A NEW MODEL FOR EXCELLENCE IN STUDENT LEARNING & SUCCESS:

Demonstrated and Shared Meaning for Education and Life

Terrel Rhodes
Vice President, AAC&U
Professional Day
Middlesex Community College
October 23, 2013
A degree should...

...provide a broad, well-rounded education that enables discovery of interests and abilities to help students realize their full potential in life

“I’m thinking that if I realize my full potential, and discover that here, and have a broad range of appreciating who people are and cultures outside my own, then I will be okay. [The] second will come from the first.”

Student, California State University System

...provide students with specific career knowledge and skills to help them realize their full potential in the workforce

“I worry that if I go through this great diverse education, but I can’t go out and find a decent paying wage at the end of it, then, while I may be a better person for it, I’m still basically [out of luck].”

Student, Oregon University System
What is a Liberal Education?

• **Liberal Education** = A philosophy of learning that empowers & prepares individuals to deal with complexity, diversity, & change.

• Broad knowledge combined w/ in-depth study

• To help students develop a sense of social responsibility, strong & transferable intellectual and practical skills & a demonstrated ability to apply knowledge.

“Knowledge is nothing without imagination”
Defining the Degree: The Degree Qualifications Profile (Lumina Foundation)
## The 21st Century Curriculum: Liberal Education & America’s Promise (LEAP) Essential Learning Outcomes

<table>
<thead>
<tr>
<th>Knowledge of Human Cultures &amp; the Physical &amp; Natural Worlds</th>
<th>Personal &amp; Social Responsibility</th>
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<tbody>
<tr>
<td>• Content &amp; professional skills</td>
<td>• Civic Knowledge &amp; Engagement</td>
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<td>• Intellectual and Practical Skills</td>
<td>• Intercultural Knowledge &amp; Competence</td>
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<td>• Inquiry &amp; Analysis</td>
<td>• Ethical Reasoning</td>
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<td>• Critical &amp; Creative Thinking</td>
<td>• Foundations &amp; Skills for Lifelong Learning</td>
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<td>• Written &amp; Oral Communication</td>
<td>• Global Learning</td>
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<td>• Quantitative Literacy</td>
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<td>• Information Literacy</td>
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<td>• Problem-solving &amp; Teamwork</td>
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<td>• Synthesis across general and specialized studies</td>
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<td>• Application of knowledge, skills in new settings</td>
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What are the necessary skills for the 21st Century?

“My company lives and dies on our ability to innovate and to create the new products and processes that give us an edge in this very competitive global economy. ESCO needs people who have both a command of certain specific skills and robust problem-solving and communication skills.”

Steven Pratt, CEO, ESCO Corp. and Chair of the Oregon Business Council
“The complexity that we’re dealing with today requires us to be re-skilling and re-tooling all the time.”
(Julie Anding, Senior Director of Employee Learning at Harley-Davidson Motor Company, WI)

• Every year, more than 30 million Americans are working in jobs that did not exist in the previous quarter.
• Every year, more than 1/3 of the entire US labor force changes jobs.
• Today's students will have 10-14 jobs by the time they are 38.
• By 2018, 22 million new and replacement jobs will require some college.

Sources: DOL-BLS; Georgetown University Center on Education and the Workforce; AAC&U, College Learning for the New Global Century (2007); Lumina Foundation for Education.
It Takes More Than A Major:

*Employer Priorities for College Learning and Student Success*

Key findings from survey among 318 employers
Conducted January 9 – 13, 2013

*for*

Association of American Colleges and Universities
Key Findings

- **Innovation is a priority** for employers, and they report that the challenges their employees face today are more complex and require a broader skill set than in the past.

- Employers recognize **capacities that cut across majors** as critical to a candidate’s potential for career success, and they view these skills as **more important than a student’s choice of undergraduate major**.

- Employers recognize the **importance of a liberal education** and the liberal arts. The majority agree that having both field-specific knowledge and skills and a broad range of skills and knowledge is most important for long-term career success.

- Employers endorse education practices that involve students in active, effortful work and the **application of skills**.

- Employers express **interest in e-portfolios** and **partnerships** with colleges to ensure college graduates’ successful transition to the workplace.
Consensus among employers is that innovation, critical thinking, and a broad skill set are important for taking on complex challenges in the workplace.

Our company puts a priority on hiring people with the intellectual and interpersonal skills that will help them contribute to innovation in the workplace.

Candidates’ demonstrated capacity to think critically, communicate clearly, & solve complex problems is more important than their undergraduate major.

Our company is asking employees to take on more responsibilities and to use a broader set of skills than in the past.

Innovation is essential to our company/organization’s continued success.

The challenges employees face within our company are more complex today than they were in the past.
A majority of employers agree that both specific knowledge and a broad range of skills are necessary for advancement and long-term career success.

*Which is more important for recent college graduates who want to pursue advancement and long-term career success at your company?*

- Having both field-specific knowledge and skills AND a broad range of skills and knowledge: 55%
- Having a range of skills and knowledge that apply to a range of fields or positions: 29%
- Having knowledge and skills that apply to a specific field or position: 16%
The majority of employers think that higher education is doing at least a good job in preparing students for success.

Thinking about the economy overall, and not just about your own company or organization, how good a job do you think higher education is doing in preparing graduates to succeed and contribute in this economy?
Two in three employers believe most college graduates have the skills/knowledge to succeed in entry-level positions; they feel fewer graduates have what it takes to advance.

What proportion of applicants for positions at your company in the past few years possess the full set of skills and knowledge needed for this?

- All/most college grads
- About half of college grads
- Only some/very few college grads

![Bar chart showing proportions](chart.png)

- Success in entry-level positions:
  - All/most college grads: 67%
  - About half of college grads: 23%
  - Only some/very few college grads: 10%

- Advancement/promotion:
  - All/most college grads: 44%
  - About half of college grads: 28%
  - Only some/very few college grads: 28%
Employers value cross-cutting skills and qualities when hiring.

Ethical judgment and integrity
- Very important: 76%
- Fairly important: 96%

Comfortable working with colleagues, customers, and/or clients from diverse cultural backgrounds
- Very important: 63%
- Fairly important: 96%

Demonstrated capacity for professional development and continued new learning
- Very important: 61%
- Fairly important: 94%

Interest in giving back to the communities in which our company is located or those that it serves
- Very important: 26%
- Fairly important: 71%

Knowledge of global cultures, histories, values, religions, and social systems
- Very important: 16%
- Fairly important: 55%
Employers believe a variety of emerging educational practices have the potential to help graduates succeed.

<table>
<thead>
<tr>
<th>Expecting students to develop the skills to research questions in their field and develop evidence-based analyses</th>
<th>45%</th>
<th>83%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students complete significant project before graduation, demonstrating knowledge in major &amp; analytical, problem-solving, communication skills</td>
<td>42%</td>
<td>79%</td>
</tr>
<tr>
<td>Students complete internship or community-based field project to connect classroom learning with real-world experiences</td>
<td>47%</td>
<td>78%</td>
</tr>
<tr>
<td>Expecting students to develop the skills to conduct research collaboratively with their peers</td>
<td>33%</td>
<td>74%</td>
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<tr>
<td>Students acquire hands-on experience with the methods of science to understand how scientific knowledge is developed</td>
<td>39%</td>
<td>69%</td>
</tr>
<tr>
<td>Expecting students to work through ethical issues and debates to form their own judgments about the issues at stake</td>
<td>34%</td>
<td>66%</td>
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Employers say that an electronic portfolio of students’ work and knowledge areas would be useful in evaluating candidates for hire.

In addition to a recent college graduate’s résumé and college transcript . . . how useful would it be to see an electronic portfolio of student work that demonstrates accomplishment in key skill and knowledge areas (effective communication, knowledge in their field, evidence-based reasoning, ethical decision-making)?
What does a Liberal Education Pay?: Salary by Skill Demand (Quintiles)

Source: Georgetown Center for Education and the Workforce (Anthony Carnavale)
It’s More than the First Job
<table>
<thead>
<tr>
<th>Variety</th>
<th>Rules Based Logic</th>
<th>Pattern Recognition</th>
<th>Problem Solving</th>
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<tr>
<td></td>
<td>Computer Processing Using Deductive Rules</td>
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<td>Problem is Unscripted and Rules for Solution Cannot be Routinized</td>
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<tr>
<td>Examples</td>
<td>Calculate Basic Income Taxes</td>
<td>Speech Recognition</td>
<td>Writing a Convincing Legal Brief</td>
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<td>Issuing a Boarding Pass</td>
<td>Predicting a Mortgage Default</td>
<td>Adapting or Developing a New Product or Service</td>
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<tr>
<td>Computer Role</td>
<td>Execute Tasks, Except in Non-Routine Cases</td>
<td>Support Human Problem Solving</td>
<td>Assist Human Problem Solving</td>
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</table>

Figure 3: Index of Changing Work Tasks in the U.S. Economy 1960-2009²¹

- Working with New Information
- Solving Unstructured Problems
- Routine Manual Tasks
- Non-Routine Manual Tasks
- Routine Cognitive Tasks

Index Value: 1960 = 50

Time Periods:
- 1960
- 1970
- 1980
- 1990
- 2000
- 2006
- 2009
“More big-picture thinking in the professions and more real-world application in the liberal arts and sciences.”

Stephen H. Weiss (1935-2008)
Former Managing Director,
Neuberger Berman LLC

“I don’t know too many jobs that the job is being well-rounded. You know, it’s not like you’re going to work at ‘Well-Rounded, Inc.’ or something.”

Student, University of Wisconsin System
How do we help students “see” Learning?
High-Impact Practices

★ First-Year Seminars and Experiences
★ Common Intellectual Experiences
★ Learning Communities
★ Writing-Intensive Courses
★ Collaborative Assignments and Projects
★ Undergraduate Research
★ Diversity/Global Learning
★ Service Learning, Community-Based Learning
★ Internships
★ Capstone Courses and Projects
★ ePortfolios
Why Are They Called “High-Impact” Practices?

• **Analyses by NSSE** (*Source: Kuh, 2008. “High Impact Practices: What are They, Who has access to them, & Why They Matter.” AAC&U*)
  – Connect participation in high impact experiences with positive gains in:
    • Deep Learning
    • Practical Competence
    • Personal and Social Development
    • General Education

  – Higher GPA/grades
  – Gains in writing, critical thinking, reading, integrative thinking, research skills,
  – Higher rate of civic engagement, gains in commitment to social justice, multicultural awareness
  – **In addition to**...
    • Increased retention and persistence
    • Ease of college transition
    • Higher rate of graduate school enrollment

• **High impact for whom?**
What is the cumulative impact of participation in HIPs experiences on learning outcomes?
Average Difference in Learning Outcomes from Participating in HIPs vs Non-participation

**Avg Gain**

- Learning Com: +7.67
- Serv Learn.: +8.47
- Study Abr: +4.25
- Internship: +5.2
- St/Fac Res: +8.1
- Capstone: +6.1
Two Issues with HIPs: Access and Quality

% of All Students in High Impact Practices

- LCS (FY): 17%
- SL (FY): 36%
- SL (SR): 46%
- St/Fac.Res(SR): 19%
- SR Cap.: 32%
- Intern. (SR): 53%
- Study/Abr(SR): 14%
High Impact Practices & The Quality Control Issue

• “...there is growing evidence that – *when done well* – some programs and activities appear to engage participants at levels that elevate their performance across multiple engagement and desired outcomes measures...” – George Kuh

• Significant amount of time on task
• Significant engagement with peers and faculty
• Frequent feedback
• Engagement with difference
• Engage higher order thinking skills (analysis, synthesis, evaluation, application)

*Source: Alex McCormick, NSSE Director, Center for Postsecondary Research, Indiana University*
What do students care about when it comes to high impact practices and learning outcomes?

“Tell me why this is important or at least tell me what your end goal is. ‘When you learn this, you’re going to become [a] better adult because blah-blah-blah-blah.’ Tell me why this matters.”

Student, University of Wisconsin System