Effective Educational Practices and Essential Learning Outcomes in General Education Courses

Differences by Discipline

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Overview

- Essential learning outcomes (ELOs) and the college curriculum
- Comparing faculty teaching general education courses (GECs) and those teaching non-GECs by disciplinary area
- Questions for you and your campus
- Discussion
A National Imperative

While there is a clamoring about access to, affordability of, and accountability for U.S. higher education...

Example: Secretary Spelling’s Commission on the Future of Higher Education
“...there has been a near-total public silence about what contemporary college graduates need to know and be able to do”

AAC&U, College Learning for the New Global Century, p. 7
“This public silence about what matters in college is dangerous”

AAC&U, College Learning for the New Global Century, p. 8
Essential Learning Outcomes

Fortunately, consensus is emerging within higher education as to the essential learning outcomes (ELOs) for the 21st century.

See the following AAC&U reports:
- College Learning for the New Global Century (2007)
- Taking Responsibility for the Quality of the Baccalaureate Degree (2004)
Knowledge...

- of human cultures and the physical and natural world

- Through study in the sciences and mathematics, social sciences, humanities, histories, languages and the arts

Focused by engagement with big questions, both contemporary and enduring

Adapted from AAC&U, 2007, p. 12
Intellectual & Practical Skills

- Including
  - Inquiry & analysis
  - Critical & creative thinking
  - Written & oral communication
  - Quantitative literacy
  - Information literacy
  - Teamwork & problem solving

Practiced extensively, across the curriculum, in the context of progressively more challenging problems, projects, and standards for performance

Adapted from AAC&U, 2007, p. 12
Personal & Social Responsibility

- Including
  - Civic knowledge & engagement--local & global
  - Intercultural knowledge & competence
  - Ethical reasoning & action
  - Foundations & skills for lifelong learning

Anchored through active involvement with diverse communities and real-world challenges

Adapted from AAC&U, 2007, p. 12
Integrative Learning

Including

- Synthesis and advanced accomplishment across general and specialized studies and the arts

Demonstrated through the application of knowledge, skills, and responsibilities to new settings and complex problems

Adapted from AAC&U, 2007, p. 12
Organizing the Curriculum

American curricular models

- **No choice** – all students take the same courses

- **Free choice** – course selection is dictated by a student’s preferences

- **Mixed choice** – choices limited by categories and rules
Implications for Liberal Ed

**No choice** – the curriculum was set and assumed to produce liberal learning

**Free choice** – student control leads to concern for the complete loss of a coherent liberal education

**Mixed choice** – general education is seen as the part of the curriculum responsible for liberal learning, but does liberal learning then take a back seat in the major?
<table>
<thead>
<tr>
<th>Curricular Shift</th>
<th>20th Century</th>
<th>21st Century</th>
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</thead>
<tbody>
<tr>
<td>Liberal education</td>
<td>A set of courses</td>
<td>A set of outcomes</td>
</tr>
<tr>
<td>What to worry about</td>
<td>Taking the right courses</td>
<td>Promoting the right outcomes</td>
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<td>Registration</td>
<td>Teaching &amp; learning</td>
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<td>Control over learning</td>
<td>Greater faculty responsibility</td>
<td>Greater student responsibility</td>
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Findings from the Faculty Survey of Student Engagement
Faculty Survey of Student Engagement

- A companion survey to the National Survey of Student Engagement (NSSE) started in 2003
- Administered each spring to faculty teaching undergraduate courses across the country to assess faculty practices, emphases, and observations
- Used to bring faculty into the conversation about student engagement and to inform the improvement of undergraduate education
- Almost 100,000 faculty members from more than 465 colleges and universities have responded to the survey
Past Research Suggests...

- GECs place greater emphasis on
  - Intellectual skills
  - Individual and social responsibility
  - Deep approaches to learning

- Non-GECs place greater emphasis on
  - Practical skills

- Faculty emphasis on these outcomes and practices varies by disciplinary area
Purpose

To understand how the gaps between GECs and non-GECs vary by disciplinary area
For this study...

- Over 8,000 faculty from 100 U.S. baccalaureate degree-granting institutions
- Faculty responded about a particular course taught during the current academic term (course-based survey)
- Sample characteristics
  - 44% women
  - 76% White
  - 85% full-time
  - Median course load=5
  - Approx equal representation by rank
  - Median year taught=14
  - 60% taught upper div
  - 27% at private inst
  - 50% taught GEC
Categorizing Disciplines

- Biglan’s (1973) categorization is used to group disciplinary areas
  - Hard v Soft
  - Pure v Applied
  - Life v Non-Life

- 8 resulting categories
  - Hard-Pure-Life (biology)
  - Hard-Pure-Non-Life (chemistry)
  - Hard-Applied-Life (agriculture)
  - Hard-Applied-Non-Life (eng)
  - Soft-Pure-Life (sociology)
  - Soft-Pure-Non-Life (history)
  - Soft-Applied-Life (educ)
  - Soft-Applied-Non-Life (bus)
Measures

- Intellectual skills ($\alpha = 0.60$)
- Practical skills ($\alpha = 0.63$)
- Individual & social responsibility ($\alpha = 0.82$)
- Emphasis on deep approaches to learning ($\alpha = 0.75$)
INTELLECTUAL SKILLS

- **Hard-Applied-Life**
- **Soft-Pure-Non-Life**
- **Soft-Applied-Life**
- **Soft-Applied-Non-Life**
- **Soft-Pure-Life**
- **Hard-Applied-Non-Life**
- **Hard-Pure-Non-Life**
- **Hard-Pure-Life**

Bar chart comparing GEC and non-GEC categories for various intellectual skills.
PRACTICAL SKILLS

- Hard-Applied-Non-Life
- Soft-Applied-Non-Life
- Hard-Applied-Life
- Hard-Pure-Non-Life
- Soft-Applied-Life
- Hard-Pure-Life
- Soft-Pure-Non-Life
- Soft-Pure-Life
INDIVIDUAL & SOCIAL RESPONSIBILITY

- Soft-Applied-Life
- Soft-Pure-Non-Life
- Soft-Pure-Life
- Hard-Applied-Life
- Soft-Applied-Non-Life
- Hard-Pure-Life
- Hard-Applied-Non-Life
- Hard-Pure-Non-Life
Implications

- Room for greater emphasis on all essential learning outcomes in courses across course type and field

- Differences between GECs and non-GEC depend on discipline

- Results can help feed campus conversations about what outcomes and practices should be emphasized in each part of the curriculum

- Raises questions about how and whether to approach promoting essential learning outcomes across the curriculum
Campus Questions

- How are essential learning outcomes (ELOs) and good educational practices defined across campus?

- How is the curriculum structured to achieve these outcomes? How should different parts of the curriculum work together to promote certain outcomes (e.g. integrative learning)?

- How are faculty from across disciplinary areas involved in conversations about promoting ELOs? How are faculty changing their teaching to promote ELOs?

- How are assessment initiatives informing dialogue about ELOs on your campus?
Questions for You

- Thinking about your own discipline, do you think these outcomes and practices are sufficiently emphasized in general education courses? In non-general education courses?

- What do you make of the differences between disciplinary clusters in their emphasis on these practices and outcomes?

- Should the gaps between course types and disciplines be cause for concern? If so, what should be done?
For more information...

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