# THE CONTINUING PARADIGM CHANGING OF HIGHER EDUCATION: CHANGING ECOLOGY

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## THE "INTRACTABLE DOMINANT CURRICULUM"

#### Dominant Paradigm-Schools

- compulsory, standardized public (state) education
- hierarchical organization; patterned after industry
- sorting by age cohorts; assessment through testing
- curriculum content instructor based, "sage on the stage"
- similar schools for common standards and outputs

# DOMINANT PARADIGM: TEACHER TRAINING

#### Dominant Paradigm

- gender bias in sub-sectors
- poor salaries, flat careers, declining social status
- tension between quality and supply: market driven
- traditional departmentalized curriculum vs. real demands
- teacher in command of classroom in a bureaucracy

# DOMINANT PARADIGM: HIGHER EDUCATION

#### Dominant Paradigm

- ivory tower based on "classical traditions"
- functions: knowledge conservation/transmission/creation
- hierarchical, rigid, e.g. credits, tenure, ranks, reputations
- reflects dominant political economy, but changes slower
- professionalization of faculty = "professoriate"

#### TRANSITIONAL PARADIGM

Schools: parent/community involvement

- charter schools
- state support for private and religious schools
- decentralization; diversification
- internet learning

Teacher training: private school teachers have less pay but more respect

- staff development based on peer consultation

Higher Education: quantum growth in international students and programs

- significant expansion of links between education and workplace

#### EMERGENT PARADIGM

Schools: student focused

- instructor is now "guide on the side"
- multiple intelligences (Gardner) recognized and developed
- emphasis shifts from information transmission and memory to problem solving and analysis
- curriculum driven by Delors' "four pillars": learning to know, to do, to be, to live together

# EMERGENT PARADIGM: TEACHER TRAINING

- education based on notions of difference
- Asian model of team teacher consultation on learning
- Idea of differentiated assessment

# EMERGENT PARADIGM: HIGHER EDUCATION

- New institutional forms, e.g., on-line, research based, etc.
- Proletarization of professoriate
- Global networks and globalized universities
- Ubiquity of cross-border education
- Mutual recognition and compatible curricula/ degrees
- Transnational quality assurance

#### SOME COMPARATIVE DIFFERENCES

- Old Paradigm
- Focus on content
- Driven by needs of present\
   past
- o Primarily informational
- Credentialing mechanisms
- Discipline based curricula curricula
- Teacher-centered

- \* New Paradigm
- \* Focus on process
- \* Driven by needs of future
- \* Primarily relational
- \* Competency measures
- \* Issue-based
- \* Learner-centered

## THE IDEA OF A CHANGING ECOLOGY OF HIGHER EDUCATION

- The idea of a changing ecology of learning as a movement in the direction of re-defining higher education and with it notions of the global university and the global availability of content—e.g. recent Harvard/MIT decision to offer free courses on line; Experience of Stanford's free access courses; emergence of MOOCs; Khan Academy; Udacity; Coursera, EdX, etc.
- The U.S. as either fore-runner or outlier
- The proposition that these changes are propelled and impelled by the dynamics of globalization and thus (a) will diffuse through the global system and (b) take particular form within national/traditional higher education environments

# EIGHT DIMENSIONS OF CHANGING ECOLOGY OF LEARNING

- Changing characteristics of learners
- Emergent trends-including technologyimpacting the learning process
- Shifting methods and expectations for engaging content
- Determining content
- Changes taking place within higher education organizations
- Changes in the frameworks of higher education
- Changes in credentialing
- Changes in policy

#### CHANGING CHARACTERISTICS OF LEARNERS

- Very nature of persons presenting to higher education processes is in the midst of significant transformation. U.S.: average age of undergraduate 28.4; average # of jobs by age thirty-five 13.8
- Variations can be observed throughout the world—driven largely by demography, work force change, shifts in income
- Significantly complicate traditional ideas of: what to "teach" to whom, under what circumstances, and why?
- Increasing evidence of shift from teaching paradigm to learning paradigm
- o In relatively highly integrated systems (albeit decentralized) such as U.S. dynamics leading to entirely new conversations
  - About what learning is
  - Who pays
  - What quality might be under such conditions of change
  - How to measure and certify any of it (Ewell 2010).

## SHIFTING METHODS AND EXPECTATIONS FOR ENGAGING CONTENT

Even a modest review of this set of change dynamics will direct attention to the complexities of participatory learning including:

- Self-learning (DIY—including MIT?!), peer to peer (P2P)
- Dissolution of conventional modes of authority/expertise
- Disruption in production, evaluation and distribution of knowledge
- Networking, interactivity as core to learning
- Collaborative, collective, social enterprise (vs. individual performance)
- Importance of learning how to re-mix, re-purpose, redistribute information—24/7 within HEIs.
- Integration of mobile learning into teaching, learning, research and outreach

#### **DETERMINING CONTENT**

- Efforts to apprise the effects of such diverse inputs as new and emerging digital literacy requirements (visual, information, digital, new media, digital production, programming)
- Rapid shifts in the currencies of knowledge
- Increased focus on outcomes—and skills and meta-skills
- Implicating the relevance of differential intelligence research
- Knowledge seekers as researchers

## CHANGES TAKING PLACE WITHIN HIGHER EDUCATION ORGANIZATIONS

- Changes range from:
- demand for evidence-based outcomes from multiple constituencies (parents, government, public, etc.);
- need to oversee and monitor cost control and affordability
- efforts to improve improve the currency and perception of higher education
- the deployment of cost, result-effective of technology
- adjusting faculty resources to succeed in the new ecology
- efforts to reinvent the college labor force
- Also: progressive unbundling of components of teaching/ learning
- course design, use of externally generated content (e.g. MIT/ Yale), content delivery, assessment, mentorship
- outsourcing of components of the educational enterprise (recruiting, marketing, design, delivery and assessment, etc.) (Palmer and Zajonc, 2010).

# CHANGES IN THE FRAMEWORKS OF HIGHER EDUCATION

- Notions of new forms of portability for degrees and certificates, greater comparability and compatibility of academic programs, transferability of credit, and transparency of such processes.
- Often associated with notions of competency based degrees, and the proposal of new kinds of institutions might arise from active cooperation between existing institutions and those arising out of sympathetic industries.
- Sometimes phased in public good language, as in the development of relevant and beneficial institutions—to point of rethinking the commercial bases of intellectual property regimes.
- Linked closely to global and international possibilities of cooperation that may lead to the emergence of new institutional forms—multi-campus global university networks (Clayton 2010; Thomas and Brown, 2011).

#### CHANGES IN CREDENTIALING

- All prefigure fundamental changes in ways that credentialing, quality assurance, and accreditation conducted
- Specific endeavors include:
  - Shift from credentialing programs and institutions toward students, competencies and measurable outcomes.
  - Constant and continual efforts to create common degree frameworks out of systems that have been developed and nurtured to excel as separate institutions.
  - Effects are occurring simultaneously with increasing pressures to develop forms of international recognition and accreditation to provide recipient institutions with effective currency in global competitiveness.
- See Lumina Foundation for common degree frameworks (AAC&U 2011).

#### CHANGES IN POLICY

As stakes in the "higher education game" continue to rise, especially with respect to costs and alignment or misalignment with rapidly changing employment markets, one can expect

- national policy environments will reflect some of the tensions of change noted above
- o new policy interests will be expressed in shifts toward greater accountability and transparency—irony: less public money will be accompanied by increased public demand for accountability—classic symbolic politics
- o demands for better metrics
- evidence of effective returns on productivity
- efforts to sort out proper relationships for public/private partnerships, especially as for profit institutions broaden their cross-border reach and come to be major actors within regional higher education arrangements.