

## **Read, Talk, Play, Watch: How HRD Practitioners Like to Learn**

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*While an aim of research is to inform practice, there exists a tension between scholars who undertake research and practitioners whom it might benefit. Scholars work diligently inside a system that values print for dissemination, but practitioners opine that the practicalities are embedded within ponderous articles rife with academic language and form. This qualitative study inquires into the learning preferences of HRD practitioners with a special focus on their preferences when learning from printed materials.*

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While an aim of research is to inform practice (Swanson & Holton, 2005, 1997), there exists a perceptible tension between the scholars who undertake the research and the practitioners who might benefit from it (Tyler, 2006; Swanson & Holton, 2005). Scholars work diligently to make clear the processes of their research, their findings, thoughtful considerations of their implications for future research and, importantly, for applied practice in the field. They work inside a system that emphasizes text (sometimes online but mainly as printed matter) as a primary means of dissemination. Practitioners, on the lookout for the next good idea, the next means of gaining a competitive advantage, opine in graduate classes that the practical implications of the research are embedded too deeply within ponderous articles rife with academic language and form. Though it is a significant enough topic to merit a separate sub-committee on the AHRD Scholar-Practitioner Committee, the literature, discussed in more detail below, offers little in the way of addressing this tension.

As a former practitioner, the researcher has herself been frustrated by the form and style that is the norm of academic writing. Conversations with her graduate students – returning adults who are Human Resource Development (HRD) professionals – have strengthened her suspicion that the chances of her research findings being applied by field practitioners narrows whenever her work is accepted into the well-respected academic journals that are read by students, because they are assigned, and that too rarely end up in a practitioner’s briefcase. “We would never have even known this journal existed,” they say, “if you hadn’t assigned it.” And she knows, from her own reading list back in her Fortune 500 days, that what they say true.

This study has its genesis in the researcher’s belief that in order to reach practitioners academic research does not have to be reduced to the snappy sidebars and high-level reporting that are the stalwart of trade publications and in-flight magazines. It seems there must be a way to flex, to think laterally about how to get our work into the hands, into the in-trays, onto the desktops, of the people who can and really will use it. There must be a way to do this without abandoning our principles of thorough reporting. There is bound to be a middle ground, one that allows us to keep our academic standards of reporting rigorous research high, at the same time that we make our work accessible, putting ourselves in real service to the HRD professionals who can benefit from our work. It was the researcher’s hope that this study would begin to hint at an approach to that middle ground.

### **Purpose**

The purpose of this study, part of a larger investigation, was to better understand the learning preferences of HRD practitioners in for-profit organizations, especially their preferences in printed materials as source of learning. The intent was that the findings might support the decisions that researchers, editors and publishers make about the process of disseminating research, by specifically informing the development of print materials to increase their usefulness and appeal to practitioners in our field *and* meet the needs of the academy.

### **Research Questions**

The study focused on two research questions. The first was in regard to the practitioners’ preferred ways of learning in general, in a work context. That is, when the practitioner is faced with the possibility of implementing a new

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process for the first time, how does he or she typically prefer to learn about the process? Second, was a question regarding the preferences of practitioners when they are endeavoring to learn from print materials specifically. That is, what features or design elements of print materials do practitioners feel facilitate accessibility of the materials?

## Review of the Literature

A review of the literature yielded no literature specifically focused on the learning preferences of HRD practitioners themselves. There is some literature that yields insights with regard to workplace learners (Slotte & Herbert, 2006; Slotte & Tynjälä, 2005; Lohman, 2005), some of it filtered through the perspective of HRD practitioners (Slotte, Tynjälä, & Hytönen, 2004). Even so, this literature is more focused on HRD practitioners as the *readers/consumers* of learning material, reviewing it in the interest of informing their work with their clients. The perspective of the HRD practitioner regarding their own learning, versus that of their constituencies, seems to be an underserved topic.

In the absence of literature that focused on the HRD practitioner as learner, the researcher made a tactical decision regarding lenses that would be useful in informing the study and interpreting the findings. Ultimately, she turned to two more generalized bodies of literature: instructional and program design targeted to adult learners (Rothwell & Kazanas, 2004; Dick, Carey & Carey, 2001; Piskurich, 2000; Caffarella, 1994) and literature on the physical design of printed documents (Schriver, 1997; Jonassen, 1982), with a special focus on the distinct but overlapping area of instructional materials design (Frank, 1997; Misanchuk, 1992; Hartley, 1985, 1982; Brody, 1982). There is a strong connection between the literature on printed material design and the literature on the design of print materials intended specifically for instructional purposes, and fortunately they tend not to conflict. Because the research was focused on approaches to learning, rather than learning styles *per se*, and had a special emphasis on print, the research made a conscious decision to focus on these two bodies of literature and to eliminate the literature on learning styles (e.g. Dunn et al, 1984; Honey & Mumford, 1982; Kolb, 1975).

### *Instructional Design Literature*

Much of the instructional design literature focuses on the design of classroom or web-based instruction. The target audiences for the literature tend to be HRD practitioners serving business audiences or educators teaching at the post-secondary level. Much, though not all, of the counsel and processes seem best suited to instruction in the instrumental domain. With the exception of Caffarella's non-linear approach (1994), much of this literature follows a highly systematic approach leading the reader through a series of steps that will ensure a high quality product. The reader is typically encouraged to include each step. The notion of looping back that is so prevalent in Caffarella's work is reserved for revisions that follow alpha and beta-testing (Dick, Carey & Carey, 2001; Piskurich, 2000; Rothwell and Kazanas, 1998; Gagné, Briggs and Wager, 1992).

Classroom learning, rather than self-directed learning, is often the primary interest in this literature. Instruction for individuals working independently, distinguished by their ability to work at their own pace (Dick, Carey & Carey, 2001) appears to be an add-on consideration either as an early notation or an afterthought toward the end of the work, and the process for its development is treated as essentially the same as the process for designing group instruction (Dick, Carey & Carey, 2001; Gagné, Briggs & Wager, 1992).

### *Document Design Literature*

In the literature focused on document design the researcher focused on those aspects that the literature itself indicates drive the "look and feel" of the overall document and its pages. Considered to be critical and, ultimately, irrelevant to the findings, are issues of page size, font, headers, justification, white space and graphics.

The issue of page size appears in all of the literature reviewed here to be subjective and not well researched. While it does not get addressed at all by many of these writers, Hartley indicates that the choice of page size is important because of its influence on subsequent issues such as font size and "the overall visual display of the page" (1985, p. 9), including decisions about multiple columns and the size of graphics. The decision about page size should be driven, he contends, by a combination of factors including an understanding of how and where the instructional document will be used, the cost of production, reader preferences and "the need to conserve resources and avoid waste" (1985, p. 10). Fonts are the desktop equivalent of typeface (Misanchuk, 1992). Hartley points out that while research on typeface and sizes is increasing, "much of the research in these areas is not very helpful to designers of instructional materials. This is principally because such variables as type size, line length and interline space have not been studied in the context of instructional text" (1985, p. 20).

Headings are stratified into levels that help to organize the document in the reader's mind. Both Frank (1996) and Misanchuk (1992) recommend that in instructional materials writers use three levels of headings, reserving a fourth level for "the extreme case" (Misanchuk, 1992, p. 103). Each level should be easy to distinguish from the

others (Misanchuk, 1992) by consistent use of visual differentiators. Justification refers to the “visual display of the right and left margin. In general, Schriver (1997) recommends the use of “justified left, ragged-right margins” as the research indicates that full justification may reduce reading speed, but contends that the real issue with justification is not the margin at all but is the spacing of the words on the line (1997).

White space, or blank space, is the space on the page that is not taken up with graphics or text. It is as much about appearance of space on the page as it is about the actual amount of the page that is “empty.” Schriver (1997) asserts that “text with generous amounts of blank space may attract and hold the reader’s attention longer than text with little blank space,” and suggests that as a general guideline “textual material should occupy about 50 percent of the page” (1997, p. 274). Misanchuk agrees that “well-designed documents contain plenty of white space” which includes margins, section separators and space around tables and graphics (1992, p. 174).

The critical consideration with respect to graphics is their placement relative to the text. Frank (1996) stresses the importance of keeping the graphics nearest to the point at which they are first referred to in the text, and contends that this is necessary even if it creates extra blank or white space at the bottom of the page (1996, p. 56). Misanchuk echoes the concern that often readers are forced to make too many decisions: “Turn the page to view the illustration, and keep flipping back and forth...or forge ahead, reading first the text relevant to the illustration, then irrelevant text, then finally seeing the illustration...From an instructional point of view, it would be far better to keep the relevant text on the same page as the illustration,” (1992, 175) even at the expense of adjusting a bottom margin for a particular page if necessary.

Document design is an area of the literature review that could benefit by some contemporary, focused research on instructional text design using desktop publishing tools. The field narrows when one concentrates on literature that is grounded in research. Only Shriver’s work (1997) is based directly on original research, and hers is by far the most comprehensive of any of the literature included in this selected review. Similarly, the field narrows again when the concentration shifts to the design of materials intended specifically for instructional applications including independent learning. The literature as it stands leaves many unanswered questions. The literature review further substantiated the need to go to HRD practitioners directly to better understand their preferred approaches to learning.

## **Method**

This was a qualitative study undertaken in the field with the intent to gain insight into HRD practitioner learner preferences from the HRD practitioners directly. This section briefly describes the design of the study, the sampling strategy and sample population, the data collection process, and limitations of the study.

### *Research Design*

The study was approached in the spirit of naturalistic inquiry “based on inductive thinking and associated with phenomenological views of ‘knowing’ and ‘understanding’ social and organizational phenomena” (Owen, 1982, p. 3). This design is a good fit for this study on the basis of several assumptions delineated by Owen (1982). The first of these is the emphasis on the importance of context of events and behaviors, which ties to the context-specific inquiry into the learning preferences of HRD practitioners. Another is the role of the researcher as a data-gathering and processing “transducer” (Owen, 1982, p. 6), in this case as both interviewer and future author of practitioner-relevant materials, whose thinking and approaches are affected by the unfolding of the study. Additionally, naturalistic inquiry holds that theory emerges from data, rather than being supported or disproved by it. Importantly for this study, it advocates for the use of qualitative methods that allow for a close relationship among the researcher, the research participants and the data. Data in this study was gathered with a semi-structured interview. The researcher used a process of constant comparison (Glaser & Strauss, 1967, pp. 62-65) in aid of “developing an understanding that encompasses all instances of the process, or case, under investigation... [based on the assumption that]...any case will necessarily bear the traces of the universal...[and] that readers will be able...to generalize subjectively from the case in question to their own personal experiences” (Denzin & Lincoln, 1994, p. 202).

### *Sampling*

The researcher chose to use snowball or chain sampling (Patton, 1990, p. 176) as a sampling strategy. Beginning with her own network of professionals with more than five years of experience (though some were newer to current position), she identified cases of interest through the earliest participants, operating through a chain of contacts who assisted in connecting with “information rich cases [and]...good interview subjects” (Passmore & Baker, 2005, p. 53). This approach to purposeful sampling allowed for a sufficient number of participants to meet a reasonable level of variation with regard to industry, company size, and role/title of the practitioners.

The fifteen for-profit HRD practitioners were drawn from a broad swath of for-profit firms. Two participants were independent consultants with no formal organizational affiliation. The remaining thirteen participants were associated with a variety of industry segments. The size of their organizations varied, from single-site firms to multi-site and multi-national operations that differed on three dimensions: market sector, e.g. retail, high technology, sports apparel, telecommunications, consulting etc; size, i.e. ranging from 500 to 90,000 employees, and type, i.e. publicly-held, privately-held, multinational and regionally based. Nine of the organizations are Fortune 500 firms. The participants held roles within HRD ranging from individual contributors (5 participants with titles of trainer or facilitator) to manager (5 participants with titles of Manager of Sales Training, Management Development, Assessment and Development Training and Development, Human Resources and Learning), and director level (4 participants with titles of Director, Learning and Development, Talent, Corporate Education, Workforce Performance), with one participant operating with the title of Chief Knowledge Officer, also under the auspices of the HRD function. Eight of the participants were female, and seven were male. Time in current role ranged from .5 years to 18 years. The mean time in current role for the sample population was 5.97 years.

#### *Data Collection*

Consistent with the spirit of naturalistic inquiry, data were collected via semi-structured interviews combining standard types of open-ended interview questions with those designed on the basis of Flanagan's Critical Incident Interview Technique (CIIT) (1954), also referred to in the literature as Critical Incident Interviewing (CII) (Boyatzis, 1998). The interview protocol, reviewed by two colleagues with research experience, and pilot-tested twice, included a total of eight questions, several with optional sub-prompts designed to elicit specific information not initially forthcoming in the interviewee's response. Following an explanatory preamble, it opened with two basic questions regarding title, tenure in role and the responsibility of the participant.

The next four questions, with accompanying sub-prompts, were: (1) when you implement a new program or method of learning, how do you like to learn about it; (2) have you ever implemented anything solely from reading a manual or using a guidebook? (with this sub-prompt for a positive reply: If you were to learn this way, what would be the critical elements or attributes of the materials that would help to make them useful to you?); (3) When you are learning about and implementing a new process or program, what difficulties have you typically encountered; (4) How have you overcome those difficulties in the past? Since the interviews took place in the participants' workspace, participants were also prompted to show the researcher any readily available materials they had found useful, and point out specifics about how/why these materials "worked" for them.

The final two questions were questions adapted from Flanagan's Critical Incident Interviewing Technique (CIIT) (1954) inquiring into both a positive and a difficult/challenging experience the practitioner had when faced with learning about a new process or method. Consistent with the CIIT process (Flanagan, 1954), participants were prompted to include as much detail as possible.

#### *Limitations*

This study has limitations typical of qualitative research resulting from its encounter, albeit a close one, with a circumscribed sample size (n=15). The sample population was drawn from for-profit businesses that represented a variety of profiles, e.g., size, market and industry, but not all types of organizations and HRD roles could be represented. Moreover, the study does not account for the particular ways in which forces such as specific organizational culture, politics, and economics can influence the ways in which practitioners can and do learn.

Further, this study may be limited (and at the same time supported) by the researcher's own experience as an HRD practitioner. This experience brings with it an insight into the complexities of the world of the practitioner, but may have made her too much a sympathizer. She tried to counter this possibility by calling on colleagues to review her protocols and coding, field testing of the protocols, and engaging in dialogue with other researchers, not associated with the study, as a way of exploring the data and testing her conclusions.

## **Findings**

The 15 HRD Practitioners who participated in the study were asked to describe their general preferences for learning in the context of their HR practice. All but two cited multiple preferences. Responses fell into five categories: 1) reading printed materials; 2) using online technology to do research, often followed by the reading of books that were cited online; 3) talking to others with experience in the subject the practitioner was pursuing; 4) seeing someone else model the process/ subject matter, and 5) experimenting with it first-hand. Table 1 depicts the responses of the practitioners. If a practitioner expressed a strong preference for one element over others, it is distinguished by a "1" in the table.

This multi-modal approach to learning was typified by John’s comment that,

My personal preference would be more of a multifaceted approach than just one linear approach. So...to learn about something new I would like to have opportunities to read about the materials, equally to have an opportunity to discuss the topic with an individual that’s knowledgeable...or is an expert of the topic. In a... ideally in an informal structure.

Alice also supported this approach when she described her own learning process:

I think that generally when I’m learning anything, I like to learn it by topic experts. I do that first. That formulates my views and then I’m likely to read. And I’m likely to do all of that before I actually try something.

While four of the fifteen practitioners did not include print materials as a preferred way to learn, three expressed a distinct preference for reading over other modes. Of these, Carol was the most enthusiastic endorser of print materials. “I love to read things and just kind of digest them by myself, more so than having it kind of spoon-fed to me,” she said, although she recognized that her style might not be representative of her peers. She continued, “I just like to read stuff and then process it. But I think for most people to have it be easy to read, more structured, more bullet points.” Carol’s suspicions were supported by Bobbi’s comment that she liked “executive summaries, anything that has short points. Everybody’s pressed for time and for the most part anything that’s easy to find, easy to locate the things I need to know more about...Harvard Business Review I find actually to be pretty useful.”

Table 1. *HRD Practitioner Self-Described Learning Preferences*

HRD Practitioners	Read Print Materials	Online	Talk to Others	See It Modeled	Participate/ Experiment
Helen	*	*	*		1
Bobbi	*		1		
Kate				*	1
Alice	*		1		
Jasa	1		*		
John	*		*		
Noah	*		1		*
Jake				1	
Carol	1				
Brad	1	*	*		
Bruce					1
Melody	*				1
Nan	*				1
Linda	*				*
Rod					*
Totals (n=15)	11 with 3 as 1 <sup>st</sup> Preference	2	7 with 3 as 1 <sup>st</sup> Preference	2 with 1 as 1 <sup>st</sup> Preference	8 with 5 as 1 <sup>st</sup> Preference

The interest in easy access often led to comments on how reading had in some cases shifted from printed text to online text, or to the Internet as a source for printed texts. As Brad, whose first preference was reading, pointed out, “I usually first look at web pages actually, and try to at least find out what’s going on out there, and then verbally. So I’m a big reader. So sometimes it’s going to external websites to find books, buy them and read them.” That the HRD practitioners included reading print materials as a compelling way of learning provides strong support for print as the medium for the continued conveyance of information for practitioners acquiring new information and skills.

#### *Design of Print Materials*

The researcher asked all fifteen HRD practitioners specifically about the characteristics of print material that worked well for them when they were learning something new from a document. All fifteen talked about at least one characteristic of print materials that was important to them, even though four of them had indicated that reading was not their first or preferred tactic for gathering information when learning something new. In total, sixteen

characteristics were noted by the participants. Responses and frequency from all three populations are included in Table 2. Note that the characteristics are listed in order of total frequency, from high frequency to low.

There was a clear cry for simplicity, with a strong preference for using graphics of many sorts. Jake, who expressed reticence regarding printed materials, still had a clear idea of what he wanted when he is faced with learning from print, commenting, “The perfect printed materials would be, I hate to say this, but a lot of, more pictures than anything else.”

Helen, who did consider print materials her first preference, supported this idea of what she called “visual content”:

...very visual, very colorful, for me I’m a very visual learner, I think a lot of us in this field are. As three-dimensional as materials can be, put it that way. Things that either stand out in the materials – have three dimensional looking pictures.

Jasa, who also cited reading as her first preference for learning, nonetheless highlighted the need for simplicity with her comment that her colleagues who were helping her implement new initiatives in her organization didn’t need “a thesis on the work. They don’t need to know about the history or anything like that.” Carol, who had attempted to fill in the vacuum of materials by putting together a guide herself, also supported the notion of simplicity and brevity:

We’ve gotten a lot of feedback. We developed a guide that was 59 pages long and the feedback is, it’s too, we’re not using it, there’s too much in there. So we’re now going to shrink it down to 20 pages, and I think that we’ll get a lot more use out of it.

Table 2. *Document Design Characteristics Important to HRD Practitioners*

Document Design Characteristics	Frequency of Mentions by HRD Practitioners (n=15)
Graphics (visuals, pictures, flowcharts, models, and relationship mapping)	7
Good Index and Table of Contents	4
Bullets	4
Job Aids (cards, templates, worksheets, step by step instruction)	4
Levels of Detail (overview/abstracts with access to more detail if required)	3
Few Words	3
Simple/Easy to Reference	3
Sidebars	3
Examples (case studies, narratives, what other companies are doing)	2
Non-Linear Sequencing of Content (intuitive referencing)	2
Colorful	2
Short	2
Technology – Computer or Web-based	2
Technology – Audio-Visual	1
Generous White Space	1
Large Print	1

Also expressed here was a strong desire to reference the materials quickly and easily, picking and choosing only those topics of particular interest. This desire appears in references to the separation of detail from higher level overviews, the use of bullets, sidebars, and especially in the commentary on the importance of both a table of contents and an index. Based on her own experience both as a learner and as a result of building a guide for her colleagues, Carol notes:

I think that one thing that is interesting is when you have the content in a book and then on the sides of it, like the sidebar has either uh bulleted items that you can kind of quickly reference or it has maybe in the sidebar that’s where your examples are, so that if you need to move through something quickly you don’t have to read the whole book.

Brad supported this desire to move quickly through materials accessing only what is needed, advocating, “I love a good table of contents, and I value an index even more. I’m very frustrated when I don’t find an index in a book. Using it for reference.”

The usefulness of job aids or tools - highly structured formats that would in essence walk the reader through tactical action – also emerged. Helen raised the concept of tools as supplement to learning without the benefit of modeling or hands-on participation, suggesting that “without the aid of real life – materials that are, uh the word practitioner-oriented is the kind of a phrase, but to possibly having physical aids with them, whether it’s cards or whatever.” John indicated that in the absence of materials, he tended to work with his colleagues on new initiatives “...through conversation, rather than formal templates, which would be useful, but we don’t have them.”

Carol summed up the need for a workbook-type of approach to the materials based on her work with colleagues who are were new to a concept:

Sometimes if there’s, this is less for me, but I do find that I’m doing this a lot for um my team as we’re creating things. First you do this, then you do that, you know more of like a step by step process. Particularly if I work with HR business partners or generalists and they’re less OD people, and they’re needing to implement something that my team has created. Tangible tools, more worksheets.

These findings on design characteristics gave the researcher clear direction regarding the “look and feel” that the materials should possess.

## **Discussion**

The participants in the study expressed preferences for learning in various media including print, in most cases. The enthusiasm of the participants’ recommendations for useful materials substantiated the welcome that appropriately designed print materials are likely to receive from practitioners in the field. In some cases printed materials were the first choice of the research participants. These results would point toward print as a still viable channel for disseminating research relevant to practitioners, despite the apparent ubiquity of the online world. In considering the design of print materials, there was strong consensus around a desire for graphics, simplicity and job aids or tools that would, respectively, make the materials easy to use, make the information accessible, and bring the steps of the process to life for HRD practitioners in the workplace. The aspects of print material that practitioners in this study indicate as important echo the key arguments made in the literature about the effective design of print materials both in general and as an aid to learning. One could argue, therefore, that there are no big surprises in this study. Rather, it highlights that there are some simple ways, even in the face of larger and ongoing discussions on the nature and value of the relationship between research and practice, that we in the academy could make research more accessible to a wider range of readers.

The findings from this study are of an eminently practical nature. They are less about meaning making – or even sense making – than they are about the delivery of materials that could result in meaning making. They have implications for narrowing the gap between the kind of publications that have become the hallmarks of rigorous academic research, with their small formats, limited black and white graphics, tiny print, and dense text, and the ways of presenting our work, with colorful graphics, cogent sidebars, and reference-able bulleted text, that will resonate with, appeal to, and even excite practitioners. These dimensions of print materials that would optimize them for use in the field need not come at the expense of thorough reporting of rigorous research processes. Creative graphics, sidebars, and even bullet points are not inherently a “dumbing-down” of the reporting, not any more than the presence of dense text ensures us that it has scholarly merit.

These findings of this study on optimizing print materials as a tool for learning in the field provide us with some ideas about how materials can be designed in ways that will increase their accessibility and therefore their appeal to our audiences in the workplace. While there may be other approaches to By considering the design elements that HRD practitioners themselves identify as important we can, in the books and journals in which chapters and articles express our findings, take a significant step toward ensuring that our work finds an applied “home” with practitioners in the field. It is, of course, only one step, but it is not a complicated one, and taking it could really matter. The practitioners are waiting. And while they wait, they are working – too often without the benefit of good research.

## **References**

- Boyatzis, R. E. (1998). *Transforming qualitative information*. Thousand Oaks CA: Sage.
- Buch, K. & Bartley S. (2002) Learning style and delivery mode preference. *Journal of Workplace Learning*. (14)1/2. 5-10.
- Denzin, N.K., & Lincoln, Y.S. (Eds.). (1994). *Handbook of qualitative research*. Thousand Oaks, CA: Sage Publications.
- Dick, W., Carey, L. & Carey, J.O. (2001). *The systematic design of instruction*. New York: Longman.
- Dunn, R., Dunn, K., & Price, G. E. (1984). *Learning style inventory*. Lawrence, KS: Price Systems.
- Flanagan, J. C. (1954). The critical incident technique. *Psychological bulletin*. 51. 327-335.
- Frank, D. (1996) *Terrific training materials: High impact graphic designs*. Minneapolis, MN: Lakewood Publications.
- Glaser, B.G., & Strauss, A.L. (1967). *The discovery of grounded theory*. Chicago: Aldine.
- Honey, P. & Mumford, A. (1982). *Manual of learning styles*. London: P. Honey.
- Kolb, D. A. and Fry, R. (1975). Toward an applied theory of experiential learning. in C. Cooper (ed.) *Theories of Group Process*, London: John Wiley
- Lohman, M.C. (2005). A survey of factors influencing the engagement of two professional groups in informal workplace learning activities. *Human Resource Development Quarterly*. (16)4. 501-527.
- Misanchuk, E.R. (1992). *Preparing instructional text: Document design using desktop publishing*. Englewood, NJ: Educational Technology Publications.
- Owen, R. G. (1982). Methodological rigor in naturalistic inquiry: Some issues and answers. *Education Administration Quarterly*. 18(2). 1-21.
- Passmore, D. L., & Baker, R. M. (2005). Sampling Strategies and Power Analysis. In Swanson, R. A. & Holton, E. F. (Eds.). *Research in organizations: Foundations and methods of inquiry*. San Francisco: Berrett-Koehler Publishers, Inc.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods*. Newbury Park, CA: Sage.
- Piskurich, G.M. (2000). *Rapid instructional design: Learning ID fast and right*. San Francisco: Jossey-Bass.
- Rothwell, W.J., & Kazanas, H.C. (2004), *Mastering the instructional design process: A systematic approach*. San Francisco: Pfeiffer.
- Schriner, K.A., (1997). *Dynamics in document design*. New York: John Wiley and Sons Inc.
- Slotte, V. & Herbert, A. (2006). Putting professional development online: Integrating learning as productive activity. *Journal of Workplace Learning*. (18)4 235-247.
- Slotte, V. & Tynjälä, P. (2005), Communication and collaborative learning at work: views expressed in a cross-cultural e-learning course. *International Journal on E-learning*. (4)2, 191-207.
- Slotte, V., Tynjälä, P. & Hytönen, T. (2004), How do HRD practitioners describe learning at work?, *Human Resource Development International*, (7)4, 481-499.
- Spencer, C. (2006). Research on learners' preferences for reading from a printed text or from a computer screen. *Journal of Distance Education*. (21)1. 33-50.
- Swanson, R.A. & Holton, E.F. (2005). *Research in organizations: Foundations and methods of inquiry*. San Francisco: Berrett-Koehler.
- Swanson, R.A. & Holton, E.F. (1997). *Human resource development research handbook: Linking research and practice*. San Francisco: Berrett-Koehler.
- Tyler, J.A. (2006). Researching research models: What is emergent, elastic, and nonlinear all over? *Human Resource Development Review*. 5(4). 494-505.