
POSTMODERNISM IN EDUCATIONAL TECHNOLOGY: UPDATE: 1996–PRESENT

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Since the first edition of the *Handbook of Research in Educational Technology*, postmodernism as a philosophy, a concept, and a methodology has integrated itself firmly and solidly within nearly all scholarly domains. In the area of curriculum theory, one need not search too far into contemporary developments of curriculum without coming upon postmodernist foci. Yet in the field of educational technology, this is not so. Scholarship in educational technology is surprisingly resistant to postmodern activity in any systematic way. While there are many sporadic and isolated examples, the field of educational technology is weak in postmodern analyses.

This entry will bring the postmodern up-to-date. The first edition of this handbook was published in 1996. Therefore this entry will backtrack to 1995 and include work until 2001, focusing on (1) postmodernism as philosophy, (2) postmodernism in curriculum theory, (3) doing postmodern research, (4) postmodernism in educational technology, and (5) borderline postmodern educational technology. This latter section focuses mainly upon the literature within the “information technology” domain. Finally, this review is not intended to be comprehensive, but rather to highlight directions and examples of the kind of work that is being done and can be done.

11.1 POSTMODERNISM AS PHILOSOPHY

At the most generic level, postmodernism has now entered the literature as the philosophy of our times. Of a myriad of popular and scholarly texts available, only two will be noted here, given for their conscious placement of postmodernism within the broad perspective of philosophy. Cooper (1996) provides

a panoramic picture of world philosophies, beginning in the ancient worlds of India, China, and Greece, and ending with twentieth century philosophies, the last of which he identifies as postmodernism. Cooper concentrates his postmodern analysis on Derrida, Lyotard, and Rorty, with their “enthusiasm [in varying degrees] for irony and play, parody and pastiche, pluralism and eclecticism” (p. 465). A similar broad treatment is given in an earlier work by Tarnas (1991) who argues that the postmodern search for truth “is constrained to be tolerant of ambiguity and pluralism, and its outcome will necessarily be knowledge that is relative and fallible rather than absolute and certain” (p. 396).

11.2 POSTMODERNISM IN CURRICULUM THEORY

Of all the contemporary studies of curriculum theory, the most comprehensive overview is arguably that provided by Pinar, Reynolds, Slattery, and Taubman (2000). Their outline of contemporary curriculum discourses provides a useful template, which one might adapt for educational technology scholarship. Their nine categories of curriculum research identify curriculum as

1. Political text
2. Racial text
3. Gender text
4. Phenomenological text
5. Poststructuralist, deconstructed, and postmodern text
6. Autobiographical/biographical text
7. Aesthetic text

8. Theological text
9. Institutionalized text

Category 5 specifically lumps poststructuralism, deconstruction, and postmodernism into one. Nevertheless, postmodern scholars might find it difficult to pigeonhole themselves that narrowly. Many would include several items of the longer Pinar et al list as in fact falling *within* the postmodern domain, including gender text, phenomenological text and political text. Contrarily, the authors choose to discuss the feminist writings of Patti Lather under the category of postmodern, but not under the equally appropriate heading “gender text.”

Slattery (1995) working on his own (before his teaming with Pinar et al.) had suggested a rather all-inclusive analysis of postmodern curriculum development paradigms, including hermeneutics, race, gender, ethnicity, and “qualitative aesthetics” (p. 207), to name only a few. Indeed, Slattery (1997) provides

a vision of the postmodern curriculum that is radically eclectic, determined in the context of relatedness, recursive in its complexity, autobiographically intuitive, aesthetically intersubjective, phenomenological, experiential, simultaneously quantum and cosmic, hopeful in its constructive dimension, radical in its deconstructive movement, liberating in its poststructural intents, empowering in its spirituality, ironic in its kaleidoscopic sensibilities, and ultimately, a hermeneutic search for greater understanding that motivates and satisfies us on the journey. (p. 267)

Ellsworth (1997) writes about curriculum theory from the vantage point of film theory, thus providing a totally different, and very useful, entry into educational technology. Ellsworth focuses on the importance of the cinematic construct of “mode of address.” Film theory, she says, defines “mode of address” by the question: “Who does this film think you are?” (p. 22). The answer points out the necessary and inevitable gap between sender-receiver, filmmaker-audience, or teacher-learner. The question (Who does this film think you are?), seemingly straightforward, immediately becomes entangled and complex. This is because a focus on mode of address “makes assumptions about who the audiences are—in terms of their aesthetic sensibilities, attention spans, interpretive strategies, goals and desires, previous reading and viewing experiences, biases and preferences. These assumptions are predicated on further assumptions about audience members locations within dynamics of race, gender, social status, age, ideology, sexuality, educational achievement and geography” (p. 45). Instructional designers need to keep in mind this postmodern concept of “mode of address” by asking critical questions about an instructional product or design:

- What actually exists?
- What is supposed to exist?
- What is wanted?
- What is needed?
- How do alternative communities perceive its function?
- Who does this *instructional product* think you are?

The significance given to the postmodern within curriculum theory is perhaps best illustrated by the acceptance to be found in the work of the *American Educational Research Association* and its journal *Educational Researcher*. Most noteworthy are the debates stimulated by Conzas (1998), Pillow (2000), and St. Pierre (2000).

11.3 DOING POSTMODERN RESEARCH

It is problematic to find methodological texts that guide the novice researcher into the difficult realm of the postmodern. Two such texts may prove useful, although they are ostensibly both outside the domain of education, let alone educational technology. Cheek (2000) focuses on research in the field of nursing, but her chapters provide a useful walk-through “situating postmodern thought,” “researching poststructurally,” and “doing research informed by postmodern and poststructuralist approaches” (p. v-vi). Scheurich (1997) provides another, albeit more generic, approach for examining postmodern research methodology.

11.4 POSTMODERNISM IN EDUCATIONAL TECHNOLOGY

As was stated earlier, postmodern scholarship in educational technology is not mainstream. Yet, on the other hand, there would seem to be a plethora of individual scholars working in the field. And clearly, they do work together. Having said that, there seems to be no strongly unified body of work that presents a clear postmodern strand of scholarship. This *Handbook of Research in Educational Technology* would appear to be the exception rather than the rule. In the first edition of the *Handbook*, postmodern issues were very clearly identified within the broad topic of “Foundations.” Major work was summarized there by Yeaman, Damarrin, Hlynka, Anderson, and Mufoletto. Today one must add scholarship by Bromley, Wilson, and Solomon as major contributors to that list, even though some of those listed might not consider themselves postmodernists.

Bromley (1998) is one who may not claim to be a postmodernist, but who nevertheless has questioned the prevailing discourse of computers in schools. His focus is on the social practices of technology utilization, broadly in schools and more narrowly in classrooms.

Wilson (1997) has been consistently intrigued by the postmodern paradigm within a series of important writings. He too, claims not to be a postmodernist, but rather an “instructional designer,” and more specifically a *constructivist* instructional designer. Nevertheless, in several papers he explores postmodern implications for instructional design. For example, he provides an interesting comparison of postmodernism and constructivism, and notes the irony that while constructivism seems to have gained acceptance in educational technology, postmodernism has not, even though “the roots of many constructivist beliefs about cognition are traceable to postmodern

philosophies” (Wilson, 1997). Elsewhere (Wilson, Osman-Jouchoux, & Teslow, 1995), he provides a similar comparison. Reeves and Hedberg (1997) explore evaluation decisions within different paradigms, one of which is identified as “critical theory-neomarxist-postmodern-praxis”.

Mason and Hlynka (1998) present a scenario on the use of PowerPoint in the classroom, then in a follow-up tandem paper (Hlynka & Mason, 1998) they examine PowerPoint from six postmodern frames: multiple voicing, breakup of the canon, supplementarity, slippery signifiers, nonlinearity, and ironic juxtaposition.

Solomon (2000) in a paper designated the AECT “Young Scholar” award winner for 1999, has provided a tentative postmodern agenda for instructional technology, and has stressed the importance of a postmodern component to the field.

Yeaman (1994, 1997, 2000) has written extensively on postmodern instructional technology focusing most recently on cyberspace, technology discourse, and the cyborg.

Several authors have noted the correspondence of hypertext to postmodern philosophy. Within educational technology, the most interesting approach has been that of Rose (2000).

In addition, a variety of doctoral dissertations have explored a variety of dimensions of postmodern educational technology. Elshof (2001) looks at cultural discourses on technology teachers’ worldviews and curriculum. Waltz (2001) provides a fascinating critical and close reading of a learning space, specifically a distance-learning classroom. Hartzell (2000) provides a postmodern framework from which to examine technology integration. Maratta (2001) focuses on the “unification of distance learning foundations and critical thought paradigms, especially postmodernism, through the creation of an educational prototype and an actual web-based course syllabus template” (p. 1). Finally, following the lead of Yeaman (1994), several studies have focused on the cyborg within technology and what it means to be human (Lucek 1999; Stein, 1997).

11.5 BORDERLINE POSTMODERN EDUCATIONAL TECHNOLOGY

In addition to the research noted in the previous sections, a huge body of literature exists in closely related fields, especially information technology, but also media theory and sociology.

Marshall McLuhan has been reinterpreted by a variety of scholars as a postmodernist before his time. For example, Levinson (1999) makes it clear that McLuhan’s aphorisms and phrases, once thought as quaint and throw-away lines, now seem to be a description of nothing less than the postmodern condition: “discarnate man,” “centers everywhere; margins nowhere,” “hot and cool,” “surf-boarding electronic waves,” and of course, “the medium is the message.” Genosko (1999) begins his study linking Baudrillard with McLuhan by pointing out that a McLuhan revolution is “in full swing” (p. 1), and that his focus is “what every reader of Baudrillard already in some respect

knows: Baudrillard’s debts to McLuhan are substantial (p. 3).” Finally he acknowledges that, “McLuhan and Baudrillard are the key thinkers to whom postmodernists turn to situate their deviations from them (ibid.)” Stamps (1995) moves in different directions by coupling McLuhan with another noted Canadian communications theorist Harold Innis, and explores their work from the perspective of the Frankfurt School.

The relation of information technology to contemporary postmodern literary theory has been explored by Coyne (1997), and Landow (1997).

In an only slightly different but parallel vein, Manovich (2001), combining film theory and art history on the one hand with computer science on the other, attempts to develop and explicate a language of new media. He argues: “In the 1980s many critics described one of the key effects of postmodernism as that of spatialization—privileging space over time, flattening historical time, refusing grand narratives. Computer media, which evolved during the same decade accomplished this spatialization quite literally” (p. 78). Manovich goes on to explore those relationships and to propose that new media is grounded in five principles: numerical representation, modularity, automation, variability, and cultural transcoding.

11.6 CONCLUSION

The intersection of postmodernist thinking and educational technology has developed haphazardly since the first edition of this *Handbook of Research on Educational Technology*. While independent scholarship thrives, nevertheless, postmodern educational technology, at this writing remains on the margins. It may be that this field is simply too close to a technical model which continually needs to know *how* more often than *why*. Progress in instructional design seems to be measured by the success of instructional design models, which promise accurate, efficient and “just-in-time” learning, often grounded today in new developments within artificial intelligence research. Interest shifts from how to teach people to think, to how to teach machines to think like people. Postmodern instructional designers and postmodern instructional technologists are more curious about *why* rather than *how*. Postmodernists are aware and have always been aware that multiple discourses need to be recognized, understood, and explicated. There are unquestionably those individuals, including instructional designers, who are more comfortable with searching for the one best solution to a given learning problem. It is clearly comforting to believe that there is still one best solution that can always be found, if one only tries hard enough, and has time enough to cycle and recycle. There are still those who fear the postmodern as bringing uncertainty and chaos into the world. Yet alternative worldviews do exist and will always exist, even within our own boundaries and borders. It is paradoxical that as we move inexorably toward a global village, in which we are united instantly with the entire world, primarily due to technology, at the same time we discover that village in our own backyard. The world today *is* postmodern. Educational technology must also be.

References

- Bromley, H., & Apple, M. (Eds.). (1998). *Education/Technology/Power: Educational computing as a social practice*. Buffalo: SUNY Press.
- Bromley, H. (1998). Data-driven democracy: Social assessment of educational computing. In H. Bromley, & M. Apple, (Eds.), *Education/Technology/Power: Educational computing as a social practice*. Buffalo: SUNY Press.
- Cheek, J. (2000). *Postmodern and poststructural approaches to nursing education*. Thousand Oaks, CA: Sage Publications.
- Constas, M. (1998). Deciphering postmodern educational research. *Educational Researcher*, 27(9), 36-42.
- Cooper, D. (1996). *World philosophies: An historical introduction*. Oxford, UK: Blackwell.
- Coyne, R. (1997). *Designing information technology in the post-modern age: From method to metaphor*. Cambridge, MA: MIT Press.
- Ellsworth, E. (1997). *Teaching positions: Difference, pedagogy and the power of address*. New York: Teachers College Press.
- Elshof, L. (2001). *Worldview research with technology teachers*. Unpublished doctoral dissertation, University of Toronto.
- Genosko, G. (1999). *McLuban and Baudrillard: The masters of implosion*. London: Routledge.
- Hartzell, F. (2000). *Contradictions in technology use: Stories from a model school*. Unpublished doctoral dissertation, Oklahoma State University.
- Hlynka, D., & Mason, R. (1998). PowerPoint in the Classroom: What is the Point?. *Educational Technology*, 38(5), 45-48.
- Landow, G. (1997). *Hypertext 2.0: The convergence of contemporary critical theory and technology*. Baltimore, MD: Johns Hopkins University Press.
- Levinson, P. (1999). *Digital McLuban: A guide to the information millennium*. London: Routledge.
- Lucek, L. (1999). *A modest intervention: Reframing cyborg discourse for educational technologists*. Unpublished doctoral dissertation, Northern Illinois.
- Manovich, L. (2001). *The language of new media*. Cambridge, MA: MIT Press.
- Maratta, W. H. (2001). *The nexus of postmodernism and distance education: Creating empowerment with educational technology and critical paradigms*. Unpublished doctoral dissertation, Florida State University.
- Mason, R., & Hlynka, D. (1998). PowerPoint in the Classroom: Who has the power? *Educational Technology*, 38(5), 42-45.
- Pillow, W. (2000). Deciphering attempts to decipher postmodern educational research. *Educational Researcher*, 29(5), 21-24.
- Pinar, W., Reynolds, W., Slattery, P., & Taubman, P. (2000). *Understanding curriculum: An introduction to the study of historical and contemporary curriculum discourses*. New York: Peter Lang.
- Reeves, T., & Hedberg, J. (1997). Decisions, decisions, decisions. Available <http://nt.media.hku.hk/webcourse/references/eval-decisions.htm>
- Rose, E. (2000). *Hypertexts: The language and culture of educational computing*. Toronto: Althouse Press.
- Scheurich, J. (1997). *Research method in the postmodern*. New York: RoutledgeFalmer.
- Slattery, P. (1995). *Curriculum development in the postmodern era*. New York: Garland Publishing, Inc..
- Solomon, D. (2000). Towards a post-modern agenda in instructional technology. *Educational Technology: Research and Development*, 48(4), 5-20.
- St. Pierre, E. (2000). The call for intelligibility in postmodern educational research. *Educational Researcher*, 29(5), 25-28.
- Stamps, J. (1995). *Untinking modernity: Innis, McLuban and the Frankfurt school*. Montreal: McGill-Queens University Press.
- Stein, S. (1997). *Redefining the human in the age of the computer: Popular discourses, 1984 to the present*. Unpublished doctoral dissertation, University of Iowa.
- Tarnas, R. (1991). *The passion of the western mind: Understanding the ideas that have shaped our world view*. New York: Ballantine Books.
- Waltz, S. (2001). *Pedagogy of artifacts in a distance learning classroom*. Unpublished doctoral dissertation, State University of New York at Buffalo.
- Wilson, B. (1997). The postmodern paradigm. In C. R. Dill & A. J. Romiszowski (Ed.), *Instructional development paradigms* (pp. 105-110). Englewood Cliffs, NJ: Educational Technology. (Available <http://carbon.cudenver.edu/~bwilson/postmodern.html>)
- Wilson, B., & Osman-Jouchoux, R., & Teslow, J. (1995). The impact of constructivism (and postmodernism) on ID fundamentals. In B. Seels (Ed.), *Instructional design fundamentals*. Englewood Cliffs, NJ: Educational Technology.
- Yeaman, A. (1994). Cyborgs are us *Arachnet Electronic Journal on Virtual Culture* [On-Line serial], 2(1). (Available <http://www.infomotions.com/serials/aejvc/aejvc-v2n01-yeaman-cyborgs.txt>)
- Yeaman, A. (1997). The discourse on technology. In R. Branch & B. Minor (Eds.), *Educational media and technology yearbook* (pp. 46-60). Englewood, CO: Libraries Unlimited.
- Yeaman, A. (2000). Coming of age in cyberspace. *Educational technology: Research and development*, 48(4), 102-106.