

Reigeluth Research Group

Systemic Change and the New Paradigm of Instruction

Purpose of the Group

People learn at different rates. Yet our current educational systems try to teach a fixed amount of content in a fixed amount of time. Our systems are therefore designed for sorting rather than for learning. That made sense in the industrial age when most jobs entailed manual labor. But now in the information age knowledge work has become the predominant form of work. So we need educational systems that are focused on learning, not sorting. So, instead of holding time constant, which forces achievement to vary, we need hold achievement constant at a mastery level, and allow each student the time necessary to master the attainments. This requires changing from a paradigm that is standardized to one that is customized, from one that is time-based to one that is attainment-based, from one that is sorting-focused to one that is learning-focused. And this requires dramatic changes in the roles of teachers, students, parents, and technology. Just as importantly, this requires dramatic changes in people's mindsets or mental models about education.

The purposes of this Research Group are to advance knowledge: (1) about what the new paradigm of education should be like, including the role of technology, and (2) about how best to help school districts to transform themselves to the new paradigm to better meet the needs of their students and communities. Our group members who are focusing on #1 are exploring four major functions for a comprehensive, fully integrated "Learning Management System" (LMS): a) record keeping for student learning, b) planning for student learning, c) instruction for student learning, and d) assessment for student learning. Project-based learning and self-directed learning are major elements of these explorations. Our group members who are focusing on #2 are exploring principles and guidelines for school districts to transform their paradigm of education. We have been working with the Indianapolis Metropolitan School District of Decatur Township since January 2001 to help them engage in such transformation and to advance our knowledge about such transformation. Research group members have frequent opportunities to visit the Decatur Township schools, help them in their transformation process, and conduct research on the process.

Functions of the Group

- Evolve a research agenda
- Conduct and coordinate research studies
- Provide a support network for studies (share what are doing and learning across studies)
- Manage data archival

Requirements

- Learn about current knowledge in the area
- Work on one or more research projects
- Meet with the research group every week

Project Description

Since January 2001, we have been working intensively with the Decatur Township school system in Indianapolis, facilitating their systemic change process. Currently, school-based design teams are designing their ideal school, developing a strategic plan for evolving as close as possible to that ideal, identifying instructional methods and technological resources to implement their designs, developing their own resources when needed, and training their teachers how to use the new methods and resources. We are simultaneously facilitating each of these activities in the schools and conducting a kind of design-based research called formative research to advance the knowledge base supporting each of these activities.