

CURRICULUM VITAE

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Charles M. Reigeluth

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Education

A.B. cum laude in Economics from Harvard University, 1969.

Ph.D. in Instructional Psychology from Brigham Young University, 1977.

Professional Experience

1988 - Present: Professor, Indiana University

1982 - 1988: Associate Professor, Syracuse University

1978 - 1982: Assistant Professor, Syracuse University

1977 - 1978: Research Associate, Brigham Young University

1969 - 1972: Teacher at the Secondary Level in Economics and Science

Management Experience

1990 - 1992: Chair, Instructional Systems Technology Dept., Indiana University.

1987 - 1988: Chair, Instructional Design, Development & Eval. Program, Syracuse Univ.

1983 - 1985: President and CEO, Renaissance Learning Systems, Inc. Started and ran a \$300,000 company with about six employees.

1972 - 1975: Vice-President, Amalur, S.A. Ran a multi-million dollar company with about 15 employees in Argentina.

Research and Teaching Interests

Educational Systems Design: Systemic change process, learning-focused educational systems.

Instructional Theory: Integrating piecemeal knowledge into a common knowledge base for an information-age paradigm of instruction, building models of instruction, and building theories of instruction that offer optimal methods for different situations.

Instructional Design: Instructional strategy selection, task and content analyses, instructional sequencing, instructional management strategies.

Memberships

American Educational Research Association

Association for Educational Communications and Technology

Phi Delta Kappa

Honors

James W. Brown publication award from AECT, 2011.

Award for “Outstanding Book” from the Systemic Change Division of AECT, 2010.

Award as second author for “Outstanding Journal Article” from the Systemic Change Division of AECT, 2010.

Award as first author for “Outstanding Publication by an Established Scholar” from the American Educational Research Association’s Systems Thinking in Education SIG, 2010.

Award as second author for “Outstanding Publication by an Early Career Scholar” from the American Educational Research Association’s Systems Thinking in Education SIG's, 2010.

Distinguished Service Award from the Systemic Change Division of the Association for Educational Communications and Technology (AECT), 2009.

Award for “Outstanding Journal Article” from the Systemic Change Division of AECT, 2009.

Chapter in a book that received three awards: the James W. Brown Publication Award, the premier book award from AECT, the Outstanding Book Award presented by the AECT Division of Design and Development, and the Outstanding Human Performance Communication Award from the International Society for Performance Improvement, 2008.

Honored Alumni Award from Brigham Young University’s School of Education, 2002.

Distinguished Service Award from AECT, 2001.

Teaching Excellence Recognition Award (TERA), Indiana University, 1999, 2000.

Award for “Outstanding *Performance Improvement Quarterly* Article” from NSPI (now ISPI – International Society for Performance Improvement), 1992.

Award for “Outstanding Book of the Year in Instructional Development” from AECT, 1988.

Award for “Outstanding Book of the Year in Instructional Development” from AECT, 1985.

Award for a chapter in “Outstanding Book of the Year in Instructional Development” from AECT, 1984.

Graduate School Research Award, Brigham Young University, 1977.

Keynote addresses to a variety of organizations, including the National School Boards Assoc.

Publications: Books (10)

Reigeluth, C.M., & Karnopp, J.R. (in press). *Reinventing Schools: It’s Time to Break the Mold*. Lanham, MD: Rowman & Littlefield.

Reigeluth, C.M., & Carr-Chellman, A. (Eds.) (2009). *Instructional-Design Theories and Models, Volume III: Building a Common Knowledge Base*. New York: Routledge.

Reigeluth, C.M. (Ed.) (1999). *Instructional-Design Theories and Models, Volume II: A New Paradigm of Instructional Theory*. Mahwah, NJ: Lawrence Erlbaum Assoc.

Olson, J., Ryan, D.F., & Reigeluth, C.M. (1996). *Systemic Restructuring in Education: A Selected Bibliography*. Englewood Cliffs, NJ: Educational Technology Publications.

Reigeluth, C.M., & Garfinkle, R.J. (Eds.) (1994). *Systemic Change in Education*. Englewood Cliffs, NJ: Educational Technology Publications.

Reigeluth, C.M., Banathy, B.H., & Olson, J.R. (Eds.) (1993). *Comprehensive Systems Design: A New Educational Technology*. New York: Springer-Verlag.

Leshin, C.B., Pollock, J., and Reigeluth, C.M. (1992). *Instructional Design Strategies and Tactics*. Englewood Cliffs, NJ: Educational Technology Publications.

Reigeluth, C.M. (Ed.) (1987). *Instructional Theories in Action: Lessons Illustrating Selected Theories and Models*. Hillsdale, N.J: Erlbaum Associates.

Reigeluth, C.M., and Merrill, M.D. (1984). *Extended Task Analysis Procedure: User's Manual*. Lanham, MD: University Press of America.

Reigeluth, C.M. (Ed.) (1983). *Instructional-Design Theories and Models: An Overview of their Current Status*. Hillsdale, N.J: Erlbaum Associates.

Publications: Chapters in Books (47)

Reigeluth, C.M. (2012). Instructional theory and technology for a post-industrial world. In R.A. Reiser & J.V. Dempsey (Eds.), *Trends and Issues in Instructional Design and Technology* (3rd ed., pp. 75-83). Boston, MA: Pearson Education.

Reigeluth, C.M., Watson, W.R., & Watson, S.L. (2011). Personalized integrated educational systems: Technology for the information-age paradigm of education in higher education. In S.P. Ferris (Ed.), *Teaching and Learning with the Net Generation*. Hershey, PA: IGI Global.

Richter, K., & Reigeluth, C.M. (2010). Systemic transformation in public school systems. In F. M. Duffy (Ed.), *Dream! create! sustain!: Mastering the art & science of transforming school systems* (pp. 288-315). Leading Systemic School Improvement Series. Lanham, MD: Rowman & Littlefield Education.

Reigeluth, C.M. (2009). Instructional theory for education in the Information Age. In C. M. Reigeluth & A. Carr-Chellman (Eds.), *Instructional-Design Theories and Models, Volume III: Building a Common Knowledge Base*. New York: Routledge.

Reigeluth, C.M., & An, Y.J. (2009). Theory building. In C. M. Reigeluth & A. Carr-Chellman (Eds.), *Instructional-Design Theories and Models, Volume III: Building a Common Knowledge Base*. New York: Routledge.

Reigeluth, C.M., & Carr-Chellman, A. (2009). Understanding instructional theory. In C. M. Reigeluth & A. Carr-Chellman (Eds.), *Instructional-Design Theories and Models, Volume III: Building a Common Knowledge Base*. New York: Routledge.

Reigeluth, C.M., & Carr-Chellman, A. (2009). Situational principles of instruction. In C. M. Reigeluth & A. Carr-Chellman (Eds.), *Instructional-Design Theories and Models, Volume III: Building a Common Knowledge Base*. New York: Routledge.

Reigeluth, C.M., & Keller, J.B. (2009). Understanding instruction. In C. M. Reigeluth & A. Carr-Chellman (Eds.), *Instructional-Design Theories and Models, Volume III: Building a Common Knowledge Base*. New York: Routledge.

Reigeluth, C.M. (2008). Chaos theory and the sciences of complexity: Foundations for transforming education. In B. Despres (Ed.), *Systems Thinkers in Action: A Field Guide for Effective Change Leadership in Education*. New York: Rowman & Littlefield. Also published as Reigeluth, C.M. (2010). Chaos theory and the sciences of complexity. In F. M. Duffy (Ed.), *Dream! create! sustain!: Mastering the art & science of transforming school systems* (pp. 288-315). Leading Systemic School Improvement Series. Lanham, MD: Rowman & Littlefield Education.

Watson, S.L., Watson, W.R., & Reigeluth, C.M. (2008). Systems design for change in education and training. In J.M. Spector, M.D. Merrill, J.J.G. van Merriënboer & M.P. Driscoll (Eds.), *Handbook of Research on Educational Communications and Technology* (3rd ed.). New York: Routledge.

Lee, S., & Reigeluth, C.M. (2007). Community involvement in Decatur's Journey Toward Excellence. In F. M. Duffy & P. L. Chance (Eds.), *Strategic Communication during Whole System Change: Advice and Guidance for School District Leaders and PR Specialists*. Leading Systemic School Improvement Series #9. Lanham, MD: Rowman & Littlefield Education.

Reigeluth, C.M. (2007). Order, first step to mastery: An introduction to sequencing in instructional design. In F. Ritter, J. Nerb, E. Lehtinen, & T. O'Shea (Eds.), *In Order to Learn: How the Sequence of Topics Influences Learning* (pp. 19-40). New York, NY: Oxford University Press.

- Reigeluth, C.M., & Duffy, F.M. (2007). Trends and issues in P-12 educational change. In R.A. Reiser & J.V. Dempsey (Eds.), *Trends and Issues in Instructional Design and Technology* (2nd ed.). Upper Saddle River, NJ: Pearson, Merrill Prentice Hall.
- Watson, W.R., Lee, S., & Reigeluth, C.M. (2007). Learning management systems: An overview and roadmap of the systemic application of computers to education. In F.M. Neto & F.V. Brasileiro (Eds.), *Advances in Computer-Supported Learning* (pp. 66-96). Hershey, PA: Information Science Publishing.
- Reigeluth, C.M. (2005). New Instructional Theories and Strategies for a Knowledge-Based Society. In J. Spector, C. Ohrazda, A. Van Schaack, & D. Wiley (Eds.), *Innovations in Instructional Technology: Essays in Honor of M. David Merrill*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Reigeluth, C.M., & Beatty, B.J. (2004). Instructional Systems Design. In M. Mukhopadhyay (Ed.), *Educational Technology: Knowledge Assessment*. New Delhi: Shipra.
- Molenda, M., Reigeluth, C.M., & Nelson, L.M. (2003). Instructional Design. In L. Nadel (Ed.), *Encyclopedia of Cognitive Science*. Vol. 2, pp. 574 - 578. London: Nature Publishing Group.
- Oswald, D., & Reigeluth, C.M. (2003). Instructional-Design Theory. In J. Guthrie (Ed.), *Encyclopedia of Education* (2nd Ed.). New York: Macmillan.
- Reigeluth, C.M. (2003). Elaboration Theory. In A. Kovalchik & K. Dawson (Eds.), *Education and Technology: An Encyclopedia*. Santa Barbara, CA: ABC-CLIO.
- Reigeluth, C.M. (2003). Educational Systems Design. In A. Kovalchik & K. Dawson (Eds.), *Education and Technology: An Encyclopedia*. Santa Barbara, CA: ABC-CLIO.
- Carr-Chelman, A.A., & Reigeluth, C.M. (2002). Whistling in the Dark? ID in the Schools. In R.A. Reiser & J.A. Dempsey (Eds.), *Trends and Issues in Instructional Design and Technology*. Upper Saddle River, NJ: Merrill/Prentice Hall.
- Martin, B.L., & Reigeluth, C.M. (1999). Affective education and the affective domain: Implications for instructional design theories and models. In C.M. Reigeluth (Ed.), *Instructional-Design Theories and Models: A New Paradigm of Instructional Theory*. (Volume II). Hillsdale, NJ: Lawrence Erlbaum Assoc.
- Reigeluth, C.M. (1999). What is instructional-design theory and how is it changing? In C.M. Reigeluth (Ed.), *Instructional-Design Theories and Models: A New Paradigm of Instructional Theory*. (Volume II). Hillsdale, NJ: Lawrence Erlbaum Assoc.
- Reigeluth, C.M. (1999). The elaboration theory: Guidance for scope and sequence decisions. In C.M. Reigeluth (Ed.), *Instructional-Design Theories and Models: A New Paradigm of Instructional Theory*. (Volume II). Hillsdale, NJ: Lawrence Erlbaum Assoc.
- Reigeluth, C.M., & Frick, T.W. (1999). Formative research: A methodology for improving design theories. In C.M. Reigeluth (Ed.), *Instructional-Design Theories and Models: A New Paradigm of Instructional Theory*. (Volume II). Hillsdale, NJ: Lawrence Erlbaum Assoc.
- Reigeluth, C.M., & Moore, J.A. (1999). Cognitive education and the cognitive domain. In C.M. Reigeluth (Ed.), *Instructional-Design Theories and Models: A New Paradigm of Instructional Theory*. (Volume II). Hillsdale, NJ: Lawrence Erlbaum Assoc.
- Reigeluth, C.M., & Avers, D. (1997). Educational technologists, chameleons, and systemic thinking. In R.M. Branch & B.B. Minor (Eds.), *Educational Media and Technology Yearbook*. Englewood, CO: Libraries Unlimited.
- Reigeluth, C.M., & Nelson, L.M. (1997). A new paradigm of ISD? In R.M. Branch & B.B. Minor (Eds.), *Educational Media and Technology Yearbook*. Englewood, CO: Libraries Unlimited. [An earlier version was published in *Educational Technology*, 36(3).]

- Molenda, M., Pershing, J., & Reigeluth, C.M. (1996). Designing instructional systems. In R. Craig (Ed.), *Training and Development Handbook (4th Ed.)*, New York: McGraw-Hill.
- Nelson, L.M., & Reigeluth, C.M. (1995). Professional development in systemic educational change. In P.M. Jenlink (Ed.), *Changing Education Systemically: Touchstones for Designing Future Schools*. Palatine, IL: Skylight Publishing.
- Reigeluth, C.M. (1995). Educational systems development and its relationship to ISD. In G. Anglin (Ed.), *Instructional Technology: Past, Present, and Future (2nd ed.)*. Englewood, CO: Libraries Unlimited.
- Reigeluth, C.M. (1994). Instructional design theories. In T. Husén & T.N. Postlethwaite (Eds.), *International Encyclopedia of Education (2nd ed.)*, Elmsford, NY: Pergamon Press. Also in E. de Corte & F. E. Weinert (Eds.), *International Encyclopedia of Developmental and Instructional Psychology*, Elmsford, NY: Pergamon Press.
- Reigeluth, C.M. (1994). The imperative for systemic change. In C. Reigeluth & R. Garfinkle (Eds.), *Systemic Change in Education*. Englewood Cliffs, NJ: Educational Technology Publications.
- Reigeluth, C.M., & Garfinkle, R.J. (1994). Envisioning a new system of education. In C. Reigeluth & R. Garfinkle (Eds.), *Systemic Change in Education*. Englewood Cliffs, NJ: Educational Technology Publications.
- Reigeluth, C.M., & Rowland, G. (1994). Task analysis. In T. Husén & T.N. Postlethwaite (Eds.), *International Encyclopedia of Educ. (2nd ed.)*, Elmsford, NY: Pergamon Press. Also in E. de Corte & F. E. Weinert (Eds.), *International Encyclopedia of Developmental and Instructional Psychology*, Elmsford, NY: Pergamon Press.
- Reigeluth, C.M. (1993). Functions of an automated instructional design system. In J.M. Spector, M.C. Polson, & D.J. Muraida (Eds.), *Automating instructional design: Concepts and issues*. Englewood Cliffs, NJ: Educational Technology Publications.
- Reigeluth, C.M. (1992). New directions for educational technology. In E. Scanlon & T. O'Shea (Eds.), *New Directions in Educational Technology*. Berlin: Springer Verlag.
- Reigeluth, C.M. (1990). Instructional strategies and tactics. In T. Husén & T. Postlethwaite (Eds.), *The International Encyclopedia of Education, Supplementary Volume Two*. Oxford, England: Pergamon Press.
- Petry, B., Mouton, H., & Reigeluth, C.M. (1987). A lesson based on the Gagné-Briggs theory of instruction. In C.M. Reigeluth (Ed.), *Instructional Theories in Action: Lessons Illustrating Selected Theories and Models*. Hillsdale, N.J: Erlbaum Associates.
- Reigeluth, C.M. (1987). Introduction. In C.M. Reigeluth (Ed.), *Instructional Theories in Action: Lesson Illustrating Selected Theories and Models*. Hillsdale, N.J: Erlbaum Associates.
- Reigeluth, C.M. (1987). Lesson blueprints based on the elaboration theory of instruction. In C.M. Reigeluth (Ed.), *Instructional Theories in Action: Lessons Illustrating Selected Theories and Models*. Hillsdale, N.J: Erlbaum Associates.
- Reigeluth, C.M., & Curtis, R.V. (1987). Learning situations and instructional models. In R.M. Gagné (Ed.), *Instructional Technology: Foundations*. Hillsdale, N.J: Erlbaum Associates.
- Reigeluth, C.M. (1983). Instructional design: What is it and why is it? In C.M. Reigeluth (Ed.), *Instructional-Design Theories and Models: An Overview of their Current Status*. Hillsdale, N.J: Erlbaum Associates.
- Reigeluth, C.M., & Stein, F.S. (1983). The elaboration theory of instruction. In C.M. Reigeluth (Ed.), *Instructional-Design Theories and Models: An Overview of their Current Status*. Hillsdale, N.J: Erlbaum Associates.

- Sari, I.F., & Reigeluth, C.M. (1982). Writing and evaluating textbooks: Contributions from instructional theory. In D. Jonassen (Ed.), *Technology of Text: Principles for Structuring, Designing and Displaying Text*. Englewood Cliffs, N.J: Educational Technology Publications.
- Reigeluth, C.M., & Merrill, M.D. (1981). Instructional science and technology: Their context within educology and some ideas for their future development. In J. Christensen (Ed.), *Perspectives on Education as Educology*. Washington, DC: University Press of America.
- Merrill, M.D., Reigeluth, C.M., & Faust, G.W. (1979). The Instructional Quality Profile: A curriculum evaluation and design tool. In H.F. O'Neil, Jr. (Ed.), *Procedures for Instructional Systems Development*. New York: Academic Press.

Publications: Journal Articles (101)

- Aslan, S., & Reigeluth, C.M. (in press). Educational technologists: Leading change for a new paradigm of education. *Tech Trends*, ...
- Watson, S.L., & Reigeluth, C.M. (in press). A disadvantaged and marginalized alternative school's perspectives on school culture and educational change. *International Journal of Education*, ...
- Watson, W.R., Watson, S.L., & Reigeluth, C.M. (2013). Education 3.0: Breaking the mold with technology. *Interactive Learning Environments*, DOI:10.1080/10494820.2013.764322.
- Yildirim, Z., Reigeluth, C.M., Kwon, S., Kageto, Y., & Shao, Z. (2013). A comparison of learning management systems in a school district: Searching for the ideal personalized integrated educational system (PIES). *Interactive Learning Environments*, DOI:10.1080/10494820.2012.745423. <http://dx.doi.org/10.1080/10494820.2012.745423>.
- Reigeluth, C.M. (2012). Teoría instruccional y tecnología para el nuevo paradigma de la educación. *RED, Revista de Educación a Distancia*. Número 32. 30 de septiembre de 2012. Consultado el (30/09/2012) en <http://www.um.es/ead/red/32>. Also published in English as Reigeluth, C.M. (2012). Instructional theory and technology for the new paradigm of education. *RED, Revista de Educación a Distancia*. Number 32. September 30, 2012. Retrieved on (30/09/2012) at <http://www.um.es/ead/red/32>.
- Watson, W.R., Watson, S.L., & Reigeluth, C.M. (2012). A systemic integration of technology for new-paradigm education. *Educational Technology*, 52(5), 25-29.
- An, Y.J., & Reigeluth, C.M. (2011). Creating technology-enhanced, learner centered classrooms: K-12 teacher beliefs, perceptions, barriers, and support needs. *Journal of Digital Learning in Teacher Education*, 28(2), 54-62.
- Aslan, S., Huh, Y., Lee, D., & Reigeluth, C.M. (2011). The role of personalized integrated educational systems in the information-age paradigm of education. *Contemporary Educational Technology*, 2(2), 95-117.
- Aslan, S., & Reigeluth, C.M. (2011). A trip to the past and future of educational computing: Understanding its evolution. *Contemporary Educational Technology*, 2(1), 1-17.
- Reigeluth, C.M. (2011). An instructional theory for the post-industrial age. *Educational Technology*, 51(5), 25-29.
- Chen, Z., & Reigeluth, C.M. (2010). Communication issues in a leadership team for systemic change in a school district. *Contemporary Educational Technology*. 1(3), 233-254.
- Joseph, R., & Reigeluth, C.M. (2010). The systemic change process in education: A conceptual framework. *Contemporary Educational Technology*. 1(2), 97-117.
- Reigeluth, C.M. (2010). Technology and the new paradigm of education. *Contemporary Educational Technology*, 1(1), 84-86.

- Duan, M.J., Pei, X.N., & Li, X. (2009). A paradigm shift in the educational system: A dialogue with Dr. Charles M. Reigeluth - An international instructional design expert. *China Educational Technology*, 268, 1-6.
- Lee, J.Y., & Reigeluth, C.M. (2009). Heuristic task analysis on e-learning course development: A formative research study. *Asia Pacific Educational Review*, 10(1), 169-181.
- Shaughnessy, M.F., & Fulgham, S.M. (2009). Q&A with Ed Tech Leaders: Interview with Charles M. Reigeluth. *Educational Technology*, 49(3), 37-42.
- An, Y.J., & Reigeluth, C.M. (2008). Problem-based learning in online environments. *Quarterly Review of Distance Education*, 9(1), 1-16.
- Duffy, F.M., & Reigeluth, C.M. (2008). The school system transformation (SST) protocol. *Educational Technology*, 48(4), 41-49. Also published as Duffy, F.M., & Reigeluth, C.M. (2010). The SST protocol. In F. M. Duffy (Ed.), *Dream! create! sustain!: Mastering the art & science of transforming school systems* (pp. 315-340). Leading Systemic School Improvement Series, Lanham, MD: Rowman & Littlefield Education.
- Reigeluth, C.M., & Duffy, F.M. (2008). The AECT FutureMinds initiative: Transforming America's school systems. *Educational Technology*, 48(3), 45-49. Also published as Reigeluth, C.M., & Duffy, F.M. (2010). The AECT FutureMinds initiative. In F. M. Duffy (Ed.) (2010), *Dream! create! sustain!: Mastering the art & science of transforming school systems* (pp. 352-361). Leading Systemic School Improvement Series. Lanham, MD: Rowman & Littlefield Education.
- Reigeluth, C.M., Watson, W.R., Watson, S.L., Dutta, P., Chen, Z., & Powell, N.D.P. (2008). Roles for technology in the information-age paradigm of education: Learning Management Systems. *Educational Technology*, 48(6), 32-39. Also published as Reigeluth, C.M., Watson, W.R., Watson, S.L., Dutta, P., Chen, Z., & Powell, N.D.P. (2008, October). Roles for technology in the information-age paradigm of education: Learning management systems. *The F. M. Duffy Reports*, 13(4), 1-14. Also published as Reigeluth, C.M., Watson, W.R., Watson, S.L., Dutta, P., Chen, Z., & Powell, N.D.P. (2010). Learning management systems. In F. M. Duffy (Ed.) (2010), *Dream! create! sustain!: Mastering the art & science of transforming school systems* (pp. 288-314). Leading Systemic School Improvement Series. Lanham, MD: Rowman & Littlefield Education.
- Watson, S.L., & Reigeluth, C.M. (2008). The learner-centered paradigm of education. *Educational Technology*, 48(5), 42-48. Also published as Watson, S.L., & Reigeluth, C.M. (2010). The learner-centered paradigm of education. In F. M. Duffy (Ed.) (2010), *Dream! create! sustain!: Mastering the art & science of transforming school systems* (pp. 288-315). Leading Systemic School Improvement Series, Lanham, MD: Rowman & Littlefield Education.
- Watson, S.L., & Reigeluth, C.M. (2008). Community members' perceptions on social, cultural changes and its implication for educational transformation in a small school district community. *Journal of Organisational Transformation and Social Change*, 5(1), 45-65.
- Duffy, F. M. & Reigeluth, C. M. (2007, October). Transforming school districts for the 21st century. *Bookmark*. Newsletter of the New Jersey Association of School Librarians.
- Reigeluth, C.M., Carr-Chellman, A.A., Beabout, B., & Watson, W. (2007). Creating shared visions of the future for K-12 education: A systemic transformation process for a learner-centered paradigm. *The Journal of Educational Alternatives*, 2(3), 34-66. Also published as Reigeluth, C.M., Carr-Chellman, A.A., Beabout, B., & Watson, W. (2009). Creating shared visions of the future for K-12 education: A systemic transformation process for a learner-centered paradigm. In L. Moller, J.B. Huett & D.M. Harvey (Eds.), *Learning and instructional technologies for the 21st century*. New York: Springer.

- Reigeluth, C.M., & Stinson, D. (2007). The Decatur story: Reinvention of a School Corporation – Mission and values for Decatur’s school transformation. *The Indiana School Boards Association Journal*, 53(1), 17-19.
- Reigeluth, C.M., & Stinson, D. (2007). The Decatur story: Reinvention of a school corporation – Leadership and empowerment in Decatur’s school transformation, *The Indiana School Boards Association Journal*, 53(2), 13-15.
- Reigeluth, C.M., & Stinson, D. (2007). The Decatur story: Reinvention of a school corporation – Collaboration: Developing partners in education. *The Indiana School Boards Association Journal*, 53(3), 13-15.
- Reigeluth, C.M., & Stinson, D. (2007). The Decatur story: Reinvention of a school corporation – Culture and climate: The personality of school governance. *The Indiana School Boards Association Journal*, 53(4), 11-13.
- An, Y.J., & Reigeluth, C.M. (2006). Functional contextualism: An Ideal framework for theory in IDT. *Educational Technology Research & Development*, 54(1), 46-50.
- Reigeluth, C.M. (2006). General influences of suprasystems on systemic change. *Tech Trends*, 50(2) 26-27.
- Reigeluth, C.M. (2006). The Guidance System for Transforming Education. *Tech Trends*, 50(2), 42.
- Reigeluth, C.M. (2006). A chaos theory approach to systemic change. *Tech Trends*, 50(2), 45-46.
- Reigeluth, C.M. (2006). A leveraged emergent approach to systemic transformation. *Tech Trends*, 50(2), 46-47.
- Reigeluth, C.M. (2006). A vision of an information-age educational system. *Tech Trends*, 50(2), 53-54.
- Richter, K., & Reigeluth, C.M. (2006). A systemic change experience in Decatur Township. *Tech Trends*, 50(2), 35-36.
- An, Y.J., & Reigeluth, C.M. (2005). A study of organizational learning at a small-town hospital. *Performance Improvement*, 44(10), 34-39.
- Joseph, R., & Reigeluth, C.M. (2005). Formative research on an early stage of the systemic change process in a small school district. *British Journal of Educational Technology*, 36(6), 937-956.
- Keller, J.B., & Reigeluth, C.M. (2004). Revolutionizing school reform for educational transformation. *Educational Technology*, 44(5), 17-23.
- Reigeluth, C.M. (2004). Comparing beans and potatoes, or creating a balanced diet? Different purposes and different approaches. *Educational Technology*, 44 (3), 53-56.
- Lee, J.Y., & Reigeluth, C.M. (2003). Formative research on the heuristic task analysis process. *Educational Technology Research & Development*, 51 (4), 5-24.
- Reigeluth, C.M. (2003). New instructional theories and strategies for a knowledge-based society. *Educational Technology International*, 5 (1), 63-75.
- Reigeluth, C.M. (2003). Knowledge building for use of the Internet in education. *Instructional Science*, 31 (4), 341-346.
- Reigeluth, C.M., & Beatty, B.J. (2003). Why children are left behind and what we can do about it. *Educational Technology*, 43 (5), 24-32.
- Sheng, Q., & Cheng, J. (2003). New perspective needed for the design of teaching: Interview with Professor Charles M. Reigeluth. *Global Education*, 32(7), 3-5.
- Joseph, R., Jenlink, P. M., Reigeluth, C. M., Carr-Chelman, A., & Nelson, L. M. (2002). Banathy’s Influence on the Guidance System for Transforming Education. *World Futures: The Journal of Evolution*, 58(5-6), 379-394.

- Oswald, D.F. (2002). A conversation with Charles M. Reigeluth. *Educational Technology*, 42(3), 56-59.
- Reigeluth, C.M. (2002). What every AECT member needs to know about systemic change: The beginning of a dialogue. *Tech Trends*, 46(1), 12-15.
- Reigeluth, C.M., & Joseph, R. (2002). Beyond technology integration: The case for technology transformation. *Educational Technology*, 42 (4), 9-13.
- Squire, K.D., & Reigeluth, C.M. (2000). The many faces of systemic change. *Educational Horizons*, 78 (3), 143-152.
- Reigeluth, C.M. (1999). Visioning public education in America. *Educational Technology*, 39(5), 50-55.
- Jenlink, P.M., Reigeluth, C.M., Carr, A.A., & Nelson, L.M. (1998). Guidelines for facilitating systemic change in school districts. *Systems Research and Behavioral Science*, 15(3), 217-233.
- Reigeluth, C.M., Pershing, J.A., & Park, S.H. (1998). A new paradigm for corporate training. *Strategic Human Resource Development Review*, 1 (2), 5-50.
- Reigeluth, C.M., & Squire, K. (1998). Emerging work on the new paradigm of instructional theories. *Educational Technology*, 38(4), 41-47.
- Reigeluth, C.M. (1997). Educational standards: To standardize or to customize learning? *Phi Delta Kappan*, 79 (3), 202-206.
- Reigeluth, C.M. (1997). Instructional theory, practitioner needs, and new directions: Some reflections. *Educational Technology*, 37 (1), 42-47.
- English, R.E., & Reigeluth, C.M. (1996). Formative research on sequencing instruction with the elaboration theory. *Educational Technology Research & Development*, 44 (1), 23-42.
- Jenlink, P.M., Reigeluth, C.M., Carr, A.A., & Nelson, L.M. (Jan. 1996). An expedition for change: Facilitating the systemic change process in school districts. *Tech Trends*, 41 (1), 21-30.
- Reigeluth, C.M. (1996). A new paradigm of ISD? *Educational Technology*, 36 (3), 13-20. (A revised version was published in the *Educational Media and Technology Yearbook*.)
- Carr, A.A., Jenlink, P.M., & Reigeluth, C.M. (1995). Critique without difference: A response to Goodman. *Harvard Educational Review*, 65 (3), 491-503.
- Reigeluth, C.M. (1995). A conversation on guidelines for the process of facilitating systemic change in education. *Systems Practice*, 8 (3), 315-328.
- Beissner, K.L., & Reigeluth, C.M. (1994). A case study on course sequencing with multiple strands using the elaboration theory. *Performance Improvement Quarterly*, 7 (2), 38-61.
- Carr, A.A., & Reigeluth, C.M. (1994). The case for systemic restructuring as a key to information technology integration in education. *Teaching Education*, 6 (1), 155-159.
- Lee, I., & Reigeluth, C.M. (1994). Empowering teachers for new roles in a new educational system. *Educational Technology*, 34 (1), 61-72.
- Luterbach, K.J., & Reigeluth, C.M. (1994). School's not out, yet. *Educational Technology*, 47-54.
- Salisbury, D.F., Reigeluth, C.M., & Soulier, J.S. (1994). A professional development program in educational systems design. *Educational Technology*, 34 (1), 73-80.
- Carr, A.A., & Reigeluth, C.M. (July 1993). Community participation in systemic restructuring: Member selection procedures. *Educational Technology*, 33 (7), 36-46.
- Khan, B., & Reigeluth, C.M. (1993). Educational systems design (ESD): An integrated, disciplined inquiry in schools of education. *Educational Technology* 33 (6), 36-40.
- Reigeluth, C.M. (1993). Principles of educational systems design. *International Journal of Educational Research*, 19(2), 117-131.

- Chung, J., & Reigeluth, C.M. (1992). Instructional prescriptions for learner control. *Educational Technology*, 32(10), 14-20.
- Reigeluth, C.M. (1992). Elaborating the elaboration theory. *Educational Technology Research & Development*, 40 (3), 80-86.
- Reigeluth, C.M. (1992). Educational systems design. (Translated by Tsuey-Jen Wu & Tsa-Kang Chu.) *Instructional Technology & Media* (A Chinese language journal), 3(6), 9-21.
- Reigeluth, C.M. (1992). The imperative for systemic change. *Educational Technology*, 32(11), 9-13.
- Reigeluth, C.M., Anelli, J.M., & Otto, S.L. (September 1992). Technology and school restructuring. *The Electronic School*, 11-12.
- Reigeluth, C.M., & Garfinkle, R.J. (1992). Envisioning a new system of education. *Educational Technology*, 32(11), 17-23.
- Armstrong, R.B., & Reigeluth, C.M. (1991). The TIP theory: Prescriptions for designing instruction for teams. *Performance Improvement Quarterly*, 4 (3), 13-40.
- Norris, C.A., & Reigeluth, C.M. (1991). Themes for change: A look at systemic restructuring experiences. *Educational Horizons*, 69 (2), 90-96.
- Reigeluth, C.M. (1991). Reflections on the implications of constructivism for educational technology. *Educational Technology*, 31 (9), 34-37.
- Reigeluth, C.M. (1991). Impressions of NASDC's design conference for inventing a new generation of American schools. *Educational Technology*, 31 (10), 8-10.
- Reigeluth, C.M. (1989). Educational technology at the crossroads: New mind sets and new directions. *Educational Technology Research & Development*, 37 (1), 67-80.
- Reigeluth, C.M., & Schwartz, E. (1989). An instructional theory for the design of computer-based simulations. *Journal of Computer-Based Instruction*, 16(1), 1-10.
- Golden, A.R., Benti, F.E., & Reigeluth, C.M. (1988). The effects of non-examples on procedure learning. *Journal of Educational Technology Systems*, 16 (3), 253-263.
- Marcone, S., & Reigeluth, C.M. (1988). Teaching common errors in applying a procedure. *Educational Communications and Technology Journal*, 36 (1), 23-32.
- Young, J.M., & Reigeluth, C.M. (1988). *Textbooks: A question of quality*. Fastback No. 275, Bloomington, IN: Phi Delta Kappa.
- Reigeluth, C.M. (1987). The search for meaningful reform: A third-wave educational system. *Journal of Instructional Development*, 10 (4), 3-14.
- Frey, L., & Reigeluth, C.M. (1986). Instructional models for tutoring: A review. *Journal of Instructional Development*, 9 (1), 2-8.
- Van Patten, J., Chao, C., & Reigeluth, C.M. (1986). A review of strategies for sequencing and synthesizing instruction. *Review of Educational Research*, 56 (4), 437-471.
- Curtis, R.V., & Reigeluth, C.M. (1984). The use of analogies in written text. *Instructional Science*, 13 (2), 99-117.
- Reigeluth, C.M. (Nov. 1984). Toward a common knowledge base: The evolution of instructional science. *Educational Technology*, 24 (11), 20-26.
- Reigeluth, C.M., & Garfield, J.M. (1984). Using videodiscs in instruction: Realizing their potential through instructional design. *Videodisc and Optical Disk*, 4 (3), 199-215.
- Sweeney, J., & Reigeluth, C.M. (Aug. 1984). Lecture and instructional design: A contradiction in terms? *Educational Technology*, 24 (8), 7-12.
- Reigeluth, C.M. (1983). Meaningfulness and instruction: Relating what is being learned to what a student knows. *Instructional Science*, 12 (3), 197-218.

- Reigeluth, C.M. (1983). The integration of task analysis and instructional design. *Journal of Instructional Development*, 6 (4), 24-30.
- Yucha, C., & Reigeluth, C.M. (1983). The use of computers in nursing education, practice and administration. *Computers and Education*, 7 (4), 223-226.
- Reigeluth, C.M., & Darwazeh, A.N. (1982). The elaboration theory's procedure for designing instruction: A conceptual approach. *Journal of Instructional Development*, 5 (3), 22-32.
- Reigeluth, C.M. (1981). Una disciplina joven que influira en su vida. *Revista de Tecnologia Educativa*, 7 (1), 82-85.
- Reigeluth, C.M., Van Patten, J., & Doughty, P. (1981). Two roles of science in instructional development. *NSPI Journal*, 20 (7), 19-22.
- Reigeluth, C.M. (March, 1980). The Instructional Quality Profile: Training teachers to teach effectively. *Educational Technology*, 20 (3), 7-16.
- Reigeluth, C.M., Merrill, M.D., Wilson, B.G., & Spiller, R.T. (1980). The Elaboration Theory of Instruction: A model for sequencing and synthesizing instruction. *Instructional Science*, 9 (3), 195-219.
- Reigeluth, C.M., & Rodgers, C.A. (1980). The Elaboration Theory of Instruction: Prescriptions for task analysis and design. *NSPI Journal*, 19 (1), 16-26. (Invited article).
- Reigeluth, C.M., & Sari, I.F. (1980). From better tests to better texts: Instructional design models for writing better textbooks. *NSPI Journal*, 19 (8), 4-9. (Invited article).
- Reigeluth, C.M. (1979). In search of a better way to organize instruction: The Elaboration Theory. *Journal of Instructional Development*, 2 (3), 8-15.
- Reigeluth, C.M. (1979). TICCIT to the future: Advances in instructional theory for CAI. *Journal of Computer-Based Instruction*. 6 (2), 40-46.
- Reigeluth, C.M., & Merrill, M.D. (March, 1979). Classes of instructional variables. *Educational Technology*, 19 (3), 5-24.
- Reigeluth, C.M., Bunderson, C.V., & Merrill, M.D. (1978). What is the design science of instruction? *Journal of Instructional Development*. 1 (2), 11-16.
- Reigeluth, C.M., & Merrill, M.D. (1978). A knowledge base for improving our methods of instruction. *Educational Psychologist*, 13, 57-70.
- Reigeluth, C.M., Bunderson, C.V., & Merrill, M.D. (1978). The structure of subject-matter content and its instructional design implications. *Instructional Science*, 7, 107-126.

Publications: Reviews

- Reigeluth, C.M. (2010). A Review of *Education Unbound*. *Educational Technology*, 50 (6), 54-57.
- Khan, B., & Reigeluth, C. (October 1993). A Review of Banathy's *Systems design of education*. *Performance & Instruction*, 32 (9), 42-43.
- Khan, B., & Reigeluth, C. (1992). A Review of Banathy's *Systems design of education*. *Systems Practice*, 5(5), 567-570.
- Reigeluth, C.M., & Chao, C. (1986). A Review of Reiser and Gagné, *Selecting media for instruction*. *Instructional Science*. 15 (2), 182-183.
- Reigeluth, C.M., & Pilaf, B.P. (September, 1985). Software Reviews. *Media and methods*, 28-29.

Publications: Software

- Reigeluth, C.M. (1986). *Missing Numbers: Multiplication and Division*. Oklahoma City, OK: American Educational Computer.
- Reigeluth, C.M. (1985). *Carrying: Regrouping for Addition*. Oklahoma City, OK: American Educational Computer.
- Reigeluth, C.M. (1985). *Borrowing: Regrouping for Subtraction*. Oklahoma City, OK: American Educational Computer.
- Reigeluth, C.M. (1985). *Missing Numbers: Addition and Subtraction*. Oklahoma City, OK: American Educational Computer.
- Reigeluth, C.M. (1984). *EASYsearch*. (A search program and 13 data bases (45 disks in all) for school teachers and teacher education students - Apple II family of computers). Syracuse, NY: Renaissance Learning Systems.

Publications: Miscellaneous

- Reigeluth, C.M. (2010). Using technology to implement the learner-centered paradigm of teaching and learning. Appendix D in F. M. Duffy (Ed.), *Dream! create! sustain!: Mastering the art & science of transforming school systems* (pp. 288-315). Leading Systemic School Improvement Series. Lanham, MD: Rowman & Littlefield Education
- Reigeluth, C.M., & Rowland, G. (2003). A Measure of Greatness: Bela H. Banathy in Memoriam. *Educational Technology*, 43(6), 64.
- Guest edited a special issue of *Educational Technology* on systemic redesign of educational systems.
- Reigeluth, C.M. (November 1991). From ISD to ESD: Educational technology and its underware. Guest column for the "Comprehensive Systems Design in Education" column, *Educational Technology*, 31(11), 33-34.

Presentations at Conferences*AECT Conference 2012*

- Aslan, S., & Reigeluth, C.M. (2012, November). *A Redefinition of Instruction and Assessment in the New Paradigm: Learner-Centered Instruction & Learner-Centered Assessment*. Paper presented at the meeting of the Association for Educational Communications and Technology, Louisville, KY. (Session No. 133)
- Min, M., Reigeluth, C.M., & Jung, E. (2012, November). *Case Studies in Systemic Change in and outside of the U.S.* Roundtable conducted at the meeting of the Association for Educational Communications and Technology, Louisville, KY. (Session No. 345m)
- Reigeluth, C.M., Huh, Y., Jung, E., Lee, D., Lin, C.Y., & Min, M. (2012, October). *New Paradigm Schools: A National Survey*. Paper presented at the meeting of the Association for Educational Communications and Technology, Louisville, KY. (Session No. 033)
- Reigeluth, C.M. (2012, November). *A Treaty to End the Paradigm Wars: An Instructional Theory for the Information Age*. Presidential Session at the meeting of the Association for Educational Communications and Technology, Louisville, KY. (Session No. 123)
- Reiser, R., Dick, W., Klein, J., Dennen, V., Molenda, M.H., Reigeluth, C.M., & Boling, E. (2012, November). *How Did We Get Where We Are? Beliefs, Values and Practices Influencing the Evolution of Two Pioneer Academic Programs*. Presidential Session at the meeting of the Association for Educational Communications and Technology, Louisville, KY. (Session No. 176)

Watson, W., Watson, S., & Reigeluth, C.M. (2012, November). *Systemic Integration of Technology in Distance Learning: A Vision for Transforming Online Education through PIES (Personalized Integrated Educational System)*. Roundtable conducted at the meeting of the Association for Educational Communications and Technology, Louisville, KY. (Session No. 345o)

Watson, W., Watson, S., Reigeluth, C.M., Duffy, F.M., & Sockman, B.R. (2012, November). *The Future of Higher Education: A Panel Discussion on the Systemic Change of Higher Education*. Panel discussion at the meeting of the Association for Educational Communications and Technology, Louisville, KY. (Session No. 278)

AERA Conference 2012

Reigeluth, C.M., & Duffy, F.M. (2012, April). *Research on the Systemic Transformation Process for Public School Districts*. Paper presented at the meeting of the American Educational Research Association, Vancouver, Canada. (Session No. 58.070)

AECT Conference 2011

An, Y.J., & Reigeluth, C.M. (2011, November). *Creating Technology-Enhanced, Learner-Centered Classrooms: K-12 Teachers' Beliefs, Perceptions, Barriers, and Support Needs*. Paper presented at the meeting of the Association for Educational Communications and Technology, Jacksonville, FL. (Session No. 3153.CA)

Reigeluth, C.M. (2011, November). *What is the Future of Our Field?* Presenter and panelist in a discussion session at the meeting of the Association for Educational Communications and Technology, Jacksonville, FL. (Session No. 4091.C2)

Reigeluth, C.M. (2011, November). *A Collegial Conversation with Leading Scholars about Educational Technology, Instructional Design and the Learning Sciences*. Presidential Panel at the meeting of the Association for Educational Communications and Technology, Jacksonville, FL. (Session No. 3130.G5)

Watson, B.R., Watson, S.L., & Reigeluth (2011, November). *Personalized Integrated Educational Systems: Challenges, Solutions, and Prescriptions for Transforming Education with Technology*. Paper presented at the meeting of the Association for Educational Communications and Technology, Jacksonville, FL. (Session No. 4153.CA)

ICITS Conference 2011

Reigeluth, C.M. (2011, September). *Paradigm Change in Education: What It Is, Why It Is Needed, and What It Will Be Like*. Keynote address presented at the annual meeting of the International Computer and Instructional Technologies Symposium, Elazig, Turkey.

KSET Conference 2011

Reigeluth, C.M. (2011, May). *The Future of Educational Technology: keystones for Global Partnership*. Keynote address presented at the annual meeting of the Korean Society for Educational Technology, Seoul, Korea.

Reigeluth, C.M. (2011, May). *The Future of Instructional Theory*. Paper presented at the annual meeting of the Korean Society for Educational Technology, Seoul, Korea.

AECT Conference 2010

Reigeluth, C.M. (2010, October). *An Instructional Theory for the Post-Industrial Age*. Paper presented at the meeting of the Association for Educational Communications and Technology, Anaheim, CA. (Session No. 118)

Aslan, S., & Reigeluth, C.M. (2010, October). *What are the factors that contribute to ineffective and limited use of Learning Management Systems in the Schools?* Paper presented at the meeting of the Association for Educational Communications and Technology, Anaheim, CA. (Session No. 203)

- Reigeluth, C.M., Aslan, S., Jordan, E., Shao, Z., & Watson, W.R. (2010, October). *PIES – Personalized Integrated Educational System*. Paper presented at the meeting of the Association for Educational Communications and Technology, Anaheim, CA. (Session No. 224)
- Reigeluth, C.M., & Richter, K.B. (2010, October). *Case studies of Information-Age new-paradigm schools*. Paper presented at the meeting of the Association for Educational Communications and Technology, Anaheim, CA. (Session No. 302)
- Richter, K.B., & Reigeluth, C.M. (2010, October). *New Paradigm Schools: A National Survey-based Search*. Paper presented at the meeting of the Association for Educational Communications and Technology, Anaheim, CA. (Session No. 325)
- Duffy, F.M., & Reigeluth, C.M., (2010, October). *FutureMinds: Transforming American School Systems*. Discussion session at the meeting of the Association for Educational Communications and Technology, Anaheim, CA. (Session No. 356)
- Aslan, S., Huh, Y., Lee, D., & Reigeluth, C.M. (2010, October). *The Role of Personalized Integrated Educational Systems in the Information-Age Paradigm of Education*. Paper presented at the meeting of the Association for Educational Communications and Technology, Anaheim, CA. (Session No. 402)

AECT Conference 2009

- Reigeluth, C.M., Kwon, S., Shao, Z., Yildirim, Z., & Kageeto, Y. (2009, October). *An Investigation of Learning Management Systems' Usage for their Primary and Information-Age Functions in a School District*. Paper presented at the meeting of the Association for Educational Communications and Technology, Louisville, KY. (15-BM)
- Richter, K., & Reigeluth, C.M. (2009, October). *Systemic Transformation Efforts in the Decatur Intermediate Learning Center Academies*. Paper presented at the meeting of the Association for Educational Communications and Technology, Louisville, KY. (41-FS)
- Visser, J., Spector, M., Bull, G., Wilson, B., & Reigeluth, C.M. (2009, October). *Building the Scientific Mind*. Panel convened at the meeting of the Association for Educational Communications and Technology, Louisville, KY. (37-NN)

CELL Conference 2009

- Reigeluth, C.M. (2009, November). *Why Students Are Underperforming and What You Can Do About It: It's a System Problem!* Paper presented at the meeting of the Center for Excellence in Leadership of Learning, Indianapolis, IN.

AECT Conference 2008

- Reigeluth, C.M., & Duffy, F.M. (2008, November). *FutureMinds: What's Happening and How You Can Get Involved*. Paper presented at the meeting of the Association for Educational Communications and Technology, Orlando, FL. (31-DN)
- Reigeluth, C.M., & Richter, K. (2008, November). *What Not To Do in Systemic Change: Lessons from a Middle School Change Process*. Paper presented at the meeting of the Association for Educational Communications and Technology, Orlando, FL. (27-EG)
- Watson, S.L., Richter, K., Lin, C.Y., & Reigeluth, C.M. (2008, November). *A High School Redesign Process: Small Learning Communities in a Systemic Educational Change Effort*. Paper presented at the meeting of the Association for Educational Communications and Technology, Orlando, FL. (36-CB)
- Watson, S.L., Reigeluth, C.M., Watson, W.R., Dutta, P., & Chen, C. (2008, November). *Learning Management System Features for Learner-Centric Schools*. Paper presented at the meeting of the Association for Educational Communications and Technology, Orlando, FL. (31-KE)

Innovation 2008 Conference

- Reigeluth, C.M. (2008, April). From the Factory Model to FutureMinds. Keynote address at the "Innovation 2008" annual conference in Breckenridge, CO.

AECT Conference 2007

- Reigeluth, C.M. (2007, October). Formative Research. In J. Klein, (Chair), *Conducting Research in Instructional Design and Technology*. Presentation and panel discussion at the meeting of the Association for Educational Communications and Technology, Anaheim, CA. (22-SE)
- Reigeluth, C.M. (2007, October). Major Revisions for a Systemic Transformation Process: The Decatur Experience. In C.M. Reigeluth (Chair), *Systemic Transformation in Decatur: Major Revisions to the Process*. Symposium conducted at the meeting of the Association for Educational Communications and Technology, Anaheim, CA. (25-S4)
- Duffy, F.M., & Reigeluth, C.M. (2007, October). *The School System Transformation Protocol*. Paper presented at the meeting of the Association for Educational Communications and Technology, Anaheim, CA. (26-G3)
- Reigeluth, C.M., & Duffy, F.M. (2007, October). *The AECT FutureMinds Initiative*. Paper presented at the meeting of the Association for Educational Communications and Technology, Anaheim, CA. (31-VA)

ISBA Conference 2007

- Reigeluth, C.M., & Stinson, D. (2007, October). Paradigm change in the MSD of Decatur Township. Presentation at the meeting of the Indiana School Boards Association, Indianapolis, IN.

AERA Conference 2007

- Reigeluth, C.M. (2007, April). Research-Based Revisions to a District-Wide Systemic Transformation Effort. In C.M. Reigeluth (Chair), *Research on the Systemic Transformation Process in Education*. Symposium conducted at the meeting of the American Educational Research Association, Chicago, IL.
- Reigeluth, C.M. (2007, April). *Formative Research on a Leveraged Emergent Approach to School-Based Changes in a Systemic Transformation Effort*. Paper presented at the meeting of the American Educational Research Association, Chicago, IL.

AECT Conference 2006

- Reigeluth, C.M. (2006, October). Overview of a systemic change project in the Decatur Township school district. In C.M. Reigeluth (Chair), *District-wide systemic transformation in the Decatur school district: A progress report and research studies*. Symposium conducted at the meeting of the Association for Educational Communications and Technology, Dallas, TX. (23-TE)
- Reigeluth, C.M. (2006, October). *Accelerating systemic transformation: The leveraged emergent approach*. Paper presented at the meeting of the Association for Educational Communications and Technology, Dallas, TX. (25-GO)
- Reigeluth, C.M. (2006, October). *Socratic seminar*. Panel discussion at the meeting of the Association for Educational Communications and Technology, Dallas, TX. (27-PA)
- Reigeluth, C.M. (2006, October). *Building the research bridge: How do we connect theory to research?* Panel discussion at the meeting of the Association for Educational Communications and Technology, Dallas, TX. (35-PA)
- Reigeluth, C.M. (2005, October). *What counts as theory in instructional technology?* Panel discussion at the meeting of the Association for Educational Communications and Technology, Dallas, TX. (36-PR)

AECT Research Symposium 2006

- Reigeluth, C.M. (2006, June). *Systemic transformation processes for a K-12 learner-centered paradigm: Comparisons among approaches*. Paper presented and discussed at the AECT Research Symposium, Bloomington, IN.

AERA Conference 2006

- Reigeluth, C.M. (2006, April). An overview of research studies on a district-wide systemic change effort. In C.M. Reigeluth (Chair), *Research on the systemic transformation process in education*. Symposium conducted at the meeting of the American Educational Research Association, San Francisco, CA. (18.063)
- Reigeluth, C.M. (2006, April). An idealized design approach versus a leveraged emergent approach to school-based changes in a systemic transformation effort. In C.M. Reigeluth (Chair), *Research on the systemic transformation process in education*. Symposium conducted at the meeting of the American Educational Research Association, San Francisco, CA. (18.063)

AECT Conference 2005

- Reigeluth, C.M. (2005, October). Overview of a systemic change project in the Decatur Township school district. In C.M. Reigeluth (Chair), *District-wide systemic transformation in the Decatur school district: A progress report and research studies*. Symposium conducted at the meeting of the Association for Educational Communications and Technology, Orlando, FL. (21-D1)
- Reigeluth, C.M. (2005, October). *Chaos and complexity theories: Foundations for transforming education*. Paper presented at the meeting of the Association for Educational Communications and Technology, Orlando, FL. (25-CS)
- Reigeluth, C.M. (2005, October). *Exploring the vision of technology integration research: Scholars' thoughts on definitions, theories, and methodologies*. Panel discussion at the meeting of the Association for Educational Communications and Technology, Orlando, FL. (27-D1)
- Reigeluth, C.M. (2005, October). The systemic change process. In J.E. Kemp (Chair), *Presidents' Perspectives on the Direct Role of AECT for Improving American Education: The Systemic Change Process*. Presidential Session conducted at the meeting of the Association for Educational Communications and Technology, Orlando, FL. (36-CL)

AERA Conference 2005

- Reigeluth, C.M. (2005, April). An overview of research studies on a district-wide systemic change effort. In C.M. Reigeluth (Chair), *Research on the systemic transformation process in education*. Symposium conducted at the meeting of the American Educational Research Association, Montreal, Canada. (12.066)

AECT Conference 2004

- Reigeluth, C.M. (2004, October). Overview of a systemic change project in the Decatur Township school district. In C.M. Reigeluth (Chair), *District-wide systemic transformation in the Decatur school district: A progress report and research studies*. Symposium conducted at the meeting of the Association for Educational Communications and Technology, Chicago, IL. (21-W)
- Reigeluth, C.M. (2004, October). Lessons learned about systemic change: The district level. In S. Smaldino (Chair), *AECT Proposal on Systemic/Systematic Change*. Presidential Session conducted at the meeting of the Association for Educational Communications and Technology, Chicago, IL. (27-S3)
- Reigeluth, C.M. (2004, October). *Instructional design and the learning sciences: A conversation between two communities of practice*. Panel discussion at the meeting of the Association for Educational Communications and Technology, Chicago, IL. (27-S1, but could not attend due to scheduling conflict).

AERA Conference 2004

- Reigeluth, C.M. (2004, April). Chaos Theory and the Sciences of Complexity: Foundations for Transforming Education. In C.M. Reigeluth (Chair), *Theoretical Foundations for Systemic Transformation of K-12 Education*. Symposium conducted at the meeting of the American Educational Research Association, San Diego, CA. (27.065)

Reigeluth, C.M. (2004, April). An Overview of the Systemic Transformation Project. In C.M. Reigeluth (Chair), *A Stakeholder-Based Process for District-Wide Systemic Transformation*. Symposium conducted at the meeting of the American Educational Research Association, San Diego, CA. (65.065)

AECT Conference 2003

Reigeluth, C.M. (2003, October). *Questioning Merrill: Constructing the Future of Instructional Science and Technology*. Panel discussion at the meeting of the Association for Educational Communications and Technology, Anaheim, CA. (26-RC)

Reigeluth, C.M. (2003, October). An Overview of the GSTE: Guidance System for Transforming Education. In C.M. Reigeluth (Chair), *A Stakeholder-Based Process for District-Wide Systemic Transformation*. Symposium conducted at the meeting of the Association for Educational Communications and Technology, Anaheim, CA. (36-G2)

Reigeluth, C.M. (2003, October). *Towards a Strategic Plan for AECT's National Leadership*. Presidential Session conducted at the meeting of the Association for Educational Communications and Technology, CA. (37-G3)

Lee, J.Y., & Reigeluth, C.M. (2003, October). *Heuristic Task Analysis on Expertise in Designing Web-Based Instruction (WBI)*. Paper presented at the meeting of the Association for Educational Communications and Technology, CA. (45-S)

KSET Conference 2003

Reigeluth, C.M. (2003, June). *New Instructional Theories and Strategies for a Knowledge-based Society*. Keynote address presented at a distance to the meeting of the Korean Society for Educational Technology, Seoul, Korea.

AERA Conference 2003

Reigeluth, C.M. (2003, April). *Knowledge Building for Use of the Internet in Education*. Paper presented at the meeting of the American Educational Research Association, Chicago, IL. (29.030)

Lee, J.Y., & Reigeluth, C.M. (2003, April). *Heuristic Task Analysis on Expertise in Designing Web-Based Instruction*. Paper presented at the meeting of the American Educational Research Association, Chicago, IL. (70.022)

AECT Conference 2002

An, Y.J., & Reigeluth, C.M. (2002, November). *Adapting an Existing Course to the Web: A Case Study*. Paper presented at the meeting of the Association for Educational Communications and Technology, Dallas, TX. (3100-MB)

Reigeluth, C.M., & Keller, J.B. (2002, November). *Deconstructing a Tower of Babble: Clarifying Terms and Concepts in Instructional Theory*. Paper presented at the meeting of the Association for Educational Communications and Technology, Dallas, TX. (1205-GB) (with John Keller)

Joseph, R., & Reigeluth, C.M. (2002, November). *Formative Research on a Design Theory to Facilitate Systemic Change in Public School Districts*. In C.M. Reigeluth (Chair), *A Stakeholder-Based Process for District-Wide Systemic Transformation*. Symposium conducted at the meeting of the Association for Educational Communications and Technology, Dallas, TX. (2115-LS3)

Pascoe, S., & Reigeluth, C.M. (2002, November). *Facilitating Systemic Change: The Role of a Support Team*. In C.M. Reigeluth (Chair), *A Stakeholder-Based Process for District-Wide Systemic Transformation*. Symposium conducted at the meeting of the Association for Educational Communications and Technology, Dallas, TX. (2115-LS3)

Cakir, H., Tuzun, H., & Reigeluth, C.M. (2002, November). *An Internet-Based Electronic Performance Support System for Systemic Change in K-12 Settings*. Paper presented at the

meeting of the Association for Educational Communications and Technology, Dallas, TX. (3205-EG)

Joseph, R., Cakir, H., Keller, J.B., Pascoe, S., Stein, R., & Reigeluth, C.M. (2002, November). *Facilitating Systemic Change: Analyzing Community Needs through Community Meetings*. Paper presented at the meeting of the Association for Educational Communications and Technology, Dallas, TX. (4106-LS3)

ISI Conference 2002

Reigeluth, C.M. (2002, November). *Systemic Change in K-12 School Districts*. Organized and led a four-day conversation group at the International Systems Institute, Pacific Grove, CA.

AERA Conference 2002

Joseph, R., & Reigeluth, C.M. (2002, April). *Formative research on the systemic Change Process in a Small Urban School System*. Paper presented at the meeting of the American Educational Research Association, New Orleans, LA. (50.24)

Lee, J.Y., & Reigeluth, C.M. (2002, April). *Heuristic Task Analysis on Designing Web-Based Instruction (WBI)*. Paper presented at the meeting of the American Educational Research Association, New Orleans, LA.

Brigham Young University 2002

Reigeluth, C.M. (2002, October). *Transformation of Educational Systems: Who Needs It?* Paper presented at Brigham Young University, Provo, UT, to the faculty of the School of Education.

AECT Conference 2001

Reigeluth, C.M. (2001, November). *Important New Directions for Educational Technology*. Invited address presented at the meeting of the Association for Educational Communications and Technology, Atlanta, GA.

Joseph, R., & Reigeluth, C.M. (2001, November). *Formative Research on the Systemic Change Process in a Small Urban School System*. Paper presented at the meeting of the Association for Educational Communications and Technology, Atlanta, GA.

Reigeluth, C.M., & Carr-Chellman, A.A. (2001, November). *An Exploration of Issues Critical to the Survival and Future Health of ISD Models*. Paper presented at the meeting of the Association for Educational Communications and Technology, Atlanta, GA.

ISI Conference 2001

Reigeluth, C.M. (2001, October). *Systemic Change in K-12 School Districts*. Organized and led a four-day conversation group at the International Systems Institute, Pacific Grove, CA.

ISSS Conference 2000

Jenlink, P., & Reigeluth, C.M. (2000, July). *A Guidance System for Designing New K-12 Educational Systems*. Paper presented at the meeting of the International Society for Systems Sciences, Toronto, Canada.

PIDT Conference 2000

Reigeluth, C.M. (2000, May). *The New Paradigm of Learning and Instruction*. Keynote address at the meeting of the Professors of Instructional Design and Technology Conference, Roanoke, VA.

AERA Conference 2000

Reigeluth, C.M., & Lim, B.R. (2000, April). *Formative Research on an EPSS for Instructional Methods for In-Service Teachers*. Paper presented at the meeting of the American Educational Research Association, New Orleans, LA. (11.07)

Reigeluth, C.M., Lee, J.Y., Peterson, B., & Chavez, M. (2000, April). *Formative Research on the Heuristic Task Analysis Process*. Paper presented at the meeting of the American Educational Research Association, New Orleans, LA. (16.45)

AECT Conference 2000

- Siebold, R., & Reigeluth, C.M. (2000, October). Educational Design Theory. Paper presented at the meeting of the Association for Educational Communications and Technology, Denver, CO. (3307)
- Reigeluth, C.M. (2000, October). Systemic Reform in Public Education Revisited. Educational Design Theory. Panel discussion at the meeting of the Association for Educational Communications and Technology, Denver, CO. (3409)
- Reigeluth, C.M. (2000, October). Determining the Quality of Graduate Instruction. Educational Design Theory. Panel discussion at the meeting of the Association for Educational Communications and Technology, Denver, CO. (4103)
- Bichelmeyer, B., & Reigeluth, C.M. (2000, October). Adapting a Master's Program to the Web. Educational Design Theory. Paper presented at the meeting of the Association for Educational Communications and Technology, Denver, CO. (4211)
- Reigeluth, C.M., Lee, J.Y, Peterson, B., & Chavez, M. (2000, October). Formative Research on the Heuristic Task Analysis Process. Educational Design Theory. Paper presented at the meeting of the Association for Educational Communications and Technology, Denver, CO. (4510)
- Molenda, M., & Reigeluth, C.M. (2000, October). Selecting Pedagogical Methods for Distance Education. Educational Design Theory. Paper presented at the meeting of the Association for Educational Communications and Technology, Denver, CO. (5009A)

ISSS Conference 1999

- Reigeluth, C.M. (1999). Designing a Parallel State-Level System of Public Education (organized and co-facilitated a 4-day conversation group)

AECT Conference 1998

- Reigeluth, C.M. (1998). An Overview of Theories in a New Paradigm of Instructional Theory (RTD Keynote Address) (4014)
- Reigeluth, C.M. (1998). Instructional Strategies for Problem-solving Tasks (5019) (with Laurie Nelson)
- Reigeluth, C.M. (1998). How To Design a Charter School (5070)
- Reigeluth, C.M. (1998). The Imperative for a Systemic Approach to Professional Development (6094) (with Julie Moore)

AERA Conference 1998

- Reigeluth, C.M. (1998). The Elaboration Theory: Guidance for Scope and Sequence Decisions (1.03)
- Reigeluth, C.M. (1998). The New Paradigm of Instructional Theory (SIG-IT Keynote Address) (3.69)
- Reigeluth, C.M. (1998). The Restructuring Support Service: Providing Research and Professional Development Opportunities in Systemic Educational Change (with Laurie Nelson and Diana Ryan) (21.07)

AERA Conference 1997

- Reigeluth, C.M. (1997). Guidelines for Using a Problem-Based Learning Approach for Teaching Heuristic Tasks (17.02) (with Laurie Nelson)

AECT Conference 1996

- Reigeluth, C.M. (1996). A Study of Society's Impact on Systemic Educational Reform in Taiwan (910) (with Yih-pei Hu)
- Reigeluth, C.M. (1996). Kaleidoscopic Views I: Critiques of Systemic Change toward Self-renewal (panel member) (#337)

ISSS Conference 1996

Reigeluth, C.M. (1996). Guidelines for Facilitating Systemic Change in School Districts (with Patrick Jenlink, Ali Carr, & Laurie Nelson).

AECT Conference 1995

Reigeluth, C.M. (1995). Rapid Prototyping for Task Analysis and Sequencing with the Simplifying Conditions Method (520) (with Young-Hwan Kim)

Reigeluth, C.M. (1995). Educational Systemic Change: The Need for Professional Development (591) (with Laurie Nelson)

Reigeluth, C.M. (1995). Formative Research on the Simplifying Conditions Method for Task Analysis and Sequencing (738) (with Young-Hwan Kim)

Reigeluth, C.M. (1995). Formative Research on the Elaboration Theory (766) (with Robert English)

AECT Conference 1994

Reigeluth, C.M. (1994). Do ISD and ESD Really Need Each Other? (349) (with Badrul Khan)

Reigeluth, C.M. (1994). Systemic Restructuring and Educational Technology: Is It a Good Alliance? (412)

Reigeluth, C.M. (1994). Initiating School Restructuring: A Case Study (536) (with Lottie Naugle)

ASCD Conference 1994

Reigeluth, C.M. (1994). Investigating Leadership: Six Models for Leadership in Community Participation (4417) (with Ali Carr)

Reigeluth, C.M. (1994). Preparing Teachers for their New Roles in a New Educational System (5143) (with In-sook Lee)

AERA Conference 1994

Reigeluth, C.M. (1994). Formative Research on the Elaboration Theory (with Robert English)

Reigeluth, C.M. (1994). Formative Research on the Systemic Restructuring Process (with Lottie Naugle)

AECT Conference 1993

Reigeluth, C.M. (1993). School Restructuring: Barriers and Opportunities (414).

AECT Conference 1992

Reigeluth, C.M. (1992). A Nationwide Study of Redesigned Schools Captures the Vision (294).

Reigeluth, C.M. (1992). Three Prescriptive Instructional Theories: Teletraining, Metacognition, and Motivation (727).

Reigeluth, C.M. (1992). Verifying Prescriptive Instructional Theory by Analysis of Patterns in Time (with Theodore Frick) (597).

AERA Conference 1992

Reigeluth, C.M. (1992). 21st Century Schools Pilot Project.

International Conference on Instructional Technology and Educational Innovation, Taipei, Taiwan:

Reigeluth, C.M. (1992). Educational Systems Design (keynote address).

ISSS Conference 1992

Reigeluth, C.M. (1992). Systems Design of Education (Denver)

ACTE Conference 1992

Reigeluth, C.M. (1992). New Directions in Educational Technology (keynote speech) (Puerto Rico).

AECT Conference 1991

Reigeluth, C.M. (1991). Educational Systems Design: Experiences in Designing New Models of Schooling (381).

Reigeluth, C.M. (1991). Patterns of Features Implemented in the Systemic Redesign of Schools (543).

Reigeluth, C.M. (1991). School Restructuring Consortium (Bloomington, Indiana): An International Educational Systems Design Perspective.

NSBA Conference 1991

Reigeluth, C.M. (1991). Technology's Role in Restructuring (Keynote address for the Technology Leadership Network annual meeting of the National School Boards Assoc.)

AECT Conference 1990

Reigeluth, C.M. (1990). Instructional Development Services to Public Schools (607).

Reigeluth, C.M. (1990). Instructional Theory for Conceptual Understanding (661).

AERA Conference 1990

Reigeluth, C.M. (1990). An Instructional Theory to Facilitate Causal Understanding.

Reigeluth, C.M. (1990). Principles of Education to Guide School Restructuring.

Indiana University Excellence in Education Conference (Bloomington, IN):

Reigeluth, C.M. (1990). Educational Technology and School Restructuring.

NATO Conference 1990

Reigeluth, C.M. (1990). Principles of Educational Systems Design.

AECT Conference 1989

Reigeluth, C.M. (1989). Sequencing and Integrating Cognitive Strategies with Subject-matter Content (329).

Reigeluth, C.M. (1989). Instructional Design and the Public Schools: A Conversation (355).

Reigeluth, C.M. (1989). A Model of Instruction for Facilitating Understanding (431).

Reigeluth, C.M. (1989). Prescriptions for Designing a Theoretical Elaboration Sequence (623).

AERA Conference 1989

Reigeluth, C.M. (1989). A Review and Synthesis of Instructional Strategies for Facilitating Understanding.

ADCIS Conference 1989

Reigeluth, C.M. (1989). Creative Approaches to Research on Interactive Instruction (Invited Address)

AECT Conference 1988

Reigeluth, C.M. (1988). General Systems Theory and the Public Schools (415).

Reigeluth, C.M. (1988). Instructional Strategies Curriculum at Syracuse University (514).

Reigeluth, C.M. (1988). A Prescriptive Theory for the Design of Computer-based Educational Simulations (534).

AERA Conference 1988

Reigeluth, C.M. (1988). Cognitive Task Analysis: Recent Advances in Automation and Verification (54.03).

COTE Conference 1988

Reigeluth, C.M. (1988). The Changing Role of the Teacher: Training for Developing Classroom Materials.

NATO Conference 1988:

Reigeluth, C.M. (1988). New Directions for Educational Technology.

AECT Conference 1987

Reigeluth, C.M. (1987). Practicing What We Preach.

AERA Conference 1987

Reigeluth, C.M. (1987). An Instructional Theory for Computer-based Simulations.

Thinking Skills Conference (Cincinnati):

Reigeluth, C.M. (1987). Teaching Thinking Skills: Contributions from Instructional Design.

COTE Conference 1987

Reigeluth, C.M. (1987). Teaching for Understanding: A Prescriptive Knowledge Base for Teachers in All Disciplines.

ADCIS Conference 1987

Reigeluth, C.M. (1987). Courseware Design: The Critical Issues for Content (a general session--invited).

AERA Conference 1986

Reigeluth, C.M. (1986). Designing a Simple-to-Complex Sequence for Procedural Content: Differences between the Shortest-path Approach and the Elaboration Theory's "Simplifying Assumptions" Approach.

Reigeluth, C.M. (1986). The Analogy in Instructional Design.

Reigeluth, C.M. (1986). Instructional Technology at Syracuse University.

ADCIS Conference 1986

Reigeluth, C.M. (1986). Can Computers Deliver Effective Instruction? Trends for CBI.

AERA Conference 1985

Reigeluth, C.M. (1985). Improving Public Education: Restructuring as an Alternative to Band-aids for Broken Legs.

AECT Conference 1985

Reigeluth, C.M. (1985). Focus on Tomorrow: The Role of Instructional Design in Guiding Change (a Presidential Session--invited).

AERA Conference 1984

Reigeluth, C.M. (1984). Extended Task Analysis Procedure.

Reigeluth, C.M. (1984). An Instructional Model for Remember-level Learning: The Integration of Instructional Design Prescriptions.

AERA Conference 1983

Reigeluth, C.M. (1983). Elaboration of Task Structures.

Reigeluth, C.M. (1983). The Extended Development Procedure (EDeP): Design Specifications for the IPISD.

AERA Conference 1982

Reigeluth, C.M. (1982). The Effects of Alternative Strategies for Sequencing Instruction on Basic Skills

Reigeluth, C.M. (1982). Instructional Theories in Action.

Reigeluth, C.M. (1982). A Lesson based on the Elaboration Theory of Instruction.

AERA Conference 1981

Reigeluth, C.M. (1981). The Army's Extended Task Analysis Procedure.

AERA Conference 1980

Reigeluth, C.M. (1980). Using Videodiscs in Instruction: Realizing their Potential through Instructional Design.

Reigeluth, C.M. (1980). The Elaboration Model: An Integrative Model for Structuring Instruction.

Reigeluth, C.M. (1980). Describing, Analyzing, and Evaluating the Instructional Quality of Textbooks: Elaboration Theory Criteria.

AECT Conference 1979

Reigeluth, C.M. (1979). In Search of a Better Way to Organize Instruction: The Elaboration Theory.

APA Conference 1979

Reigeluth, C.M. (1979). Instructional Design Theory: What Is It and Why Is It?

Reigeluth, C.M. (1979). Overview of the Elaboration Model of Instruction.

AERA Conference 1978

Reigeluth, C.M. (1978). Structural Strategies: A Preliminary Taxonomy of Strategy Variables.

Reigeluth, C.M. (1978). TICCAT to the Future: Advances in Instructional Theory for CAI.

Reigeluth, C.M. (1978). Training Teachers to Teach Effectively: The ISDP Manual.

AERA Conference 1977

Reigeluth, C.M. (1977). The Effects of Rules, Examples and Practice on Instructional Effectiveness and Appeal.

APA Conference 1977

Reigeluth, C.M. (1977). The Structure of Subject Matter.

AAMD Conference 1976

Reigeluth, C.M. (1976). Research Support for the Instructional Strategy Diagnostic Profile.

Seminars, Workshops, and Paid Presentations

2012: Army Research Institute: Designed and delivered two workshops: *Instructional Systems Primer* and *Advanced Concepts in ID*, August 23 & 30.

2011: Turkey: *The Future of Educational Technology*. An invited presentation at Bogazici University, Istanbul, Turkey, September 29.

Paradigm Change in Education: What It Is, Why It Is Needed, and What It Will Be Like. An invited presentation with senior level people at the Ministry of Education, Ankara, Turkey, September 27.

Paradigm Change in Education: What It Is, Why It Is Needed, and What It Will Be Like. An invited presentation at the Department of Educational Technology, Ministry of Education, Ankara, Turkey, September 20.

Instructional Theory for the New Paradigm of Education: PBL and Explicit Instruction. An invited presentation at the Middle East Technical University, Ankara, Turkey, September 19.

Taiwan: *Research Topics for the Information-Age Paradigm of Education*. An invited presentation at the National Academy for Education Research, Taipei, Taiwan, June 2.

The Future of Education: Paradigm Change and its Implications for Instructional Methods and Technology. An invited presentation at the National Taipei University of Education, Taipei, Taiwan, June 1.

Japan: *The Future of Instructional Theory*. An invited presentation at Kumotomo University, Kyoto, Japan, May 29.

- The Future of Educational Technology*. An invited presentation at Kansai University, Osaka, Japan, May 27.
- Korea: *Paradigm Change in Education*. An invited presentation at the Korean Ministry of Education, Science and Technology, Seoul, Korea, May 25.
- The Future of Educational Technology*. An invited presentation at Ewha University, Seoul, Korea, May 24.
- The Future of Instructional Theory*. An invited presentation at Kookmin University, Seoul, Korea, May 24.
- Paradigm Change in Education*. An invited presentation at the Korean Educational Development Institute, Seoul, Korea, May 23.
- Systemic Change in Education: A New Paradigm of Schools*. An invited presentation at Sogang University, Seoul, Korea, May 20.
- Systemic Change in Education: A New Paradigm of Schools*. An invited presentation at Inha University, Seoul, Korea, May 19.
- China: *Paradigm Change in Education: New Educational Needs for a New Era*. An invited presentation at East China Normal University, Shanghai, China, May 16.
- Educational Technology for a New Paradigm of Education*. An invited presentation at Beijing Normal University, Beijing, China, May 14.
- 2009: US AFRL: This is Not Your Father's Instructional Theory: A Paradigm Change. An interactive presentation with researchers at the Air Force Research Lab in Mesa, AZ.
- TDPE-OH: FutureMinds: Transforming America's School Systems – Creating and Sustaining Transformational Change in Ohio's School Districts. An interactive presentation with Ohio's "Transformational Dialogue for Public Education" group of top leaders in Ohio (governor's office, legislators, state superintendent, state chancellor of higher education, state teachers' associations' leaders, and many more), supported by the KnowledgeWorks Foundation. The purpose of the session was to assist the state leaders in expanding their educational transformation process from the state level to the district level.
- US AFRL: Advances in Instructional Theory: A Paradigm Change. An interactive presentation with researchers at the Air Force Research Lab at the Wright-Patterson AFB near Dayton, OH.
- 2003: AECT: Teaching about Systemic Change for a Corporate Setting, Higher Education Context, or Public School System (11-S8) (half-day workshop)
- 2002: Brigham Young University: Building Instructional Theory. A seminar with the Instructional Design and Technology Department.
- Theory and Instructional Design. A seminar with the Center for Instructional Development.
- 2001: Association for Computer Users in Education: A New Paradigm of Learning and Instruction (keynote address)
- NCREL National Technology Conference: High-Performance High-Technology Learning Environments: What Works?
- Utah State University Instructional Technology Institute: Important New Directions for Instructional Design.
- 1998: AECT Workshop, St. Louis, MO, February 18: Co-conducted a half-day workshop on "Instructional Strategies for Problem-Solving Tasks."

- 1997: LG HRD Academy, Seoul, Korea, October 9. Presented ideas on ways to foster the development of a learning organization in one presentation and ideas about the new paradigm of instructional theories in another.
Ehwa Womens University, Seoul, Korea, October 10. Presented ideas on ways to foster the development of a learning organization in one presentation and ideas about the new paradigm of instructional theories in another.
ITESM, University of Monterrey, Mexico. Presented the Elaboration Theory in Spanish.
- 1996: New Palestine Elementary School, New Palestine, IN, January 30: Presented ideas on systemic change in education to a team of faculty and administrators.
Indiana Educational Progress Alliance, Indianapolis, IN, February 9: Presented ideas on systemic change to the Board of Directors.
AECT Workshop, Indianapolis, IN, February 13: Co-conducted a half-day workshop on "Facilitating Systemic Change."
U.S. Army, Fort Knox, KY, March 27: Conducted a one-day workshop on "Instructional Strategies for Problem-Solving Tasks."
Indiana Youth Institute, Indianapolis, IN, May 6: Presented ideas on systemic change in education to the staff.
PSI Energy Educational Speakers Service, Plainville, IN, July 23: Presented ideas on systemic change in education.
MSD Pike School Corporation, Indianapolis, IN, October 29: Presented ideas on systemic change in education to board members and administrators.
- 1995: AECT Workshop, Anaheim, CA, February 8: Co-conducted a half-day workshop on "Facilitating Systemic Change."
National School Boards Assoc., San Francisco, CA, March 31: Gave the ITTE keynote address entitled, "Technology, Restructuring, and Professional Development: Star Trek or Journey to Oz?"
New Palestine Elementary School, New Palestine, IN, September 27: Presented ideas on systemic change in education to a team of faculty and parents.
- 1994: Evansville Central High School, Evansville, IN, March 2: Gave a presentation on systemic change in education to all the faculty.
Schmitt Elementary School, Columbus, IN, March 7: Gave a seminar to the Restructuring Team and a presentation to all the faculty.
Indiana University, Bloomington, IN, June: Gave seven full-day workshops on task analysis and instructional strategies to managers from Lucky-Goldstar in Korea.
AECT Summer Professional Multimedia Seminar, West Lafayette, IN, July 17: Gave an invited presentation entitled "CHANGE: Restructuring & Technology."
Rogers Elementary School, Bloomington, IN, November 21: Gave a presentation to all the faculty.
- 1993: U.S. Air Force Academy, Colorado Springs, CO, September 1: Gave a seminar entitled, "Envisioning the Academy in the Information Age."
Indiana University, Bloomington, IN, June: Gave four full-day workshops on task analysis and instructional strategies to managers from Lucky-Goldstar in Korea.
- 1992: National Hualien Teachers College, Hualien, Taiwan, May 18: Gave a seminar entitled, "Instructional Design."
Seoul National University & Ewha Womens University, Seoul, Korea, May 25: Gave a seminar entitled, "New Directions in Educational Technology."
Univ. of Colorado, Denver, CO, July 15: Gave a seminar on systemic restructuring in education.
School Restructuring Consortium, Bloomington, IN, October 14: Gave a seminar entitled, "A National Study of School Restructuring Efforts."

- Gosport Elementary School, Gosport, IN. Gave an address on school restructuring.
- 1991: Indiana Department of Education in Indianapolis, IN. Gave a presentation on “A Systemic Approach to Restructuring.”
- AECT in Orlando, FL. Gave a workshop entitled “The Elaboration Theory: Prescriptions for Task/Content Analysis.”
- Evansville Chamber of Commerce, Evansville, IN. Gave a presentation on “Systemic Restructuring of Education.”
- Linton Elementary School, Linton, IN. Gave a keynote address on “Restructuring a School.”
- 1990: Florida State University in Tallahassee, FL. Gave a presentation on “Future Directions for Educational Technology and Instructional Theory.”
- Universidad de Monterrey in Monterrey, Mexico. Gave a presentation on “Empowering Educational Technology through School Restructuring and Instructional Design” and conducted a workshop on the same subject.
- Leadership Evansville, Evansville, IN. Gave a presentation on “The Need for a New Paradigm in Education.”
- Asilomar in Pacific Grove, CA. Organized and participated in five days of intensive work on applying systems thinking to educational restructuring.
- 1989: Indiana Curriculum Advisory Council in Indianapolis, IN. Gave a presentation on “Overcoming New Technology Barriers: Informal Learning.”
- Phi Delta Kappa Chapter in Joliet, IL. Gave a presentation on “Improving the Textbook Selection Process.”
- Asilomar in Pacific Grove, CA. Participated for five days of intensive work developing a process model for systemic educational restructuring.
- 1988: ISC Educational Systems, Inc. and the Regional Resource Center for Technical and Industrial Training in Lancaster, PA. Conducted a seminar on theories and principles of instructional design as applied to level-3 interactive video disc.
- Blue Cross and Blue Shield, Eleventh Annual National Computer-Based Training Conference in Poughkipsie, NY. Gave a presentation entitled “Powerful CBT Demands Powerful Design.”
- Rensselaer Polytechnic Institute, Office of Minority Student Affairs, in Troy, NY. Conducted a 2-day seminar on “Designing Instruction to Facilitate Learning and Problem Solving Skills.”
- Canadian Centre for Learning Systems in Calgary, Alberta (Canada). Conducted a 2-day workshop on “How to Improve Education.”
- University of Maryland in Baltimore, MD. Presented a paper on “New Directions for Instructional Design” at a conference entitled “An Evening with Robert Gagné.”
- 1987: AT&T in Cincinnati, OH. Co-presented a seminar entitled “Curriculum Building from the Ground Up” on curriculum sequencing.
- University of Illinois in Urbana, IL. Presented a colloquium on the role of instructional design in textbook design and evaluation.
- 1986: Columbia Teachers College in New York, NY. Presented a colloquium entitled “Instructional Design for Computer-Based Instruction”.
- 1982: University of Navarra in Pamplona, Spain. Conducted a seminar on instructional design (in Spanish).
- 1979: National Technical Institute for the Deaf at the Rochester Institute of Technology, Rochester, NY. Conducted a seminar on the Elaboration Model of Instruction, an approach for structuring and sequencing a course or curriculum.

Consulting

- 2011: Gary Community School Corporation. Conducted an evaluation of their Cadre III Technology Grant from the Indiana Department of Education.
- 2009: Laureate Education, Inc. Advised Laureate in May on the content and organization for an online course on Instructional Design for Walden University.
- US Air Force Research Laboratory. Engaged with Air Force Research Lab researchers in Mesa, AZ, in May to advise them about instructional theory. After that, they hired me part time through IU to continue to advise them about instructional theory.
- Laureate Education, Inc. Was videotaped by Laureate in a discussion about instructional design for a course on Instructional Design for Walden University.
- KnowledgeWorks Foundation. Advised the KnowledgeWorks Foundation on how to help Ohio school districts engage in systemic transformation to the learner-centered, attainment-based paradigm of education. This included meeting with the Ohio governor's education advisor and subsequently a group of about 25 top state leaders, including the governor's office, legislature, state superintendent, state chancellor of higher education, state department of education, state teachers' associations, administrators' associations, and much more.
- 2001-present: Metropolitan School District of Decatur Township, Indianapolis, IN. Provided facilitation services since January 2001.
- 2003: Nationwide Insurance, Columbus, OH. Provided advice on instructional strategies and task analysis.
- 2002: North Central Regional Educational Laboratory (NCREL) in Naperville, IL: Served on a National Blue Ribbon Panel on the use of technology in education on June 12-14.
- 2001: North Central Regional Educational Laboratory (NCREL) in Naperville, IL: Served on a National Blue Ribbon Panel on the use of technology in education on June 6-8.
- 1999: NETg in Naperville, IL: Reviewed their courseware evaluation process.
- 1998: Nova Southeastern University in Ft. Lauderdale, FL: Reviewed their graduate program in Instructional Technology and Distance Education on February 14 and 15.
- Walden University and Brookings Institute: Facilitated the design of a seminar on dealing with change in the healthy care industry, and offered advice about appropriate instructional strategies, Mar. - Sep.
- 1997: Corporate Educator Program in Bloomington, IN: Conducted three and a half days of workshops on instructional strategies and task analysis for 11 executives from the LG Corporation in Korea on June 16-19 and another day on corporate restructuring for a learning organization on July 21.
- Walden University and Brookings Institute, Washington, DC. Facilitated a meeting to design a seminar series, and offered advice about appropriate instructional strategies.
- 1996: Nationwide Insurance, Columbus, OH. Provided advice on instructional strategies and task analysis.
- 1993: JWK, Inc. in Universal City, TX. Worked on a contract to develop a new course on engineering for the U.S. Air Force Academy.
- 1992: NCREL (North Central Regional Education Laboratory) in Chicago, IL. Worked on an evaluation report for the Chicago educational reform effort.
- Southwest Research Institute in San Antonio, TX. Prepared recommendations for restructuring the U.S. Air Force Academy.
- Transport Canada Training Institute in Cornwall, Ontario, Canada. Advised on the use of Elaboration theory for designing a new curriculum to train air traffic controllers.
- 1991: The PLS Group in Potomac, MD. Reviewed and critiqued several instructional theories for their relevance to the design of the ID Advisor.

- 1990: MEI Associates in Lexington, MA, and Air Force Human Resources Lab in San Antonio, TX. Advised on the design of specifications for the Advanced Instructional Design Advisor (AIDA), an instructional design expert system under development by the AFHRL.
The PLS Group in Potomac, MD. Reviewed and critiqued specs for the ID Advisor.
- 1989: IBM in Armonk, NY. Advised on a briefing related to school restructuring.
Hewlett Packard in Loveland, CO. Advised on the design of documentation for a computer program.
The PLS Group in Potomac, MD. Reviewed and critiqued a status report on the instructional design knowledge base, the context of instructional design within the Air Force, and attempts to automate ID.
MEI Associates in Lexington, MA, and Air Force Human Resources Lab in San Antonio, TX. Advised on the design of specifications for the Advanced Instructional Design Advisor (AIDA), an instructional design expert system under development by the AFHRL.
- 1987: Air Force Human Resources Lab in Dayton, OH. Advised on instructional strategies for complex problem solving.
Leshin * Pollock and Associates in Phoenix, AZ. Advised on instructional strategies for computer-based training for DOD.
Morgan Guaranty Trust Company in New York, NY. Advised on instructional strategies for training programs.
- 1986: Holt, Rinehart and Winston in New York, NY. Advised on ways to improve their high school chemistry textbook.
- 1985: Onondaga / Madison County BOCES in Syracuse, NY. Developed the NY state pretest for third grade social studies.
Jamesville Correctional Facility in Jamesville, NY. Developed an implementation plan for computer-based education.
- 1984: Motorola Corp. in Schaumburg, IL. Designed a workshop.
- 1983: Teaching Research, a division of the Oregon State System of Higher Education in Monmouth, OR. Advised on ways of integrating testing and teaching for an NIE project, "Developing a Teacher's Handbook for Integrating Testing and Teaching."
- 1982: Training Developments Institute, US Army Training and Doctrine Command in Norfolk, VA. Discussed instructional design procedures at the Chiefs of Analysis Seminar.
- 1980: HumRRO in Alexandria, VA. Advised on task analysis methodology.
Training Developments Institute, US Army Training and Doctrine Command in Norfolk, VA. Discussed task analysis procedures at Chiefs of Analysis Seminar.
Kinton, Inc. in Alexandria, VA. Advised on task analysis methodology and instructional strategies and models.
- 1979: Cooperative Care Center, New York University Medical Center in New York, NY. Advised on designing a patient education curriculum, and I designed two prototypical lessons.
Training Developments Institute, US Army Training and Doctrine Command in Norfolk, VA. Advised on "soft skills" task analysis methodology and wrote part of a chapter on that topic.
- 1978: Far West Lab in San Francisco, CA. Advised on instructional design for the Energy/Environmental Teacher Training Project.
Courseware, Inc. in Phoenix, AZ. Advised on instructional design for the F-16 Flight Training Project.

Extramural Research and Development Projects

- Project Director on a contract to evaluate the Cadre III Technology Project in the Gary Community School Corporation. 2010-11. (\$20,000).
- Assignment Agreement - IPA/USAF Air Force Research Laboratory. 2010-11. (\$104,123)
- Assignment Agreement - IPA/USAF Air Force Research Laboratory. 2009-10. (\$58,088)
- Project Director on a contract to provide facilitation services to the Eastern Greene County School Corporation, IN. 1995-96. (\$9,900).
- Project Director on a contract to provide facilitation services to the Schmitt Elementary School, Columbus, IN. 1993-94. (\$4,500).
- Project Director on a contract to provide facilitation services to the Perry-Worth Elementary School, Lebanon, IN. 1992-93. (\$7,600).
- Project Director on a contract to provide professional development to five executives from the Samsung Corp. 1992. (\$31,700).
- Project Director on a contract to organize and conduct a NATO Advanced Research Workshop on Educational Systems Design. 1990. (\$32,940).
- Project Director on a contract for the Indiana Department of Education to conduct an extensive national survey of schools that have engaged in systemic restructuring, to identify what kinds of structural changes they have made, how well they have worked, what factors have influenced their success or failure, and the change processes that were used to bring about those changes. 1989-91. (\$27,890).
- Project Director on a contract to develop recommendations for approach, features, scope and sequence for an entire (new) K-6 science curriculum for Macmillan Publishing Company. 1986. (\$18,000).
- Project Director on a contract for Motorola Corp. to perform task and content analyses and design the scope and sequence for a course on project planning for low-level managers. 1984. (\$10,000).
- Project Director on an Army SSP contract to synthesize existing knowledge about instructional design into an optimal set of procedures. 1981-2. (\$63,000).
- Project Director on a research project entitled "An Investigation on the Effects of Alternative Strategies for Sequencing Instruction on Basic Skills" funded by the Navy Personnel R & D Center (NPRDC). 1980-1. (\$63,000).
- Major investigator on an Army SSP contract to synthesize existing knowledge about task analysis into an optimal set of procedures, 1980. This resulted in the Extended Task Analysis Procedure (ETAP).
- Instructional design specialist on a Title I Grant from the Office of Education, Bureau of Higher and Continuing Education, for a project entitled "Competency-Based Professional Development Programs for Counselors of Adults." 1979. My major responsibility was to design materials for training people in the skills of adult counseling. (\$90,000).
- Principal Investigator for Courseware, Inc., on a research grant from the Navy Personnel R & D Center (NPRDC), for a project entitled: "Structural Strategy Diagnostic Profile Project." 1977-8. I supervised the activities of three assistants. We developed several models (called the "Elaboration Theory of Instruction") for designing instruction on a set of related ideas, based on principles for sequencing synthesizing, and summarizing instructional content. (\$43,000).

Proposals Written Since 1987

- Survey on Learner Centered Teaching Practices and Role of Technology, for \$186,450 over 1 year, submitted to the Spencer Foundation on September 20, 2012.
- Prototype Development of a Technology System to Support Personalized Learning in a Project-based Curriculum for \$549,888 over two years, submitted to NSF on December 15, 2011.

Research and Development on a Personalized Integrated Educational System, for \$74,939 over one year, submitted to the Indiana University Collaborative Research Grants program on December 15, 2010.

Evaluation Research for Systemic Change for Learner-Centered STEM Instruction in Public School Districts, for \$1,306,474 over three years, submitted to the National Science Foundation on May 15, 2005.

Advancing the Knowledge about Systemic Organizational Change in Public School Districts, for \$740,964 over three years, submitted to the National Science Foundation on August 16, 2004.

Understanding Systemic Change in Public Education Systems, for \$449,500 over three years, submitted to the McDonnell Foundation on Mar 14, 2002.

Designing Online Courses for Nontraditional Learners, for \$235,000 over two years, submitted to the Lumina Foundation on Dec 3, 2001.

Systemic Change in an Urban Public School Corporation, for \$541,000 over three years, submitted to the Carnegie Corporation of New York on May 9, 2001.

Systemic Change in an Urban Public School Corporation, for \$541,000 over three years, submitted to OERI on Apr 3, 2001.

Designing Web-based Instruction for Underrepresented Students, for \$836,000 over three years, submitted to OERI on Apr 3, 2001.

Developing and Testing an Educational Theory for the Design of Problem-Based Learning
OERI, U.S. Department of Education, December 9, 1993, \$82,669.

Richmond 1999: The Systemic Redesign of an Educational System.
FIE, U.S. Department of Education, May 22, 1992, \$223,677.

LearningSphere 2000: A Systemic Redesign of the American Educational System.
New American Schools Development Corporation, February 14, 1992, \$1,868,306
for year 1, \$4,804,032 for years 2 and 3, and \$9,687,723 for years 4 and 5.

National Research and Development Center for the Organization and Restructuring of Schools.
OERI, U.S. Department of Education, June 15, 1990, \$1,242,619.

Prototypes for Future Schools: Restructuring for a Quantum Improvement in Student Learning.
FIRST, U.S. Department of Education, June 16, 1989, \$350,519.

Improving Science Textbooks through the Selection Process.
National Science Foundation, September 11, 1987, \$69,545.

Community Service

Indiana University representative to the Minority Fellowship Program for Careers in Industrial Training, Education, and Development, 1988 - 1991.

Chair of the Indiana Curriculum Advisory Council's Subcommittee on Textbook Adoption Needs for 1990 - 2000, 1988-89.

Member, Policy Board, Jamesville-Dewitt/SU Teaching Center, 1979 - 1988.

Jamesville-Dewitt School District's Math Task Force, 1984.

University Service

Served on an average of three committees per year at Syracuse University, including:

- The School of Education Scholarship Committee.
- The School of Education Research Core Course Oversight Committee.
- The School of Education computer Classroom Committee.
- The School of Education Research Committee.

Served on the following committees at Indiana University:

- The IST Curriculum Committee (Chair).
- The IST Qualifying Examinations Committee (Chair).
- The IST Scholarships and Awards Committee (Chair).
- The IST Admissions Committee (Chair).
- The IST Portfolio Review Committee.
- The IST Distance Master's Program Committee (Chair).
- The IST Faculty Merit Review Committee (Chair).
- The IST Minority Recruitment Committee (Chair).
- The Education Library Committee.
- The School of Education Policy Council.
- The Committee on Recruitment, Admissions, and Financial Aid (Education).
- The School of Education Committee on Diversity (Chair).
- The School of Education Long-Range Planning Committee (Chair).
- The School of Education Committee on Teaching.

Served on the Advisory Board for Indiana University's Center for Research and P-16 Collaboration.

Professional Service: Journal Reviews

- Editorial Board, *Contemporary Educational Technology*, 2009-present.
- Editorial Board, *Asia Pacific Educational Review*, 2000-present.
- Editorial Board, *Educational Technology International*, 2000-present.
- Contributing Editor for *Educational Technology*, 1986-present.
- Consulting Editor, *Educational Technology Research & Development*, 1984-2008.
- Editorial Advisory Board, *Instructional Science*, 1990-93, 2000-present; Advisory Editor, 1985-1990.
- Consulting Editor for *American Educational Research Journal*, 2000.
- Manuscript Review Board, *Journal of Educational Computing Research*, 1986-93.
- Editorial Board (elected), *Educational Technology Research & Development*, 1987-1990.
- Consulting Editor, *Journal of Instructional Development*, 1980-1989.
- Advisory Editor, *Journal of Educational Psychology*, 1982-84.

Professional Service: Other Reviews

- Proposal review, U.S. Department of Education, 1996.
- Proposal review, Indiana Department of Education, 1990-1991, 1995, 1996.
- Proposal review, National Science Foundation, 1981.
- Member, State Advisory Council for Research and Development, 1990-1993.
- Editorial Board, *ISSS Yearbook on Systems in Education*, 1994-present.
- Book manuscript review, Educational Technology Publications, 1990.
- Book manuscript review, Erlbaum Associates, 1989.
- Book manuscript review, Allyn and Bacon, 1980.
- Book prospectus review, Wadsworth (1982), West Publishing Co. (1985).
- Document review, ERIC Clearinghouse for Information Resources, 1979-1988.

Professional Service: Associations

Served as guest editor for a special issue of Tech Trends (vol. 50, no. 2) on systemic change in education and training.

Served as a board member for the Association for Educational Communications and Technology, 2003-2006.

Served as a board member for the International Systems Institute, 1992-2002.

Served as a board member for the Division for Systemic Change in Education in the Association for Educational Communications and Technology, 2007-present.

Served as a board member for the Institute for School Innovation in Tallahassee, FL, 1999-2003.

Served as president of AERA's SIG on Instructional Technology, 1999-2000.

Founded the Division for Systemic Change in Education in the Association for Educational Communications and Technology, and served as its first president (elected), 1994-1996.

Coordinated review of McClusky Award submissions for AECT, 1990.

Coordinated four reviewers to review 17 submissions to AECT's Young Researcher Award, 1998.

Board Member (elected), Research and Theory Division of AECT, 1988-1990.

Co-founded the Special Interest Group for Restructuring Public Education in AERA, 1988.

Program Chair for Division C, Section 5, of AERA's 1987 Annual Convention, 1986.

President, Special Interest Group for Instructional Technology in AERA, 1999-2000.

Proposal Review, AERA Annual Conventions, 1982-present.

Proposal Review, AECT Annual Conventions, 1980, 1987-present.

Member of the AECT Curriculum Committee, 1987-90.

Editor, *Attention*, the newsletter of the Military Training and Education SIG of AERA, 1982-84.

Research Representative, Syracuse Chapter of Phi Delta Kappa, 1983-4.

Treasurer, Syracuse Chapter of Phi Delta Kappa, 1984-5.

Teaching: Indiana University

Founded and taught most of the courses on instructional design (selection of instructional strategies), including:

- R521. Instructional Design and Development.
- R626. Instructional Strategies and Tactics.
- R680. Task analysis and Sequencing Strategies.
- R695. Research Seminar on Instructional Theory.

Founded and taught R667. Educational Systems Design.

Founded and taught R711. Readings in Instructional Systems Technology.

Taught R795. Dissertation Proposal Preparation in IST.

Teaching: Syracuse University

Founded and taught all the courses on instructional design (selection of instructional strategies), including:

- IDE 622. Instructional Design: Theory and Practice.
- IDE 722. Advanced Instructional Design.
- IDE 822. Instructional Model Building and Theory Construction.
- IDE 880. Advanced Seminar on Instructional Design.

Founded and taught a course sequence on research on instruction, founded a working paper series to get students involved in the process of publishing, and organized and held an average of five or

six research forums per year to allow students to share their research experiences with each other.

IDE 724. Research on Instruction, I.

IDE 824. Research on Instruction, II.

Taught the department's primary foundations course:

IDE 501. Foundations of Educational Technology.

Founded and taught several courses on the design of computer-based instruction:

IDE 616. Computers in Education.

IDE 880. Advanced Seminar on Educational Software Design and Evaluation.

Founded and taught a course for in-service teachers to learn aspects of instructional design that are useful in the classroom:

IDE 600. Instructional Support for Slow Learners.