

Designing School for a Sustainable Future

John M. Gould
Drexel University

Creative Strategies for Educational Leaders

As part of Drexel's EdD program for Educational Leadership and Change, students participate in a course focused on creativity and leadership. The outcome is to work in teams to conceptualize and redesign schools for the future based on the concepts of ecological and economic sustainability. This doctoral course engages learners in the process of studying creativity and prototyping as a process for rethinking the structure and function of schools.

The essential question: *how do we structure new learning environments that allow for the integration of learning activities based on the concepts found in sustainability?* The underlying assumption of this question is based in the fact that the present K-12 daily organization of people within a school does not allow for the type of learning and teaching necessary to address the critical issues of the 21st century. If the present structure would change, then how would the integration of *Education for Sustainability* be enhanced?

Learning activities explore how creativity develops and how motivation drives this development. The context to apply this understanding is the creation of new possible designs for schools/learning communities through prototyping. These designs are based on shifting our present metaphor and assumptions about the purpose of school from those based in an industrial model to one based in concepts of sustainable development and living systems. For example, if we think of schools as seedbeds and students as seeds, how would this influence our thinking about the structure of schools; would the present structure of grade levels be needed; is the idea of a Carnegie Unit appropriate for cross-curricular learning; how does informational technologies change both the flow of information and the patterns of work within schools; and, what are the leadership skills needed for new designed schools in the 21st century?

The design process last for 10 weeks and is the culminating activity in which student teams demonstrate their understanding of core sustainability and leadership principles by applying them to an integrated design process. Through collaboration, the learners participate in the process of *design thinking*, which allows for the demonstration of their creative abilities for transforming both leadership and schools in the 21st century.

Their products are now becoming part of a Society for Organizational Learning (SoL) incubator project and a place on the Presencing Institute's web site with the intent to showcase their design projects to stimulate dialogue about the possibilities for recreating the structure of schools in the 21st century. It is also hoped that these models can become actualized in any place on this planet.

Pre-knowledge:

The course builds on the following knowledge bases: systems thinking, Theory U, sustainable development, ecological sustainability, economic sustainability, divergent and convergent thinking processes, and technological innovation. These make up the conceptual framework to design schools (learning communities) that lead to mindfulness and a system focused on the well-being of all its members.

Leadership Skill Sets:

In system thinking the students are exposed to the framework of the *iceberg* in order to begin to understand how to develop leverage within a system to effect change. Students learn about system archetypes, or common organizational stories, to deal with problems to help them in how to affect change in systems. They also explore Russell Ackoff's ideas the difference between teaching and learning; and, about information, knowledge, and wisdom and how it's important to thinking about redesigning the organization of information through curriculum design. Heifetz and Linsky's concept of adaptive leadership is developed to understand the difference between managing and leading. All of these underlying concepts relate to the need for understanding of ecological and economic sustainability in order to create a sustainable future for our children.

After this 10-week introduction, they do a deep dive into their assumptions about leadership using Theory U as the organizing framework. The key concept is understanding and finding their source of leadership. Here students explore Scharmer's idea of leading from the future as it emerges. The skill set they explore is how to develop conversations within their schools (K-16) in order to let go of the past to create learning that is focused on the future. They also explore the concept of *prototyping* to think about the design possibilities for new models of schooling. In conjunction with this course they take a course that looks at how technology is shaping organizations. Here they are exposed to Ray Kurzweil's concepts of technological development, in particular the concept of exponential growth.

Some Essential Questions Found In These Courses:

- How do the core learning capabilities – seeing systems, collaborating across boundaries and creating and recognize desired futures –drive systemic change toward a sustainable world?
- How do the challenges presented by external forces created by current global situations lead to local change by identifying and reflecting on what is meant by sustainable development?
- How can leaders leverage change with the processes of visioning and systems thinking?
- How do the tools of system thinking effect your leadership skill set in dealing with uncertainty?
- What is the impact of one’s leadership “Blind Spot” on the capacity to lead?
- How is listening one of the most important foundational skills for leadership?
- How can prototypes be the “seeds” for systemic change?
- What are the principles and practices that will help me and others to link with the and realize our best future possibilities?
- How does the use and integration of learning technologies impact the ways we think, learn, communicate, and make decisions?