

Instructional Design Practice as Innovative Learning

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Critical discussions within the field of instructional design have addressed the roles and competencies of designers, as well as the nature of design work per se. This article presents an overarching metaphor—namely, instructional design as a journey into the unfamiliar that views design as a two-fold learning enterprise (i.e., innovative and maintenance learning) and characterizes designers as sojourner-learners. This metaphor places instructional design in a narrative context and emphasizes designers, rather than formalisms, as the primary drivers of the design process. The article then presents several implications of this metaphor related to the identity and innovative practices of designers in the field. Finally, the article suggests that this metaphor can serve as a framework for inquiries into everyday instructional design work, examinations of innovative design practices, and further discussion of the respective roles of instructional designers and design formalisms.

Introduction

Design practice within the field of instructional design has been the subject of critical examination and debate over the past several decades (Dobozy, 2011; Gibbons, 2014; Gropper, 2015; Hakkinen, 2002; Maclean & Scott, 2007, 2011; Mor & Craft, 2012; Smith & Boling, 2009; Yanchar & South, 2009). Major concerns have included appropriate training and design competencies for practitioners (Arinto, 2013; Maclean & Scott, 2011; Yusop & Correia, 2012), suitable conceptual resources to facilitate their work (Der-Thanq, Hung, & Wang, 2007; Maclean & Scott, 2007; Mor & Craft, 2012; Tracey & Hutchinson, 2013; Wild & Quinn, 1998), and perhaps more fundamentally, the nature of design per se as an aspect of educational practice, especially with regard to distance education, computer-based instruction, e-learning, and so forth (Bichelmeyer, Boling, & Gibbons, 2006; Clark & Estes, 1998; Gibbons, 2014; Gropper, 2015; Rowland, 1993). It might be said, in this respect, that an ongoing conversation about the nature of work in the field has raised important issues for consideration and yielded useful insights regarding best practices.

This conversation has also raised concerns among many regarding the relationship between conceptual resources, such as design process models, and the role of instructional designers who would be expected to implement such resources (Gropper, 2015; Hakkinen, 2002; Smith & Boling, 2009; Wild & Quinn, 1998; Yanchar & South, 2009; Zemke, 1985). Traditional formalisms, such as design process models, instructional theories, design theories, and so on, have been questioned on the grounds that they are often overly simplistic, divorced from the realities of practice, and fail to offer adequate guidance to designers (for reviews, see Gibbons, 2014; Smith & Boling, 2009; Yanchar & South, 2009). These criticisms have been motivated, at least in part, by a discomfort with the view that design should be produced through the use of a systematic process, including step-by-step specifications that minimize the need for designer judgment (Smith & Boling, 2009; cf. Gropper, 2015). Indeed, if one takes a systematic approach to design seriously enough, the role of the designer becomes difficult to discern. As Smith and Boling observed, based upon their intensive study of the literature of instructional design:

... there is little to indicate how the individual designer impacts upon or influences design. The problems that initiate design, the data that serve as evidence, the theories that justify decisions, the models that guide behavior—all of these are codified and exist outside of the designer. We are left wondering what, if anything, does the designer contribute? (p. 13)

While an important conversation has taken place with regard to these issues, there is little evidence to suggest that design can be effectively reduced to a technical process of following predetermined steps to a predictable conclusion, although instructional design is often depicted in this way (e.g., Dick, Carey, & Carey, 2014; Gropper, 2015; Maclean & Scott, 2007; for a review and analysis of “prescriptive” design models, see Gibbons, 2014; Gustafson & Branch, 2002; Smith & Boling, 2009). Indeed, most studies of design practice suggest the opposite—that designers must adapt to the particularities of a given project, and that models and theories may facilitate this undertaking in some ways, but have limited applicability and underspecify what is needed to produce finished design document or learning environment (Wislon, 2013; Yanchar, South, Williams, Allen, & Wilson, 2010). As some outside of the field of instructional design have argued, designing is unpredictable, designer flexibility and adaptation are crucial, and creative problem solving is required (e.g., Cross, 1982; Lawson & Dorst, 2009; Nelson & Stolterman, 2012). In this respect, design work in the field should, at a minimum, be characterized by a satisfactory fit between design formalisms and their “intelligent” use (Lowyck & Pöysä, 2001, p. 508; see also Hakkinen, 2002). To the extent that this is the case, a scholarly focus on what designers actually do—that is, how they use conceptual resources intelligently, adapt to contextual circumstances, and make decisions—offers an important contribution to discussions of their role in the instructional design process.

A growing body of research has shed light on this topic, but there is still relatively little discussion of the functions that designers in the field actually perform and how to conceptualize their role in the work of designing learning environments. Assuming that designers do contribute something significant to the design process, and based on a view of design borrowed from narrative theorizing, I will offer a general account of the role and identity of instructional designers, first, by offering a unique metaphor for understanding instructional design practice, and second, by drawing out several implications of this metaphor for work in the field.

In presenting this metaphor and its implications, I recognize that there are many useful ways to conceptualize the activities of designers, and moreover, that the ever-increasing number of systematic process and design models (e.g., Gustafson & Branch, 2002; Scott, 2001) have much to offer practitioners in the field. However, I will suggest that framing key disciplinary considerations in terms of this metaphor allows for a different kind of conversation to take place, namely, one focused on the possibilities that arise when designers’ practical knowledge and innovative learning are viewed as the primary drivers of design. What I present does not amount to a new process model, nor does it advance a strong engineering-oriented approach (e.g., Gropper, 2015). But it can be seen as a metaphor for instructional design practice in which designers use many different models—even those with an engineering orientation—in creative and effective ways.

Design as a Journey into the Unfamiliar

If one takes seriously the view of design as an unpredictable, innovative, and sometimes intuitive process, then design might be best conceptualized as a kind of exploratory work in which resources such as process models, general principles, and templates are, at best, tools in a larger and more complex endeavor. From this perspective, design might be metaphorically cast as a journey into the unfamiliar—that is, a metaphorical Journey in which designers move into uncharted territory by attempting to formulate what hasn’t yet been formulated. That is, for an activity to count as design, at least some aspect of what is to be designed must not have been previously worked out; it must be unformulated and unfamiliar in some sense; otherwise, no design efforts would be required. Extending this basic proposition is the corollary notion that journeys into the unfamiliar will necessarily involve learning that fosters familiarity and, ultimately a finished product; and, without this learning, such a journey cannot be construed as design per se.

While others have briefly suggested that design can be considered a special case of learning (e.g., Rowland, 1993), and that a learning experience might be fruitfully viewed as possessing a narrative structure (e.g., Parrish, 2009), I wish to specify two relevant kinds of learning as unique and essential aspects of the design journey—what have been referred to in another context as *maintenance learning* and *innovative learning* (Botkin, Elmandjra, & Malitza, 1979, p. 10; see also Jarvis, 2006). The first, maintenance learning, refers to becoming familiar with extant knowledge, practices, and tools, such that designers can engage in the same work, in approximately the same manner, as others in the field—for example, using a software program in originally-intended ways for fairly well-understood applications relevant to design. Maintenance learning is clearly important, as it permits adaptation to circumstances using the accumulated accomplishments of others, including those of prior generations. Innovative learning, on the other hand, refers to becoming familiar with unfamiliar situations that have no clear precedent for action, or with managing familiar situations in better ways, such as seeking alternative solutions to existing problems. In the field of instructional design, innovative learning involves both major and minor excursions into the unfamiliar, including efforts to formulate, explore, and test possibilities regarding the design of a learning experience in all of its contextual uniqueness.

As should be clear, maintenance learning and innovative learning in design work complement one another; the first allows for a significant degree of convenience and continuity across time; the second allows for exploration that can solve problems, create new knowledge, and lead to better practices. Moreover, innovative learning is central to any endeavor, such as design, in which a journey into the unfamiliar and a new formulation is required. While familiarity with extant knowledge bases—that is, maintenance learning—surely facilitates the practice of design, as it frees designers from the need to innovate all aspects of their practice; it cannot offer the breadth of knowledge needed for a given design project because that breadth of knowledge is unknown at the outset, though it will, in all likelihood, be vaguely anticipated and worked out as the design process unfolds. In this sense, maintenance learning often supports design work and should be studied as an aspect of design; but it does not drive design forward in the same manner as innovative learning.

What I have suggested here entails several concepts not present in traditional process models, but which, I suggest, contribute to discussions of the designer's roles in the work of design. This contribution is that of sojourner into the unfamiliar, or stated less metaphorically, a learner who explores and becomes familiar with situations in ways that produce the contextual (and possibly generalizable) knowledge needed to achieve a successful outcome, especially with regard to the formulation and working out of design possibilities.

Based on prior research (e.g., Yanchar & Hawkey, 2014), there is some evidence that designers must become familiar with different aspects of a design situation to effectively manage it, including: (a) course-related factors such as client expectations, the nature of the subject matter, learning objectives, and learner characteristics; (b) tools required to actually produce a learning environment; and (c) possibilities regarding how a learning environment might be actually designed—for example, exploring ways of engaging learners, presenting subject matter, and assessing learning outcomes on a particular project. Becoming familiar with such design possibilities is the primary domain of innovative learning in design—that is, formulating and testing possibilities that lead to actuality in the form of a finished design document or learning environment, as well as reflecting on what worked in the process. However, the influence of innovative learning extends beyond the confines of a given project in which it occurred. From the perspective I offer here, innovative learning in situ provides a progressing basis for improvements in designer practices, which informs how they can relate to future work, and might, in that sense, contribute to shifts in professional identity and practical wisdom over time.

Although I have emphasized the notion of designer as learner and design practice as a knowledge-accruing endeavor, I do not wish to ignore what many would consider the central issue in design, namely, the artifact that was the explicit reason for designing in the first place. Such artifacts, including plans, outlines, design documents, online courses, physical aspects of a learning environment, curricula, and so forth, might be considered one of the principal fruits of designer learning from this perspective; that is, what a designer produces will be an expression of the learning that has occurred and a manifestation of the knowledge produced. The artifact will reflect the manner in which relevant aspects of the world became apparent to the designer and how possibilities were formulated and explored. In this sense, it can

be said that the artifact, as it is used (and possibly studied; e.g., Howard, Boling, Rowland, & Smith, 2012) in various ways, will reveal something about the designer; and the learning that occurred in the design process—for example, that the designer had a particular perspective, used certain techniques, made certain assumptions, and so on.

Given what I have already suggested, the related notions of “design as a journey into the unfamiliar” and “designer as sojourner-learner” can be viewed in a narrative sense. There is some precedent for viewing human learning as a narrative-oriented phenomenon in various literatures including educational technology and adult education. For example, Clark and Rossiter (2008) have argued that narrative offers a useful medium for instructing others and a frame of reference for describing learning processes per se. Parrish (2009) has argued similarly, suggesting that aesthetic experiences in education can be fostered, at least in part, by developing instruction in which the student is viewed as a protagonist in an unfolding storyline construed as a learning journey. Narrative as a framework for conceptualizing learning resources has been advocated by these and other scholars (e.g., Goldsworthy & Honebein, 2010; Pachler & Daly, 2009; Plowman, 1996) on the grounds that it provides a meaningful and possibility-filled language for interpreting human activity in general.

Based on existing views of narrative as a metaphor for learning and aesthetics (Parrish, 2009), the design journey can be thought of as having a beginning, a middle, and an ending. It can also be conceptualized as including traditional narrative elements, such as lead character(s), supporting character(s), setting, plot, and theme. This metaphor, then, offers a structure in which design activities can be situated and a tool for analyzing what transpired in a given design project. Designer, from this perspective, might be cast as lead characters, involved with supporting characters (clients, students, other stakeholders) within a twisting plot that includes a number of encounters and events, contextualized in a setting with time, place, deadlines, project requirements, and so on (other variations are possible also, for example, considering clients as main characters.) *Moreover*, any design project may bring with it a particular theme or set of themes, as in projects that entail unique challenges. For example, work on an online course might be dominated by an unusually tight deadline, which would lead to a number of time-related challenges. A major theme of the experience, then, might concern what the design team members learned about producing quality work quickly, about properly satisficing in light of client requests, and so on.

I have presented only a brief sketch of what this viewpoint on instructional design entails. More work is needed to develop this approach and study how it might facilitate scholarly and practical work in the field. For instance, designers may not view their experiences narratively in the moment it may be only later, after some reflection, that they are able to discern the narrative structure of their design experience or articulate that experience in narrative terms. However, future study in this area can address differences made by viewing one’s design efforts narratively, in the moment, at least to some extent. This metaphor could not only offer a unique sense of identity for practitioners—as sojourners into the unfamiliar and innovative learners who drive the design process—but also an opportunity for self-reflection that leads to professional growth, as designers consider how they relate to other lead and supporting characters on a project, how they manage the design process in an unfolding plot, how they seek to learn in the journey of design, how they conceive of the design journey in general, and so forth. While these and other possibilities can be addressed through future inquiry, I wish to present five preliminary implications of this conception of design for practitioners in the field. These implications also create possibilities to be addressed in future inquiry.

Five Implications for Instructional Design Practice

The centrality of designer as sojourner-learner

This metaphor invites designers to view their work as more than technical rule following; it involves attempts to understand design situations from different angles (client requests, learner needs, best practices, designer judgment, etc.), explore possibilities with regard to what might work best in a given situation, and produce learning environments that are optimally responsive within contextual circumstances. From this perspective, there is no design doctrine to be followed aside from the basic injunction to create what is most useful to students. This activity can be seen as a sustained effort to manage the interplay between an overall vision of what the design journey will involve and the

possible aspects of the design to be created along the way. Design practice, from this perspective, involves an initial formulation of the overall nature of what is to be designed, as a possibility to be explored, and that will be worked out as the designer grapples with details that emerge in the unfolding journey. Innovative learning is centrally involved, from this perspective, in that this “working out” of a design involves a continued effort to explore and gain familiarity regarding which possibilities work well in a given context and which do not; moreover, addressing problems that arise in the design journey will suggest more possibilities that bring the designers closer to a successful working out of the design. Encounters with unfamiliar aspects of the situation, then, propel the work forward as they invite exploration and learning that leads to the formulation of more possibilities, working toward a progressively refined product (e.g., a design document or a finished learning environment).

A designer’s innovative learning activities, and the expression of those activities in the form of an artifact, point to a conception of designer knowledge that unfolds continually in practice—lived and embodied rather than codified in a manual or textbook. In other words, from this perspective, design learning can be thought of as embodied in two interrelated ways: in the artifact produced and in the ever-developing practical capability of the designer. I though the practical knowing of designers, or its expression in artifacts, may be described in ways that allow for abstract design principles to be formulated—that is, practical knowing may be “extracted” and thematized—it exists first in a designer’s experiential sense of their craft and its design-producing capability. At bottom, this line of analysis suggests that for design to take place, innovative learning in the midst of uncertainty cannot be replaced by a pat reliance on rules or steps in a process model.

At the center of design, then, is the designer embarked on a learning journey—that is, the designer as an innovative learner who pursues the progressive unfolding of the contours of what she or he is designing. From this perspective, it is the designer who provides the energetic force that allows possibilities to be formulated and worked out on the way to actuality. What I have contended here matches in many respects what others outside of education have suggested (Jahnke, 2012; Schön, 1983; Snodgrass & Coyne, 1997). This conception of design is relevant to education, however, in that it calls for design work guided principally by humans (rather than process models) for humans and thus calls for sensitivity to the needs of students in real educational settings (including those involving distance education and computer aided instruction). Moreover, this account’s focus on innovative learning as a crucial aspect of design coheres with many of the values of education as a field, including an acknowledgment of the central role of learning in life and a commitment to lifelong learning in one’s work. Design as innovative learning requires a progressive, craftsperson-like ingenuity and judgment, which translates into continual learning in order to help others learn.

Questioning authority as part of the design journey

To the extent that a design project is taken seriously as a journey into the unfamiliar, it should be relatively unconstrained by historical precedents within the discipline. That is, designers should be willing to question accepted disciplinary practices in an effort to innovate what is needed in a given situation; their personal innovative learning and practical wisdom will, at least at times, overturn textbook formalisms; and they should be willing to violate principles in an effort to create what is needed, within contextual constraints. From this perspective, the notion of design—as a journey in which possibilities are innovatively formulated and knowledge is produced—demands that some practical freedom be granted to designers.

On the other hand, conceptual tools such as process models and prescriptive theories can, at least at times, offer useful ways of managing the complexities of design projects. As research has suggested, designers do value such conceptual tools in their work, even if they are unable to use them often or as originally intended by their innovators (Yanchar et al., 2010). In this sense, it seems reasonable that designers would be willing to make use of the accumulated wisdom of the past, given its disciplinary longevity as a guide for action. However, instructional designers as innovative learners must also transcend the constraints that historical practices can impose on their ability to work through a unique design situation. Designers as innovative learners will be opportunistic when it comes to solving instructional problems and thus be opportunistic when it comes to innovative learning. This means, for example, that while traditional approaches may sometimes be totally rejected in favor of innovations, they may also, at times, be seen as having potentials that allow them to be repurposed into new resources that facilitate new practices, even if in limited circumstances. For

example, behaviorist techniques originally intended to control behavior, such as reinforcement and punishment, may, with some shift in meaning and execution, be used to demonstrate how a student's own volitional choices lead to meaningful consequences, and thus should be carefully considered before taking action.

What I suggest with regard to the creative repurposing of conceptual tools need not be viewed as a form of uncritical eclecticism. It is surely possible that some designers may grasp at such tools without concern for their fit with the designer's other tools and purposes; but this is only one way to pursue innovative and contextually sensitive practices (for criticisms of eclecticism, see Bednar, Cunningham, Duffy, & Perry, 1992; Yanchar & Gabbittas, 2011). Repurposing conceptual tools may also follow a syncretic pattern, in which they are critically appraised with regard to their potential utility and modified to fit with the rest of a designer's purposes in a given project. Elsewhere, this notion has been referred to as "critical flexibility" (Yanchar & Gabbittas, 2011, p. 383), a practice which emphasizes not only the creative reformulation of what a designer needs in order to accomplish a particular task, based on his or her perspective (assumptions, values, preferred techniques, etc.), but also the need to critically reflect on his or her overall perspective. In this sense, one's questioning of authority should be directed not only toward historical practices, but also toward the "authority" (perhaps tacit) of one's personal *modus operandi* and preconceptions. A part of one's learning journey, then, is learning that comes by way of critical self-reflection.

Learning facilitates learning (and practice)

Included within this view of design is the notion that learning facilitates learning, but not in a gradual, linear sense. A designer's current *modus operandi*, made possible by prior learning in practice, offers a basis for being challenged in new ways that promote further growth and development, even if the direction of that learning cannot be predicted in advance. More specifically, prior training and practical experience will inform a designer's approach to current design tasks; and, one may assume, a designer's approach will lead to relatively effective practice. However, a designer will also encounter difficulties in the design journey—created to some extent by the practical details of their approach—that must be resolved through adjustments (possibly innovations); and those adjustments or innovations can facilitate progress on the project at hand as well as augment and refine the designer's approach in general. Learning in the midst of design, then, is based on a complex interplay of prior ability and current challenges, leading to practical wisdom; and, from this perspective, such learning is a primary means by which designer capability is strengthened as the central driver of design. Thus, journeys into the unfamiliar educate and strengthen the sojourner for future journeys; and the process continues, on and on, as designers continually develop as lifelong (or career-long) learners. In this regard, maintenance and innovative learning will enhance how a designer relates to design situations and can be seen, from this perspective, to enhance skill over time.

Designers embrace their identity as learners

Given the realities of everyday design work, what I suggest should not be understood as a call for undisciplined exploration at the expense of productivity. Rather, what I suggest should be viewed as an exercise in gradual professional identity formation. Following the metaphor of design as a journey into the unfamiliar, designer-sojourners can be thought of as professional learners of a particular type. As I stated above, they not only come to participate in historical practices and utilize extant tools in the course of design; they also explore situations in ways that lead to the formulation of unique possibilities to be worked out; and such "working out" is the design process from this perspective. Challenges that arise in the midst of design projects, then, are not so much obstructions to progress, though they may be frustrating in the moment, as they are the events that enable innovative learning and professional growth over time. If this metaphor is taken seriously, designers will embrace their role as innovative learners and welcome the challenges that arise in the course of their work, viewing them as opportunities rather than inconveniences. Even if designers must strategically choose which challenges to address among the many they will encounter, this general disposition toward design work could become an important part of their professional identity. In this sense, new journeys and plot twists become seen, perhaps tacitly, as invitations for improvement, and design practice is itself a continuous process of becoming. Thus, completed work—for example, design documents, learning environments, and so on—can be viewed as artifacts derived from, and that reflect, the designers' learning activities. They are the spoils of the journey.

Professional training and organizational support

The competencies of designers, from this perspective, would not diverge radically from those already discussed in the field of instructional design. As others have suggested (Guerra, 2006; MacLean & Scott, 2011; Richey, Fields, & Foxon, 2001), a variety of skills are required to be proficient in this work, including project management, practical application of theoretical knowledge, needs analysis, creating learning outcomes, designing courses that allow outcomes to be achieved, and so on. Given what I have already suggested, these are all areas in which designers as learners should continually refine their skills, striving toward greater competence as they engage in their work. Much of this refinement may fall within the category of maintenance learning, as designers seek to enhance what are taken to be standard skills in the profession, although designers may also innovate their own unique ways to excel at such tasks.

What I have described as innovative learning, however, is more straightforwardly related to the work of designing *per se*—that is, formulating and testing possibilities that lead to actuality in the form of a finished product, which, in this sense, is one of the central competencies of a designer. The designer has, in this regard, become able to journey into unknown territory, negotiate its contours, and arrive at a destination that can be viewed as a successful plan for engaging learners and helping them succeed. Taking a reflexive turn, it might be said that this endeavor requires designers to learn to be innovative learners and to develop the identity I have described here. Although there is evidence that practitioners in the field design in this manner, at least to some extent (Yanchar & Hawkley, 2014), a greater emphasis on innovative learning, in addition to the attention commonly paid to design formalisms, can facilitate instructional design practice. The skills to be developed, then—beyond those often acknowledged in the literature—would involve a designer's own *learning skills*, in domains such as the following:

- Locating sources of insight to inform one's imagination when faced with a stubborn problem or in need of an alternative perspective. (Sources might include scholarly research, practitioner literature, professional conferences, design case studies, online resources, colleagues in the field, and insights from other fields, such as the behavioral sciences, engineering, literature, art, philosophy, and so on.)
- Learning general problem-solving and decision-making techniques; possibly participating in some form of creativity training.
- Becoming familiar with principles of group creativity in order to maximize the capability of design teams.
- Studying extant conceptual resources (e.g., design techniques, models, principles, precedents) to ascertain their utility as tools for navigating the journey into the unfamiliar—for example, learning about the affordances and limitations of particular resources and how they might enable a designer to effectively generate and test possibilities en route to a finished product.
- Learning to repurpose extant conceptual resources to adapt to situations or to make use of previously unexplored potentials. This entails an understanding of conceptual resources, but also an ability to use them in unorthodox ways or reformulate them to effectively manage unique circumstances.
- Developing one's own best practices for understanding clients' and students' context and perspectives, in order to create learning environments optimally fitted to students' unique needs. The design journey, in this sense, can be informed by a relatively thorough understanding of what students need.
- Examining one's own assumptions and values to study how they facilitate, or possibly limit, one's efforts to navigate the unfamiliar and create effective learning environments; and, relatedly, reflecting on one's prior work experiences to identify new design knowledge created in the process. Such self-study might be facilitated by journaling about one's experiences and insights and possibly sharing those insights with others.

Graduate training that includes attention to at least some of these skill areas (and possibly others) would help facilitate designers' efforts to engage in innovative learning and enhance what they already do. How these or other skills are best taught is itself a design question and could be worked out over time. Some relevant literature in the social sciences and education could aid in the development of appropriate designer training, for example, work in the areas of designer competency (MacLean & Scott, 2011), group creativity (West, 2009), critical thinking and self-reflection (Tracey & Hutchinson, 2013; Yanchar & Gabbitas, 2011; Yanchar, Slife, & Warne, 2008), narrative learning (Goodson, Biesta, Tedder,

& Adair, 2010), innovative design practices (Honebein & Goldsworthy, 2009), and design precedent (Howard et al., 2012).

The metaphor of designer-as-sojourner also suggests general implications for the organizational structures in which designers perform their labors. One rather clear issue concerns the extent to which designers or design teams are granted sufficient latitude to explore possibilities and arrive at actual learning environments that meet the needs of students. While it is reasonable to expect that such organizations will have in-house methods and procedures, it is important that such methods and procedures do not control the course-creation process altogether and obviate a crucial organizational resource, namely, the imaginative capabilities of designers who adapt to local circumstances and generate what has not been previously generated—an effective learning experience for students.

Organizational support could also come in the form of work time allocated to *some of* the learning exercises I have previously mentioned, such as self-study and access to resources that enable designers to expand their horizons, including scholarly and practitioner-based design literature, professional dialogue (conferences, Webinars, etc.), and co-worker discussion time built into the work schedule. Such resources would allow designers to have a near-continuous influx of ideas to aid and rejuvenate their innovative learning efforts in the midst of design projects.

Finally, an organizational culture that allows designers to take some risks and that places a value on the unique contribution of designers to the creation of learning environments is important. Processes, principles, and so forth contribute to the work of design, but as tools in the hands of designers who creatively navigate the contours of unique design projects.

Conclusion

I have suggested that instructional design practice can be fruitfully thought of as a journey into the unfamiliar—indeed, that any particular design project might be thought of as a journey in this sense—and that designers be viewed as sojourners who engage in this unique task of exploration through maintenance and innovative learning. While both forms of learning are important, I have suggested that the latter of these is the driving force behind design, as it emphasizes the designer's work of formulating and exploring possibilities regarding the structure of specific learning experiences.

This metaphor provides an alternative to technical, process-dominated view of design—which leave some doubt as to the role of designer—and provides a basis for deeper investigations of designers' roles in instructional design; as a possibility explorer, a craft worker, a theory adapter, and so on.

It would seem that there are many useful ways of understanding design and the roles of instructional designers; this approach offers one way of continuing this conversation and exploring how design in the field might be most productively conceived.

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