

# IDD&E: ESSENTIALS

## Reference materials on instructional design

These materials supplement eight informational videos on the essentials of instructional design and contain, in addition to the summary of all videos, minimal reference information: a list of instructional design founding fathers, leading peer-reviewed journals, main professional organizations, major instructional design theories and models, theoretical foundations of instructional design, a short list of interesting blogs and vlogs of practitioners, some assumptions of instructional design, and a short bibliography.

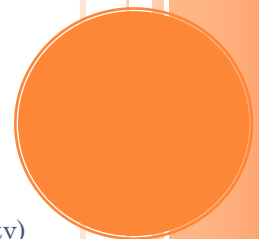
This review can be of interest to people unfamiliar or only slightly familiar with instructional design and willing to study or practice this discipline. The materials are not exhaustive by any means. One should view them as a “survival kit” which gives a big picture of instructional design as a process, science, and profession.

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## WHAT IS INSTRUCTIONAL DESIGN?

Instructional design is a systematic process of creating instruction and instructional materials which help learners go through a particular transformation and, ultimately, solve their performance problems.

## FOUNDING FATHERS OF INSTRUCTIONAL DESIGN

Robert M. Gagné	Walter Dick	M. David Merrill
Benjamin S. Bloom	Roger Kaufman	David H. Jonassen
Robert F. Mager	Robert A. Reiser	John M. Keller
Leslie J. Briggs	Kent L. Gustafson	Charles M. Reigeluth
Thomas F. Gilbert	David R. Krathwohl	Alexander J. Romiszowski

## KEY PEER-REVIEWED JOURNALS ON INSTRUCTIONAL DESIGN

Educational Technology, Research and Development	Australasian Journal of Educational Technology
Instructional Science: An International Journal of the Learning Sciences	Quarterly Review of Distance Education
American Journal of Distance Education	Performance Improvement Quarterly
British Journal of Educational Technology	Educational Researcher
Canadian Journal of Learning and Technology	TechTrends
	Computers & Education

## MAIN PROFESSIONAL ORGANIZATIONS

- AECT Association for Educational Communications and Technology
- ASTD American Society for Training and Development
- ISPI International Society for Performance Improvement
- ISTE International Society for Technology in Education
- AERA American Educational Research Association
- ibstpi® International Board of Standards for Training, Performance and Instruction

## THEORETICAL FOUNDATIONS OF INSTRUCTIONAL DESIGN

- ◆ Learning theories (the psychology of learning)
- ◆ General systems theory
- ◆ Communications theory

## SOME THEORIES OF INSTRUCTIONAL DESIGN

Mastery Learning	Subsumption Theory	Component Display Theory
Programmed Instruction	Collaborative Learning	Elaboration Theory of Instruction
Nine Events of Instruction	Cognitive Apprenticeship	Algo-Heuristic Theory of Instruction



## SYNONYMOUS NAMES FOR INSTRUCTIONAL DESIGN

Instructional Systems Design	Educational Science
Instructional Systems Development	Educational Engineering
Instructional Technology	Learning Design and Technology
Educational Technology	Mathetics

## ASSUMPTIONS OF INSTRUCTIONAL DESIGN

- ◆ effective instruction is purposeful
- ◆ we can design instruction using research-based principles of learning and instruction
- ◆ similar or same skills can be developed with different subject-matter contents
- ◆ learning can be measured
- ◆ teaching is not sufficient for learning, but it can facilitate learning

## MOST WELL-KNOWN MODELS OF INSTRUCTIONAL DESIGN

Dick, Carey, & Carey ISD Model	Rapid Prototyping ISD Model
Smith & Ragan ID Process Model	Gerlach and Ely Design Model
Merrill's First Principles of Instruction	Diamond's Instructional Design Process Model
Kemp Design Model	Knirk and Gustafson Design Model
ASSURE Instructional Design Model	Keller's ARCS Model of Motivational Design
Instructional Development Institute Design Model	Kirkpatrick's 4-Level Training Evaluation Model
Jeroen J.G. van Merriënboer 4C/ID Model	Stufflebeam's CIPP Evaluation Model

## SOME BLOGS AND VLOGS ABOUT INSTRUCTIONAL DESIGN

eLearning Industry Blog | <https://elearningindustry.com/>

Cathy Moore Learning Blog | <http://blog.cathy-moore.com/>

The eLearning Coach Blog | <http://theelearningcoach.com/>

Instructional Design Central (IDC) Blog | <https://www.instructionaldesigncentral.com/>

Anna Sabramowicz YouTube Vlog | <https://www.youtube.com/user/eLearnerEngaged/>

## SELECTED TEXTBOOKS ON INSTRUCTIONAL DESIGN

Dick, W., Carey, L., & Carey, J. (2015). *The systematic design of instruction* (8th ed.). Boston, MA: Pearson.

Smith, P.L., & Ragan, T.J. (2005). *Instructional design* (3rd ed.). Hoboken, NJ: Wiley & Sons.

Gagné, R.M., Wager, W.W., Golas, K., & Keller, J.M. (2005). *Principles of instructional design* (5th ed.). Belmont, CA: Wadsworth/Thomson Learning.

Seels, B., & Glasgow, Z. (1998). *Making instructional design decisions* (2nd ed.). USRiver, NJ: Merrill.

Romiszowski, A.J. (1981). *Designing instructional systems: Decision making in course planning and curriculum design*. London, UK: Routledge.



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### Learning theories

Ormrod, J. (2015). *Human learning* (7th ed.). Boston, MA: Pearson.

Ertmer, P.A., & Newby, T.J. (2013). Behaviorism, cognitivism, constructivism: Comparing critical features from an instructional design perspective. *Performance Improvement Quarterly*, 26(2), 43–71.

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### Front-end analysis

Mager, R., & Pipe, P. (1997). *Analyzing performance problems, or, you really oughta wanna* (3d ed.). Atlanta, GA: CEP Press.

Rossett, A. (1987). *Training needs assessment*. Englewood Cliffs, NJ: Educational Technology Publications.

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### Instructional design

Reiser, R., & Dempsey, J. (2018). *Trends and issues in instructional design and technology* (4th ed.). New York, NY: Pearson.

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Angelo, T.A., & Cross, K.P. (1993). *Classroom assessment techniques: A handbook for college teachers* (2nd ed.). San Francisco, CA: Jossey-Bass Publishers.

Fleming, M.L., & Levie, W.H. (1993). *Instructional message design: Principles from the behavioral and cognitive sciences* (2nd ed.). Englewood Cliffs, NJ: Educational Technology Publications.

Briggs, L., Gustafson, K., & Tillman, M. (1991). *Instructional design: Principles and applications* (2nd ed.). Englewood Cliffs, NJ: Educational Technology Publications.

Herman, J., Morris, L., & Fitz-Gibbon, C. (1987). *Evaluator's handbook*. Newbury Park, CA: Sage Publicat.

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Bloom, B.S., Englehart, M.D., Furst, E.J., Hill, W.H., & Krathwohl, D.R. (1956). *Taxonomy of educational objectives: Handbook I. Cognitive domain*. New York: McKay.

### Project management

Weiss, J.W., & Wysocki, R.K. (1992). *5-phase project management: A practical planning and implementation guide*. Cambridge, MA: Perseus Books.

