



6.1 | Understand: Seminal Articles in the Field

Your professional development plan should include measures to continually improve your understanding of learning theory, pedagogical approaches, and instructional methods. This includes keeping current with emerging theories as well as ensuring you have a solid understanding of previous research and the literature on what works.

For recommendations on what to read, many well-respected texts on instructional design theory highlight important foundational works, such as the fourth edition of Driscoll and Burner's (2022) *Psychology of Learning for Instruction*. In addition, Gentry's (2016) dissertation on citation context analysis of theory use in IDT articles identifies a set of seminal works, which we have drawn on to compile the list below. Her analysis shows that a relatively small group of influential publications continues to shape how theory is understood and applied, though these works are often cited without deep engagement. For professional development, this underscores the value of returning to original sources to better understand the assumptions and principles that underpin common practices. Reading these seminal articles with intention can strengthen your ability to apply theory in a grounded and meaningful way, rather than relying on surface-level familiarity. The following list provides a starting point for revisiting some of these influential works as part of your ongoing learning.

References and for more on Wendy Gentry's analysis method and findings:

Driscoll, M. P., & Burner, K. J. (2022). *Psychology of learning for instruction* (4th ed.). Pearson.

Gentry, W. A. (2016). *Citation context analysis of theory use in instructional design and technology academic articles* [Doctoral dissertation, Virginia Polytechnic Institute and State University]. VTechWorks. <http://hdl.handle.net/10919/82931>

Gentry, W. A., & Lockee, B. B. (2020). Exploring the evolution of instructional design and technology disciplinary knowledge through citation context analysis. In E. Romero-Hall (Ed.), *Research methods in learning design and technology* (1st ed., pp. 115–129). Routledge. <https://doi.org/10.4324/9780429260919>

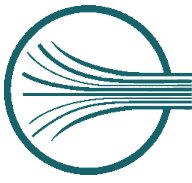
Seminal Articles on Learning Theories & Pedagogical Approaches

Behaviorism

Keller, F. S. (1968). Good-bye, teacher... *Journal of Applied Behavior Analysis*, 1(1), 79-89.

Skinner, B. F. (1954). The science of learning and the art of teaching. *Harvard Educational Review*, 24, 86–97.

Skinner, B. F. (1974). *About behaviorism*. Oxford, England: Alfred A. Knopf.



Thorndike, E. L. (1949). *Selected writings from a connectionist's psychology*. New York: Appleton.

Watson, J. B. (1924). *Behaviorism*. New York: The People's Institute.

Cognitivism

Anderson, R. C., Spiro, R. J., & Anderson, M. C. (1978). Schemata as scaffolding for the representation of information in connected discourse. *American Educational Research Journal*, 15(3), 433–440.

Atkinson, R. C., & Shiffrin, R. M. (1968). Human memory: A proposed system and its control processes. In K. W. Spence, & J. T. Spence (Eds.), *The psychology of learning and motivation: Advances in research and theory* (Vol. 2, pp. 89–195). New York: Academic Press.

Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18, 32–41.

Cole, M., & Scribner, S. (1978). Introduction. *Mind in society: The development of higher psychological processes* (pp. 1–14). Cambridge, MA: Harvard University Press.

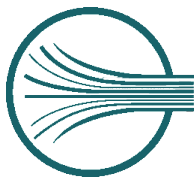
Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. New York: Cambridge University Press.

Constructivism

Duffy, T. M., & Jonassen, D. (Eds.) (1992). *Constructivism and the technology of instruction: A conversation*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Gallimore, R., & Tharp, R. (1990). Teaching mind in society: Teaching, schooling, and literate discourse. In L. Moll (Ed.), *Vygotsky and education: Instructional implications and applications of sociohistorical psychology* (pp. 175–205). Cambridge, England: Cambridge University Press.

Jonassen, D. H. (1994). Thinking technology: Toward a constructivist design model. *Educational Technology*, 34(4), 34–37.



Jonassen, D. H. (1999). Designing constructivist learning environments. In C.M. Reigeluth (Ed.), *Instructional design theories and models: A new paradigm of instructional theory* (Vol. 2, pp. 215-239). Lawrence Erlbaum Associates.

Jonassen, D. H. (2000). *Computers as mind tools for schools: Engaging critical thinking* (2nd ed.). Merrill.

Jonassen, D. H., & Rohrer-Murphy, L. (1999). Activity theory as a framework for designing constructivist learning environments. *Educational Technology Research and Development*, 47(1), 61-79. (Jonassen's most cited publication).

Vygotsky, L. S. (1980). *Mind in society: The development of higher psychological processes*. Harvard university press.

Connectivism

Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning*, 2(1), 3–10.

Downes, S. (2007). An introduction to connective knowledge. In T. Hug, (Ed.) *Media, knowledge & education – Exploring new spaces, relations and dynamics in digital media ecologies*. Innsbrook, Austria: Innsbrook University Press.

Downes, S. (2010). New technology supporting informal learning. *Journal of Emerging Technologies in Web Intelligence*, 2(1), 27–33.

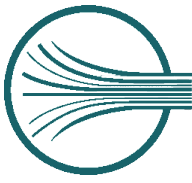
Other Important Theoretical Works

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman.

Mayer, R. E. (2001). *Multimedia learning*. New York: Cambridge University Press.

Mayer, R. E. (2009). *Multimedia learning* (2nd ed.). Cambridge, MA: Cambridge University Press.

Miller, G. A. (1956). The magical number seven, plus or minus two: Some limits on our capacity for processing information. *Psychological Review*, 63(2), 81–97.



Paivio, A. (1986). *Mental representations: A dual coding approach*. Oxford, England: Oxford University Press.

Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context*. New York: Oxford University Press.

Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12, 257–285.

Sweller, J., van Merriënboer, J. J. G., & Paas, F. (2019). Cognitive architecture and instructional design: 20 years later. *Educational Psychology Review*. <https://doi.org/10.1007/s10648-019-09465-5>