(Re)Emerging Areas of Focus for the Success of Twenty-first Century Learners

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Who Is This Guy? (About the Presenter)
About the Non-Profit Organization
What’s Up with the Session Title?

- (Re)Emerging Areas of Focus for the Success of Twenty-first Century Learners
- The Equity Imperative
What Will He Share? (About The Session)

- Lessons from Current Work at the Gardner Institute on the Importance of:
  - Gateway Courses
  - Integrated High Impact Practices
  - Cost Benefits of Student Success Initiatives
Issue & Lesson 1 – Gateway Courses
Deplorable rates of failure in college “gateway courses” are limiting possibilities – especially for historically underrepresented and underserved students.
Defining our Terms – Gateway Courses

• Foundation-Level
• High-Risk
• High-Enrollment
• “Killer Courses”
Let’s Look at Some Data
The Data – U.S. History Survey Courses

- 32 institutions
- Average DFWI Rate = 25.5%
- Range of 5.66% - 48.89%
The Data – U.S. Survey Courses

US History DFWI Rate by Institution

- DFWI Rate
- Average
First-Year Students Are Most at Risk
The Data – U.S. Survey Courses

Average DFWI Rate by Classification

- Freshmen DFWI Rate: 29.01%
- Sophomore DFWI Rate: 21.16%
- Junior DFWI Rate: 16.65%
- Senior DFWI Rate: 13.80%
Gender, Income & First-Generation Status Matter
The Data – U.S. Survey Courses (Gender)

Average DFWI Rate by Gender

Male: 27.18%
Female: 22.67%
Unspecified: 31.26%
The Data – U.S. Survey Courses (Income)

Average DFWI Rate by Pell Eligibility

- Pell Eligible: 28.49%
- Not Pell Eligible: 22.65%
- Unknown: 24.64%
The Data – U.S. Survey Courses (First Generation)

Average DFWI Rate by First Generation Status

- First Generation: 26.13%
- Not FG: 22.41%
- Unknown: 30.50%

DFWI Rate vs. Average
Race Matters
<table>
<thead>
<tr>
<th>Column A. Course</th>
<th>Column B. Subpopulation</th>
<th>Column C. Subpopulation DFWI Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. History</td>
<td>White</td>
<td>26.5%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>30.2%</td>
</tr>
<tr>
<td></td>
<td><strong>Course Average</strong></td>
<td><strong>30.3%</strong></td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>30.8%</td>
</tr>
<tr>
<td></td>
<td>Hispanic / Latino</td>
<td>35.3%</td>
</tr>
<tr>
<td></td>
<td>First Generation</td>
<td>36.2%</td>
</tr>
<tr>
<td></td>
<td>Pell</td>
<td>38.2%</td>
</tr>
<tr>
<td></td>
<td>African American</td>
<td>49.0%</td>
</tr>
<tr>
<td></td>
<td>Native American</td>
<td>49.6%</td>
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Gateway Course Performance is a DIRECT Predictor of Retention
<table>
<thead>
<tr>
<th>Lessons Learned</th>
<th>Column A. Course Examples from Individual G2C Institutions</th>
<th>Column B. Average DFWI Rate</th>
<th>Column C. DFWI Rate for Non-Retained Eligible-to-Return Students*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Principles of Accounting I</td>
<td>54.0%</td>
<td>81.6%</td>
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<tr>
<td></td>
<td>Foundation for Physiology / Biology</td>
<td>18.9%</td>
<td>55.0%</td>
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<td></td>
<td>General Chemistry</td>
<td>36.3%</td>
<td>73.9%</td>
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<tr>
<td></td>
<td>Writing and Rhetoric I</td>
<td>10.6%</td>
<td>25.8%</td>
</tr>
<tr>
<td><strong>Survey of American History</strong></td>
<td>26.8%</td>
<td></td>
<td>67.2%</td>
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<td></td>
<td>College Algebra</td>
<td>59.7%</td>
<td>73.5%</td>
</tr>
<tr>
<td></td>
<td>Beginning Algebra</td>
<td>24.4%</td>
<td>65.1%</td>
</tr>
<tr>
<td></td>
<td>Introduction to Psychology</td>
<td>28.1%</td>
<td>46.1%</td>
</tr>
<tr>
<td></td>
<td>Mean of Average DFWI Rates for Examples</td>
<td><strong>32.4%</strong></td>
<td><strong>61.0%</strong></td>
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</table>
Summary – Gateway Course Outcomes

• Are Stumbling Blocks for All Students
• Especially
  • First-Year
  • Low-Income
  • First-Generation
  • Males
  • Racial Minorities
DISCUSSION

1. What Role Do You Play In These Outcomes?

2. What Can You Do to Alter Them?
Lesson / Issue # 2 – High Impact Practices
Origins of High Impact Practices (HIPs)
High-Impact Educational Practices

First-Year Seminars and Experiences

Many schools now build into the curriculum first-year seminars or other programs that bring small groups of students together with faculty or staff on a regular basis. The highest-quality first-year experiences place a strong emphasis on critical inquiry, frequent writing, information literacy, collaborative learning, and other skills that develop students’ intellectual and practical competencies. First-year seminars can also involve students with cutting-edge questions in scholarship and with faculty members’ own research.

Common Intellectual Experiences

The idea of a “core” curriculum has evolved into a variety of modern forms, such as a set of required common courses or a vertically organized general education program that includes advanced integrative studies and/or required participation in a learning community (see below). These programs often combine broad themes—e.g., technology and society, global interdependence—with a variety of curricular and cocurricular options for students.

Learning Communities

The key goals for learning communities are to encourage integration of learning across courses and to involve students with “big questions” that matter beyond the classroom. Students take two or more linked courses as a group and work closely with one another and with their professors. Many learning communities explore a common topic and/or common readings through the lenses of different disciplines. Some deliberately link “liberal arts” and “professional courses,” others feature service learning.

Writing-Intensive Courses

These courses emphasize writing at all levels of instruction and across the curriculum, including first-year programs. Students are encouraged to produce and revise various forms of writing for different audiences in different disciplines. The effectiveness of this repeated practice “across the curriculum” has led to parallel efforts in such areas as quantitative reasoning, oral communication, information literacy, and, on some campuses, ethical inquiry.

Collaborative Assignments and Projects

Collaborative learning combines two key goals: learning to work and solve problems in the company of others, and sharpening one’s own understanding by learning seriously to the insights of others, especially when different backgrounds and life experiences. Approaches range from study groups within a course, to team-based assignments and writing, to cooperative projects and research.

Undergraduate Research

Many colleges and universities are now providing research experiences for students in all disciplines. Undergraduate research, however, has been more prominently used in science disciplines. With strong support from the National Science Foundation and the research community, scientists are redoubling their efforts to connect key concepts and questions with students’ early and active involvement in systematic investigation and research. The goal is to involve students with actively contextual questions, empirical observation, cutting-edge technologies, and the sense of excitement that comes from working to answer important questions.

Diversity/Global Learning

Many colleges and universities now emphasize courses and programs that help students explore cultures, life experiences, and worldviews different from their own. These include—which may address U.S. diversity, world cultures, or both—often explore “dualistic differences” such as racial, ethnic, and gender inequality or confronting struggles around the globe for human rights, freedom, and power. Frequently, intercultural studies are augmented by experiential learning in the community and/or by study abroad.

Service Learning, Community-Based Learning

In these programs, field-based “experiential learning” with community partners is an instructional strategy—and often a required part of the course. The idea is to give students direct experience with issues they are studying in the curriculum and with ongoing efforts to analyze and solve problems in the community. A key element in these programs is the opportunity students have to both apply what they are learning in real-world settings and reflect in a classroom setting on their service experiences. These programs model the idea that giving something back to the community is an important college outcome, and that working with community partners is good preparation for citizenship, work, and life.

Internships

Internships are another increasingly common form of experiential learning. The idea is to provide students with direct experience in a work setting—usually related to their career interest—and to give them the benefit of supervision and coaching from professionals in the field. If the internship takes for course credit, students complete a project or paper that is approved by a faculty member.

Capstone Courses and Projects

Whether they’re called “senior capstones” or some other name, these culminating experiences require students nearing the end of their college years to create a product of some sort that integrates and applies what they’ve learned. The project might be a research paper, a performance, a portfolio of “best work,” or an exhibit of artwork. Capstones are offered both in departmental programs and, increasingly, in general education as well.
Some Educational Activities are Unusually Effective

“High-impact practices” provide substantial educational benefits to students

**Balkanization**

Bal·kan·ize  [bawl-kuh-nahyz]
verb (used with object), Bal·kan·ized, Bal·kan·iz·ing.

1. to divide (a country, territory, etc.) into small, quarrelsome, ineffectual states.
Vertical Integration

What students learn in one lesson, experience or course prepares them for the next lesson, experience or course.

Educational experiences are purposefully structured and logically sequenced so that students gain the knowledge and skills to progressively prepare them for more challenging, higher-level work.
Some Conceptual Frameworks for Alignment

• Foundations of Excellence (FoE)
  ▪ Guiding Question
  ▪ Aspirational standards – FoE Dimensions
  ▪ Horizontal & vertical alignment across the new student experience

• Gateways to Completion (G2C)
  ▪ Guiding Question
  ▪ Aspirational standards – G2C Principles
  ▪ Horizontal & vertical alignment in gateway courses & curriculum
Criteria for “Excellence”

- **Intentional** – Evidence of an intentional, comprehensive approach
- **Scale** – Broad impact on significant numbers of students
- **Sustained & Supported** – Strong administrative support for and durability over time
- **Inclusive / Broad Engagement** – Involvement of a wide range of constituent groups
- **Advancing Equity and Inclusion**
Outcomes Correlated with Intentional Integration from FoE & G2C

- Improvements in
  - Persistence
  - Completion
  - Grades
  - “Resilience”
  - Return on Investment
  - Use of Resources
Impact of HIPs is Greatest for Historically Underserved Students
HIP participation benefits Latina/o students more; Latina/o respondents Graduating “on time” Increases as HIP Participation increases, Rising from 38% to 73%
 HIPs: Differences by Race-Ethnicity

• 52% Internships overall
• Yet only 42% of African American students did an Internship

Source: “Assessment of High-Impact Practices: Using Findings to Drive Change in the Compass Project,” by A. Finley, Spring 2011, Peer Review.
More Difference... HIPs & First Generation Status

Data source: NSSE 2016
Widely Available? Accessible?

Two or more HIPs

- White
- Black or African American
- Hispanic or Latino
- Asian
HIP Effectiveness Research Led to Prescription:

All Students Do 2...
one early,
one later
HIPs: What We Know for Sure

• HIP participation positively related to several educational outcomes
• Salutary effect for historically underserved students
• Multiple HIPs overall positive – including reflective & integrative learning
• Desired by employers
• Enjoyable to students & faculty
• HIP participation growing

*(HIPs on NSSE show modest increases, more multiples)*
HIP Concerns: Equity & Quality

**Equity concerns:**
- accessibility
- negative experiences for students of color
- effect on faculty

**Quality concerns:**
- curricular coherence
- connections to co-curriculum
- must be done well
- little assessment of quality alignment with future of degree
Critiques of Negative Impact for Students of Color?

**Critical Race Theory** (Patton, Harper & Harris, 2015):

• Are HIPs appealing to underrepresented students?
• HIPs may create opportunities for impactful, but negative experiences for students of color by exposing students to micro-aggressions & other racist behaviors in an intensive, academic experience
• Are there HIPs that bolster students of color belongingness that aren’t captured in current HIP definitions?
Connecting HIPs in Co-Curriculum?

- HIPs demand student time & effort **in and out** of class
- Ensure all educators guide students to practices
- Collaborate to deliver effective HIPs
HIP Effect on Faculty?

• How important is it to faculty that undergraduates do HIPs ("very important + important"):
  - Culminating Exp/Capstone  86%
  - Internships               82%
  - Community Service        58%
  - Research with faculty    57%
  - Learning comm.(FY)        46%
  - Study Abroad             41%

  » FSSE 2015 Upper Division Faculty results

• Implies other pedagogies are “low-impact”?
• HIPs on top of teaching load?
• Administrative curricular change?
• Expensive, siphon $ from research?
HIP Implementation Challenges?

• Most High Impact Practices demand:
  – Financial resources
  – Significant time and coordination for students (harder for commuters/non-trads/working students)
  – Faculty/mentor time that is often only regarded as service
  – Administrative resources, professional development

• There’s a significant learning curve to doing them well
THINK / PAIR / SHARE

1. What (If Any) High Impact Practices Are You Working With?

2. How Will You Apply What You Learned Here To Your Work?
Lesson / Issue # 3 – Cost Benefits of Student Success Plans & Programs
Defining Terms (Costs)

• Costs
  • Financial
  • Human
  • Societal
  • Opportunity
Lessons from JNGI Work (Source)

- Foundations of Excellence (FoE)

- Survey of Liaisons (2013-14)
  - 230 Institutions
  - 99 Unique Institutional Responses
  - 43.04% Response Rate

- Degrees of Implementation and Costs
### Who Implemented?

Did your institution complete a Foundations of Excellence action plan as a result of your self study?

<table>
<thead>
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<th>Answer</th>
<th>%</th>
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<tr>
<td>Yes</td>
<td>87%</td>
</tr>
<tr>
<td>No</td>
<td>8%</td>
</tr>
<tr>
<td>Don't know</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
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</table>
Who Implemented?

From your perspective, to what degree has your institution implemented its FoE-related action plans?

<table>
<thead>
<tr>
<th>Answer</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>5%</td>
</tr>
<tr>
<td>To a limited degree</td>
<td>37%</td>
</tr>
<tr>
<td>To a medium degree</td>
<td>36%</td>
</tr>
<tr>
<td><strong>To a high degree</strong></td>
<td><strong>21%</strong></td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

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Reasons for Not Implementing

Pitfalls

1. change in leadership and or staffing
2. lack of leadership commitment
3. unexpected budgetary issues
4. timing or institutional readiness
5. lack of plan for moving forward
What Happened?

Comparing your institution’s approach to the first year before and after your participation, to what extent can you attribute positive change to your participation in FoE?

![Bar chart showing the extent of positive change attributed to FoE participation. The y-axis represents the percentage, ranging from 0% to 70%. The x-axis shows the extent of change, with categories such as Not at all, To a limited degree, To a medium degree, and To a high degree. The chart includes bars for All and High Implementers.]

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What Happened and Why?

High Implementers

- Link to reaffirmation of accreditation
- Revised programmatic offerings for:
  - Cohesion / Coordination
  - Scale
  - Eliminate Redundancy
  - Address Gaps
- Much closer coordination
- Had a 3-5 year implementation timeline
- Was NOT the only thing they did, BUT . . .
Who Implemented?

Approximately, how much resource investment did your institution make in implementing its FoE action plan?
What Did We Learn?

Where did that money come from?

Low / Medium Implementers
- Current reallocation: 64%
- New resource: 36%

High Implementers
- Current reallocation: 76%
- New resource: 24%
What Can You Take Away?

Resources

• Some money is necessary for implementation, but new money is not required.

• Many high implementers used 10k or less (21%)

• Many high implementers used 75k or more (37%) BUT most high implementers reallocated money (76% of money was reallocated)
Level of Implementation

Change in 1-yr retention rates post implementation of FoE action plan by level of implementation
Two Other Sources

Calculating Cost-Return for Investments in Student Success (2009)

Investing in Student Success (2013)
Key Salient Points

- Pool of High Schools Graduates in Decline
- Cost Increases Exceed Annual Rate of Inflation
- Stratification Within Institutions
  - Less Resourced Institutions Serving Higher Proportion of Low-Income & First Generation Students
- “Base Plus” Model No Longer Valid or Feasible
Key Salient Points

• All Institutions (Even the Least Resourced) Have the Money to Do Better

• Few (if any) Have Examined and Acted on Cost Benefit Models for Student Success Programs
Key Salient Points

• Calculating Cost Return for Investments in Student Success (2009)
  • Delta Cost Project / Jobs for the Future
  • Outcomes of High Impact Practices Touted – But No Cost Benefit Information Available
  • 13 Institutions (2-Year & 4-Year)
  • ISS Cost-Return Calculator
Key Salient Points

• Calculating Cost Return for Investments in Student Success Findings
  • Cost Per Program Varied – from $59 to $1,601 per student
  • 7 of the 13 institutions showed retention gains attributed to programs
  • Cost Data Hard to Come By
  • Factoring The Data Into the Conversation Changed the Conversation
Considerations

• Scale
  • Average Cost Per Student
  • Economies of Scale
  • Point of Diminishing Returns
• Redundancy (and Benefits)
REFLECTION & SHARING

1. Do you / does your unit / department examine the cost benefit of your / its student success program(s)? (If not, why?)

2. What might you do to begin to / or enhance how you will examine the cost benefits of your student success efforts?
Additional Questions & Discussion
Contact Information

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