Bichelmeyer, B. (1990). Rapid prototyping: An alternative instructional design strategy. *Educational Technology Research & Development*, 38(1), 31-44.
- Visscher-Voerman, I., & Gustafson, K.L. (2004). Paradigms in the theory and practice of education and training design. *Educational Technology Research and Development*, 52(2), 69-89.

Wilson, B. (2005). Broadening our foundation for instructional design: Four pillars of practice. *Educational Technology*, 45(2), 10-15.

Yin, R.K. (2003). *Case study research: Design and methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Acknowledgements

This research is supported by a grant from the Social Sciences and Humanities Research Council of Canada.