

21st Century Work-skills and Competencies: Establishing Context

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Seminar Goal

- The overall seminar goal is to solicit insights and examples of how various universities, countries and governmental entities are seeking to deal with the tensions of the alignment dilemma.

Some Assumptions and Presumptions

- Much of this argument is developed from the perspective of the U.S. In this regard an important question to address is whether with respect to these educational dynamics the U.S. is either a “fore-runner” or an “outlier”.
- If it is a fore-runner then some of the data that are presented in the concept paper and these conference papers is significant because many (most) the dynamics and instances that are appearing on the U.S. landscape will soon be emerging in other settings as well.
- If it is an “outlier” we can examine these events and dynamics, find them of interest (or not) and see them essentially as bound by the American context and not necessarily relevant to the rest of the world, or in particular Asia and the Pacific.

No Surprise!

- We see the U.S. in this context as a fore-runner and seek to analyze various of these approaches to 21st century skills as exemplars that other HEIs in other national economic and cultural contexts will be moved to either emulate, adapt, or reject.

The Vectors and Dynamics

- At the core of this issue is the co-variance between higher education and marketplace (work) changes...
- Which in turn are driven by a set of highly interactive global dynamics that include but are not limited to:
 - Increasing global population and differential demographics
 - Highly inter-dependent and increasingly interactive patterns of economic exchange including new and extended supply chains

More Vectors and Dynamics

- Patterns of wealth creation and distribution with increasingly inequality between and within countries
- The knowledge revolution and its rapid dissemination throughout the world
- Neoliberalism as the de facto ideology of globalization and its affects throughout the world on public budgeting
- The increased focus on higher education as a key source of innovation for the knowledge economy
- Increased role of private capital in (global) higher education
- The continuing and persistent dilemma of the “alignment” crisis

Alignment Crisis

- A dilemma or a predicament—not a “problem”
- The core of the issue is that market dynamics are in a state of rapid and continual transformation, and change far more rapidly than higher education and its curriculum and teaching mission
- The consequences include world-wide instances of HE graduates unable to obtain employment because their “skills” do not fit contemporary job markets

Five Major Responses to this Dilemma

- 1-All of higher education has become more “job focused”
- 2-Private capital has rushed into the higher education market, including the emergence of the occupation-skill-oriented global universities (e.g. Appollo and Laureate)
- 3-Neo-liberal economic policies have leveraged student fees and overall the cost of education has risen
- 4-Many governments have targeted investments in elite/innovative universities (e.g. China, Korea, Japan, Taiwan, etc)
- 5-These dynamics (and others) underlie the phenomenon we experience as the “rankings” game

All of which creates a context for our seminar...

- As the concept paper indicates, many countries and entities within countries are seeking ways to “redefine” education in terms of the kinds of skills and capabilities that graduates “should” have to cope in this rapidly changing environment.
- We listed four examples: the 2011 work on the Institute for the Future; the current degree profile work of the Lumina Foundation; the Singapore learning profile for primary and secondary education; and the technology-oriented Temasek Polytechnic and Cisco criteria.

What this might mean...

- In all such efforts to generalize from U.S. HE activity to the Asia-Pacific, one has to ask whether the U.S. is a “fore-runner” or an “outlier”.
- Will these activities (whatever they are) migrate into Asia-Pacific settings (and thus we can learn something from exploring them now), or is the US just so peculiar in its higher education structures and practices to be effectively replicated somewhere else
- Or will other settings produce hybrid responses

Forerunner....

- We think it is a forerunner, and as we try to sort out the complex issue we have set for ourselves concerning 21st century competences and workplace skills, it is important to recognize that...
- Some of the process elements to higher education change in the U.S. may also be of importance

Changes in Learning and Teaching Platforms

- On-line education...
 - While this has been around for quite a while, it would seem as if “on-line” itself is a highly dynamic environment which is not only continuing to itself change, but to alter other elements of the overall higher education environment
 - If we just look at the data in the US we see that the prevalence of on-line education continues to grow
 - more students are taking advantage of this approach each year but the rate is slowing down. Over 6 million students took at least one on-line course during the fall 2010 term, representing a 10% increase over the previous year.
 - 65% of HEIs report on-line learning is a significant part of their long-term strategy.
 - 31% of all HE students take at least one on-line course annually
 - HE administrators report that student satisfaction for on-line learning is equivalent to face-to-face learning.

But...the important issue may be

- The explosive growth of MOOCs,\
- Their adoption by many of the leading universities in the US
- The vast #'s of students world-wide taking them
- And their continued growth with new providers emerging, e.g. Eusera
- Even as some cautionary tales are being told about their limitations and the possible draw-back of some universities that “jumped into” the MOOC environment, such as San Jose State

MOOCs Present Both Opportunities and Risks

- Opportunities:
 - Pressure on teachers to re-invent what they do
 - Bringing education to the world: access and speed
 - Lower cost of education
 - Require fewer faculty
 - Generate revenue: certification, tutoring, data sales; diagnostics
 - Adaptability: partnerships with business and HE

MOOCs and Risks

- Risks:
 - How will it make money?; sustainability; might cannibalize existing distance education-extension models
 - High quality MOOCs expensive to produce
 - Low completion rates a concern
 - Idealistic promise as a cost cutter—whose interests are being served?
 - Education is more than acquiring knowledge-engagement is essential for quality
 - Elitist so far: MOOCs brand the best, crowd out the mid and low tier of HE
 - Security testing issue—QA and accreditation issues

Yet...

- It is useful to see MOOC's and the environment they have emerged out of as perhaps a signal of something else...
- At root, what is the “disrupting class” movement about? It continues to spread throughout US higher education and develop new forms
- One way to interpret it is as students beginning to “vote with their feet” as it were—as a kind of “consumer revolt” (to embrace the academic capitalism kind of language)
- One interpretation is that “class” (using this as a metaphor for traditional higher education and its classroom/teaching platforms) is an increasingly less-relevant/irrelevant experience for students, especially undergraduates, and those experiences embraced by the disrupting movement are seen as having far greater relevance both in terms of learning styles and in terms of work-place readiness
- Christensen and Horn recently termed this “going all the way with online learning as an agent of drastic change”

So...

- Whether that interpretation is “right” or not, we can see this movement as an expression of preference toward a set of teaching/learning behaviors in which the “on-line medium” is the message—as it were (to paraphrase Marshall McLuhan)
- To explore another frame of reference some US observers (for example WASC) have begun to frame this as a “changing ecology” of higher education and take that to mean something more than just a metaphor...but rather an effort to trace the beginnings of “new ways” of doing higher education that both change the teaching/learning modalities and address the issue of the general crisis of relevance for higher education graduates

Summing Up

- This kind of argument would be less relevant were it not for the steadily escalating cost of traditional higher education. When it is combined with the teaching/learning relevance issue, the combination can be explosive
- One goal of this seminar is to draw attention to these kinds of structural/process issues in higher education and link them to the overall broader question that frames our inquiry: namely in such a radically transformed environment, what kinds of learning and workplace skills can be directed at approaches to the endemic alignment issue?