CITIZEN EDUCATION AT THE CROSSROADS: The Creation of a Future Forward College

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“In an adaptive system (i.e. one that is becoming fitter), learning – the system’s capacity to change effectively – then takes the form of the alignment of lower level elements with what lies in the future – a growing as yet unseen pattern. This is the reverse of normal learning, which is based on reasoning and past experience.

Reason proceeding cautiously, looks backward: rational argument on which learning can be based is valid only insofar as its founding premises and previous logical moves are sound. It builds from the simple to the complex, one step at a time, and so if virtually blind and powerless in the face of an emergent situation.

The imagination and its allied capacities, however, look forward. The imagination is the mind’s supreme faculty for dealing with the future... for intuitively sensing and insightfully grasping patterns that do not yet exist, but are yet still forming themselves and coming into being. It is the entrepreneur’s (and scientist’ and inventor’s and artist’s) most precious gift.”
Ogle's concept is simple, a creative mind is one that is able to adapt and survive in the new normal of a globalized and constantly changing world. His adaptive system model is parallel to previous generation's breakthrough thought leaders creating new consciousness and practice.

- Einstein's theory of relativity forever changed the idea of reality.
- Watson and Crick's identification of the DNA double helix redefined humanity.
- The semiconductor set the stage for the concept of real time information.
- Facebook, Twitter and other recent social networking technologies have forever changed the way we conduct our social lives and businesses.

Ogle's insight has potential for transforming education/learning in a similar way. His desire to develop a science of creativity has the potential to rethink the conceptual framework of education for the 21st century. In a time of great historical transition from one type of societal operation and organizing ability to another, institutional structures and undergirding principles must be transformed for society to be able to adapt to patterns and structures that are just beginning to emerge.

For example, as we shift from an Industrial Age to an Adaptive Systems Age, our society becomes more fast-paced and interconnected. Rapid technological change is driving innovation leading to new processes and interconnected webs of information, collaboration and knowledge. Technological change requires postsecondary education's role in preparing an educated society and a competent workforce to be transformed. Students need to "unlearn" traditional concepts and methods as the only means of learning and "uplearn" ideas and methods to enhance their capacity to understand and work. The concept of "uplearning" is defined as the ability to think at a higher level of connections and complexity. This requires not just a change on the part of the student (who is very likely to be adaptive to new ideas and methods), but requires a change on the part of educators who were schooled in the "traditional" way of educating youth and adults.
The increasingly complex framework of thinking and action is transformational, requiring all levels of teaching and instruction and action to become adaptive. As new business models of sharing knowledge and collaboration emerge, a fundamental shift in skills required for the new economy has emerged. No longer is transformational leadership just for the influential leading to widespread societal change, every instructor of students is a potential transformational leader for societal change by using and teaching adaptive learning methods.

Community colleges, with strong linkages to the industrial economy, are particularly vulnerable to “innovation inertia,” which can be defined as placing new knowledge and connective understanding requirements into existing and traditional methods of cognitive instruction....hoping for better learning outcomes. Placing content online for widespread access was, at one time, innovation. However, continuing to place content only with cognitivist learning measurements is “innovation inertia.” Educators are rightly concerned about competencies, but measuring competencies for traditional learning outcomes may hinder some educational advances essential to matching worker to the demand of the globalized economy. Students use of technology to organize their lives is very much reflective of the business world, yet the educational context most often dismisses the potential for new types of learning from the use of these technologies.

Accomplishing the goal of developing a system of adaptive learning, community colleges will require a shift of from the use of top down/teacher centered instructional hierarchies with standard answers and predictability, to the use of instructional models utilizing webs and networks, multiple choices, and a comfort with uncertainly and ambiguity.

**Newly Emerging Patterns**

If the direction of learning needs to shift from looking backwards to looking to the future, it is important to understand how the context of society is transforming. In understanding this unseen phenomenon, educators are able to determine the best learning environments and practices to prepare students with essential skills in a time of constant change. The context of knowledge becomes equally as important as the content of knowledge.
It is our thesis that existing educational approaches need to be transformed systemically to develop learners with the knowledge and skills required for a society and economy that is just beginning to be identified. There is very little research on connective learning through networks, so our efforts will include a research agenda. It is also our opinion that community colleges should rethink their roles, structure, and curricula to teach most effectively and lead emerging ideas and concepts. In doing so, community colleges will overcome innovation inertia and reach their potential as democracy's colleges(6). Rising educational costs, the demand for lifelong training and retraining, and the proximity of community colleges within the community will insure that large numbers of citizens are given the capacities to adapt to the transformed ideas and approaches of a society and economy in complete transformation.

With this in mind, the following attempts to identify key changes in learning systems that will be needed during this time of historical transition that will significantly impact the development of learners able to navigate an adaptive societal and economic environment:

- A shift from teaching singular, standard answers to teaching emerging connections.
- A shift from the exclusive use of individual learning to learning in teams and networks.
- A shift from teaching linear thinking to teaching non-linear systems and connective thinking.
- A shift from educational leadership by individual instructors to leadership by teams and adaptive learning networks.
- A shift from organization of command and control to organization by interlocking networks and self-organizing "units," breaking down silos and operational overlap within the college.
- A shift from instructional methods of one-way content delivery (the "sage on the stage") to real-time interactive learning through communications using the Internet social networking for knowledge generation.
- A shift from reliance on historically-based knowledge to emerging knowledge connecting disparate "idea spaces" in continuous learning innovation as the norm.
- A shift to content delivery through mobile technologies that will create distributive knowledge and learning as the norm.
These new learning and instructional norms reflect the need for community colleges to adapt to the ongoing transformations in society to include:

- A shift from independence as the central organizing principle of society to interdependence as the norm as we deal with increasing connectedness and complexity.
- A shift from radical individuality to “connected individuality.”
- A shift from hyper-competition to deeper collaboration to able to adapt quickly to changing circumstances.
- A shift from an economy and society based on principles of physics (linear cause and effect and strategic planning) to an economy and society based on biological principles (connecting and disconnecting of networks in a process of adapting to constantly changing conditions).
- A shift from workforce development based on technology and computer skills only to a Future Forward Workforce based on creativity, connective thinking, innovation networks and dentifying “weak signals.”(7)

**Rising Beyond Tradition – A Future Forward College**

It is our opinion that community colleges require a new system of learning and operation to achieve the goal of preparing students of all ages to be adaptive learners. The movement beyond traditional education and operations to an organic system of learning is what we refer to as a Future Forward College. It is in the spirit of Ogle’s emphasis on imagination, insight and intuition that the name Future Forward is used.

The Center for Strategic Futures (a futures institute) at Wake Tech Community College in Raleigh, NC will be the incubator for this emerging idea. The goal is moving the college faculty, staff, and students from a system built on looking backward at history to a system built on looking forward. To achieve this goal, the College is undertaking professional development for a core group of leaders through a series of engagement sessions to evolve the following practices of a Future Forward College:

- An ability to see connections among disparate ideas, discoveries, processes and people....e.g. “connective thinking.”
- An ability to understand and utilize the new “science of networks.”
An ability to ask appropriate questions.

- An emphasis of a shift from traditional basic skills to “future basics.”
- An emphasis on building a systemic framework of modular knowledge in different “idea areas” to include science, technology, economics, history and social systems.
- Learning how to apply the concepts of chaos, complexity and ecological theory in practical ways.
- An understanding of how to utilize emerging technologies including a) mobile wireless connections, b) social networking and c) virtual reality, as tools of communication and imagination in the development of individualized instruction.
- A knowledge of megatrends and the ability to identify emerging trends and “weak signals”..., and to be able to understand their potential impact in creating a “futures context.”
- An emphasis on the emergence of individualized learning that will connect with the ability to collaborate at a deeper level.

Seeding the Idea

We expect this to be the first of two articles. A core team of key college leaders representing every division at Wake Tech has just begun to meet and be introduced to future thinking concepts required to evolve the Future Forward College. The project is formative, but revolutionary in thinking to propel the College as a leader of community college transformation. From January to June of 2011, the team will meet for ½ day per month to learn across divisions of the challenges and opportunities to achieving the goal of becoming a Future Forward College. Participants will also be involved in futures generative dialogue to design an adaptive plan to seed and grow the requisite capacities for a Future Forward College. It is our opinion that true transformative change cannot be instituted from the top down, but needs to be designed and seeded as a parallel process to existing policies, procedures and curricula.

Wake Technical Community College’s President Dr. Stephen Scott is leading the transformation of the college to a Future Forward College. The effort grows out of Wake Tech’s Center for Strategic Futures, an organizational function to create future thinking across the college. The Future Forward
College team of Master Capacity Builders is positioned to impact community colleges across the nation.

Once the first team of Master Capacity Builders has finished the six-month series of coaching, a second article will be written to introduce the newly identified principles, concepts, methods and techniques for transforming the traditional community college to a Future Forward College.

Wake Tech’s selection of Communities of the Future as coach is intentional. Communities and organizations share common operational practices. The symbiotic relationship between Communities of the Future and the Future Forward College will serve as a strong foundation as the work expands. Wake Tech intends to brand the Future Forward College and create a movement among community colleges with the ultimate goal of becoming a national network.

References


http://www.sooperarticles.com/internet-articles/spam-articles/great-
importance-social-networking-300688.html


7) "Weak signals are emerging ideas, inventions, discoveries and innovations that are not yet trends, but have the potential to impact local areas within 3-5 years."

http://education.jhu.edu/newhorizons/future/articles/new-genes/index.html

http://education.jhu.edu/newhorizons/future/articles/wormhole

http://education.jhu.edu/newhorizons/future/articles/transformation