Creating a Culture for “Campus Change for Learning”

An Education That Transforms Students May Require Transformation of Our Institution and Our Priorities

Leadership Coalition

Presidents’ Symposium
Georgetown University
November 10, 2008
“The Tyger,” E. D. Hirsch, Jr., Wordsworth, the Dell, and a Conversation Only Apparently at Cross-Purposes

A stop on the pathway of liberal education.
I understand the argument that the university can’t do everything. Academic courses, it goes, are for the mind. Let the home and the church and the psychotherapist and the athletic program attend to the spirit and the body and the rest... We can’t be therapists and doctors and spiritual directors, too.

What I am asking for is a more holistic approach to learning, a disciplinary training for people who teach in college that takes into account the fact that we are educators of whole human beings, a form of higher education that would take responsibility for emergence of an integrated person.

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The goal -- the desired outcome of college -- is the emergence of an integrated person [a transformational aspiration]

Taking responsibility...being accountable for achieving that goal...obligates colleges and universities to think, plan, and act differently...to undergo their own transformation.

Boston: Addison-Wesley, 1996; p. 218
An education that transforms students

- The student who graduates [as an emerging integrated person] is [and should not be] not the same as the one who first enrolled.

- Liberal education frees and inspires [e + duco].

- Students question, form and re-form themselves -- their knowledge, beliefs, values, attitudes, even identity -- through learning experiences of many kinds.

- Mezirow’s concept of perspective transformation, extended beyond the cognitive.
Transformation

Transformation is a multi-channel, multi-site, multi-disciplinary phenomenon that occurs idiosyncratically and holistically.

The “flash to bang” time varies -- from immediate [ah ha!] to very protracted [deep immersion in a discipline; civic or cultural engagement].

We are only clever enough to imagine it whole and predict its parts; “we murder to dissect.”

It is diminished when seen as mechanistic but hollowed if not seen as purposeful.

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Glimpses of transformation: learning outcomes

- **Learning outcomes** report **impact** -- how the student has changed; over time, in the multiple and aggregate, they show evidence of the emergence of an integrated person.

- Learning outcomes offer **glimpses of transformation** by observing the correlates of its occurrence; they define the **characteristics of a person (student) who has experienced some element of transformation**.

- Learning outcomes are seldom **final**; many are tentative and intermediary.

- We can witness learning outcomes in the complexity of students’ thought and ideas, new capacities or competencies, and the maturation of personal, social, and civic characteristics.
The transformation will not be announced or televised; the moments of its occurrence cannot be scheduled or predicted. But thoughtful observation and assessment can bear witness to its occurrence.
The idea of transformative learning rests on a complex understanding of learning itself.
Ways of knowing about learning

- Philosophical inquiry, observations, and postulates [epistemology]
- Cognitive, behavioral, educational and clinical psychology
- Research and scholarship on “adult learning”
- Pedagogy; scholarship of teaching and learning
- Documented “real world” experience [corporate training, military training, museums]
- Basic and clinical neurosciences [anatomical and functional]
- Emerging disciplines: pure and experimental neurophilosophy [philosophy of science integrated with neurophysiological research]
Learning is a complex, dynamic interaction among students and others, new knowledge, experiences, events, and their own history and aspirations.....

Learners each construct knowledge from the raw materials of content and their experience

*Not* intellectual relativism

Epistemology, Psychology, Adult Learning Theory, Scholarship of Teaching and Learning, “Real World” Experience
What is learning?

A complex, multi-centric, holistic activity, centered in making meaning, that occurs throughout and across the educational experience...
...a process of transformation that integrates 1) the acquisition, integration, and application of knowledge with 2) personal and social development and change -- which can no longer be considered separate, but, instead, interact and shape each other as they evolve.

...developmental, holistic, integrative, contextual, and transactional [College Outcomes Project]
The shift has been from a view that learning is the acquisition of desired knowledge and behaviors to a view that learning is the construction of knowledge by the individual, construction that is mediated by the context of the learning, the social environment, and the prior knowledge of the learner.

Jose Mestre and Eugenia Etkina, 2002
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Jose Mestre and Eugenia Etkina, 2002
Observational and Experimental Neurophysiology of Learning
Imaging the brain

MRI

PET

fMRI

DTI
The brain -- and the mind -- at work
"Snapshot" of someone’s brain as it thinks a single thought in the course of completing a task -- pattern recognition. The scan captures the moment when the brain recognizes and "understands" what it is seeing.

Imaging a single thought
Cerebral processing: **concrete** vs. **abstract**
Daydreaming

Empathy
Differential Limbic Activation

Normal

Sociopathic Personality Disorder
Mind is not a concept, an abstraction; it is based in the brain, a living physical organ that is part of a living human being.

Learning, emotion, and behavior are brain-based, physical processes (“brain-based learning”).

The brain works in the cycle of action, reflection, and meaning-making; this happens always and everywhere.

Separating body and mind -- or imagining “pure” thought -- is infeasible and impossible [beyond Descartes...]

Learning is an active, energy-dependent process that occurs in whole people.
Implications

- The learner [the human person] matters in the learning; we cannot separate learning, the brain-based process, from the learner, the whole person.

- In teaching, learning, and the assessment of learning, we have to account for -- and pay attention to -- conditions in the learner.

- Students make their own idiosyncratic and unique meaning of both academic and out-of-classroom experiences. Those experiences may be cognitive, affective, spiritual, relational, social, etc.

- To assess students’ learning, we must assess both academic and out-of-classroom experiences in multiple dimensions.
Conditions in the Learner Influence the Processes and Outcomes of Learning
The developmental stage of the learner matters in learning.

Brain development continues at macroscopic levels into the mid-20s; at microscopic levels [primarily remodeling and refining of neural connections and pathways] much longer.

A developmental view of students’ learning potential must account for stages of brain growth and maturation.

Why do most 16-year-olds drive like they’re missing a part of their brain?

Because they are.

Even bright, mature teenagers sometimes do things that are "stupid.

But when that happens, it’s not really their fault. It’s because their brain hasn’t finished developing. The underdeveloped area is called the dorsal lateral prefrontal cortex. It plays a critical role in decision making, problem solving and understanding future consequences of today’s actions. Problem is, it won’t be fully mature until they’re into their 20s.

It’s one reason 16-year-old drivers have crash rates three times higher than 17-year-olds and five times higher than 18-year-olds. *Car crashes injure about 300,000 teens a year. And kill nearly 6,000. Is there a way for teens to get their driving experience more safely—giving their brains time to mature as completely as their bodies? Allstate thinks so.*

Graduated Driver Licensing (GDL) laws are one approach that’s been proven effective at reducing teen crashes. These laws restrict the more dangerous kinds of driving teens do, such as nighttime driving and driving with teen passengers. Since North Carolina implemented one of the most comprehensive GDL laws in the country, it has seen a 25% decline in crashes involving 16-year-olds.

To find out what the GDL laws are in your state, visit Allstate.com/teen. Help enforce them—and if they aren’t strong enough, ask your legislator to strengthen them.

Let’s help our teenagers not mess up on tomorrow just because they have something missing today.

It’s time to make the world a safer place to drive. That’s Allstate’s Stand.
Brain maturation
Given what we know about learning -- from epistemology to experimental neurophilosophy -- what should institutions do to promote student learning and success?
Goals of higher education
Student Success

Learning Goals

Practical Liberal Education
General education, disciplinary content, cognitive skills, preparedness for work, citizenship, global literacy, personal and relational competence...

an integrated person

Specific learning goals
established by individual institutions

Graduation
Roots of student success extend back well before college begins.

Factors that produce student success are multiple and diverse.

Enhanced when whole campus purpose is student success, when that purpose is reflected in policy, and when activities are coordinated and “tightly coupled”
Correlates of student success
Achievement of desired learning outcomes

- High expectations
- Active and experiential learning
- Time on task
- First-year experience and transition programs
- Engagement with diversity
- Frequent faculty contact
- Coherent curriculum
- Integration of classroom and other learning experiences
- Collaborative learning
- Frequent feedback
- Diversity of ways of knowing and learning
- Integration of knowledge, experience, skills

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Correlates of student success  
Achievement of desired learning outcomes
Institutional and structural barriers

- Liberal education, transformative learning, primary learning outcomes, the emergence of an integrated person, assessment, student engagement, and students themselves [who are, in the wild state, pre-disciplinary] are **horizontal**.

- The organization of colleges and universities is primarily **vertical**.

- General education is often understood -- by both students and faculty -- as a **necessary horizontal evil** on the way to a vertical future.

- Other horizontal activities and people -- such as student affairs programs and staff -- have **inferior status** [perceived purposes: maintain order, clean up the mess]

- Faculty reward systems are **almost entirely vertical**.

- The world, as Thomas Friedman reminds us, is **flat**.
Re-membering students: intentional integration of persons and learning experiences

- **Re-membering**: literally, putting students back together

- Focus on the **whole student**; attention to spectrum of factors associated with human well being that affect readiness to learn [e.g., levels of engagement and disengagement; screening and treatment of depression]

- **Rejects** the separation and categorization of mind/body, learning/life, academic/non-academic

- Learning cannot be the province of the faculty alone

- Strengthen learning, engagement, and success by **integrating and coupling learning experiences**
Renewal of purpose and accountability in higher education: learning as transformation

- Colleges and universities are not trade schools; students should be different after undergraduate education in more ways than just getting a job [the purpose of liberal education is transformation].

- And liberal education, by preparing students for life, work, and service, can address national and social priorities; a prepared, whole, integrated, flourishing person can lead, work, and serve.

- Institute **high impact learning experiences** [AAC&U/ LEAP] that promote persistence, retention, satisfaction, and learning.
Reorientation of the relationship with students: commitment to learning

- Responsibility for learning -- for using all the assets of the institution to best advantage -- does not rest exclusively with students.

- Colleges and universities must use all of their resources [including, but not only, the faculty and student life professionals] to support the education and preparation of the whole student.

- Responsibility is not discharged by delivering the curriculum alone.

- Many starting lines, only one finish line: institutions commit themselves to helping students be successful.
Change the geometry [culture]

- **Functional** before structural and organizational change.

- **“Horizontalize” foundations**: general education curriculum, first year experience/transition, advising, undergraduate research, service learning, learning communities/residential education.

- Identify and exploit **seams** that allow movement and flexibility among structures and systems [interdisciplinary and cross-divisional centers].

- Find **opportunities for renewal** in transitions, accreditation reviews, fiscal or other crises, strategic planning, institutional reviews.

- Reward **cross-divisional [horizontal] educational innovations**.
Sound operations, competitive facilities, and pleasing programs promote a positive student experience; the learning process and learning environment depend on them.

But operations, facilities, and processes are not the purpose of higher education and they do not alone produce desired student outcomes.

Every element of student experience has learning implications; learning impact statements should be required for every major change an institution makes.
Summary

- A transformative liberal education engages students as whole people and requires the engagement of institutions as whole campus communities.

- The learner matters in the learning; readiness to learn is a complex construct that influences persistence, achievement, learning, and success. A focus on transformative learning requires attention to readiness to learn.

- There are substantial barriers to supporting integrative, transformative learning in institutional structure and culture.

- To transform students, colleges and universities must transform themselves functionally, culturally, and structurally.

- The conditions for institutional transformation -- like those for student transformation -- will be contextual and idiosyncratic.