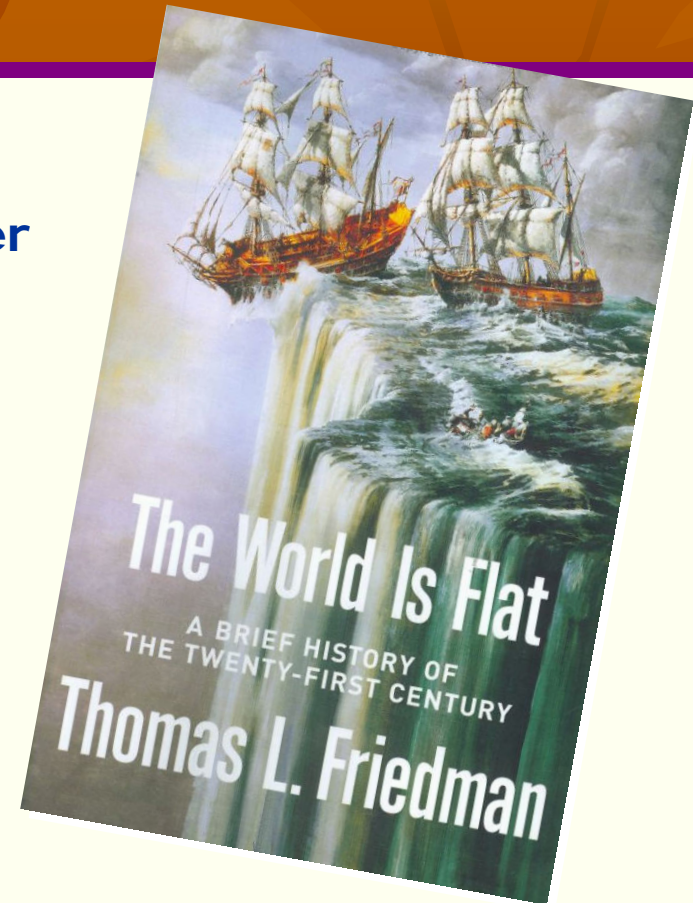


# **Integration and Learning in a Non-Flat World**

Albright College  
General Education Revision  
August 21 – 22, 2007

# Forces Flattening the Global Playing Field

- ◆ Fall of Berlin Wall
- ◆ First Mainstream Web Browser
- ◆ Work Flow Software
- ◆ Open Sourcing
- ◆ Outsourcing
- ◆ Offshoring
- ◆ Supply-chaining
- ◆ Insourcing
- ◆ In-forming
- ◆ “The Steroids” Wireless Mobile Digital Communication



# Learning that is Greater than the Sum of its Parts

- Heart of liberal education
- Classical tradition of educating the “whole” person
- The capacity to connect is central to scholarship broadly conceived – whether focused on discovery and creativity, integrating and interpreting knowledge from different disciplines, applying knowledge through real-world engagements, or teaching students and communicating with the public (Boyer 1990).

# Why Integrative Learning?

- Many social problems cannot be resolved by a single disciplinary approach
- Frequent demand from students and faculty against the artificial segmentation of knowledge
- Employer expectation that employees can integrate what learned in variety of contexts

# Why? – cont.

- Desire to make more efficient use of resources and equipment by sharing them across disciplines
- Dynamic changes in knowledge construction, blurring disciplinary boundaries
- Electronic technology/internet are transforming the way we organize and seek knowledge, replacing linear with hypertext

*Taking the Lead on What  
Matters in College:  
Liberal Education for the New Global Century*



# The Essential Learning Outcomes



Beginning in school, and continuing at successively higher levels across their college studies, students should prepare for twenty-first-century challenges by gaining:

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## ★ 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*

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## ★ Intellectual and Practical Skills, including

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

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

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## ★ Personal and Social Responsibility, including

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

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

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## ★ Integrative Learning, including

- Synthesis and advanced accomplishment across general and specialized studies

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

# *Premise #1*



*"In a democracy that is diverse, globally engaged and dependent on active citizenship, liberal education helps Americans explore our connections and responsibilities to one another."*



## *Premise #2*



*“In an economy fueled by innovation, the capabilities developed through a liberal education have become America’s most valuable economic asset.”*



## *Premise #3*



*"We can—and should—provide every student with a liberal education—not just some of them."*





# Involving Students in the Exploration of Big Questions:

First Year Seminars/Experiences

Thematic Core Curriculum

Linked Courses/Learning Communities





# Practicing Intellectual Skills Across the Curriculum:

E.g. Writing Across the Curriculum

Information Literacy " " "

Quantitative Literacy " " "

Undergraduate Research " " "



# Educating Students for Mindful Citizenship:

Global Learning

Diversity Courses and Experiences

Ethical Inquiry

Service Learning/Community-Based Research





# Teaching Students to Integrate Their Learning:

Learning Communities

Supervised Internships

Advanced Integrative Courses

Capstone Requirements and Assignments



**For Data on the Benefits of Engaged  
Learning Practices:**



[http://nsse.iub.edu/pdf/Connecting\\_the\\_Dots\\_Report.pdf](http://nsse.iub.edu/pdf/Connecting_the_Dots_Report.pdf).

*(National Survey of Student Engagement site)*

# **Employers Endorse Key Elements of Liberal Education**

*Percentage of Business Leaders Who Want Colleges  
to “Place More Emphasis” on Key Outcomes*



## **Knowledge of Human Cultures and the Physical and Natural World**

<b>Science and Technology</b>	<b>82%</b>
<b>Global issues</b>	<b>72%</b>
<b>The role of the US in the world</b>	<b>60%</b>
<b>Cultural values/traditions (US/Global)</b>	<b>53%</b>

# Employers Endorse Key Elements of Liberal Education

*Percentage of Business Leaders Who Want Colleges  
to “Place More Emphasis” on Key Outcomes*



## Intellectual and Practical Skills

<b>Teamwork skills in diverse groups</b>	<b>76%</b>
<b>Critical thinking and analytic reasoning</b>	<b>73%</b>
<b>Written and oral communication</b>	<b>73%</b>
<b>Information literacy</b>	<b>70%</b>
<b>Creativity and Innovation</b>	<b>70%</b>
<b>Complex problem solving</b>	<b>64%</b>

# Employers Endorse Key Elements of Liberal Education

*Percentage of Business Leaders Who Want Colleges  
to “Place More Emphasis” on Key Outcomes*



## Personal and Social Responsibility

<b>Intercultural competence (teamwork in diverse groups)</b>	<b>76%</b>
<b>Intercultural knowledge (global issues)</b>	<b>72%</b>
<b>Ethics and values</b>	<b>56%</b>
<b>Intercultural knowledge (culture values/traditions—US/Global)</b>	<b>53%</b>

# Employers Endorse Key Elements of Liberal Education

*Percentage of Business Leaders Who Want Colleges  
to “Place More Emphasis” on Key Outcomes*



## Integrative Learning

**Applied knowledge in real-world settings**

**73%**

# What skills do employers value from employees who have studied or interned abroad?

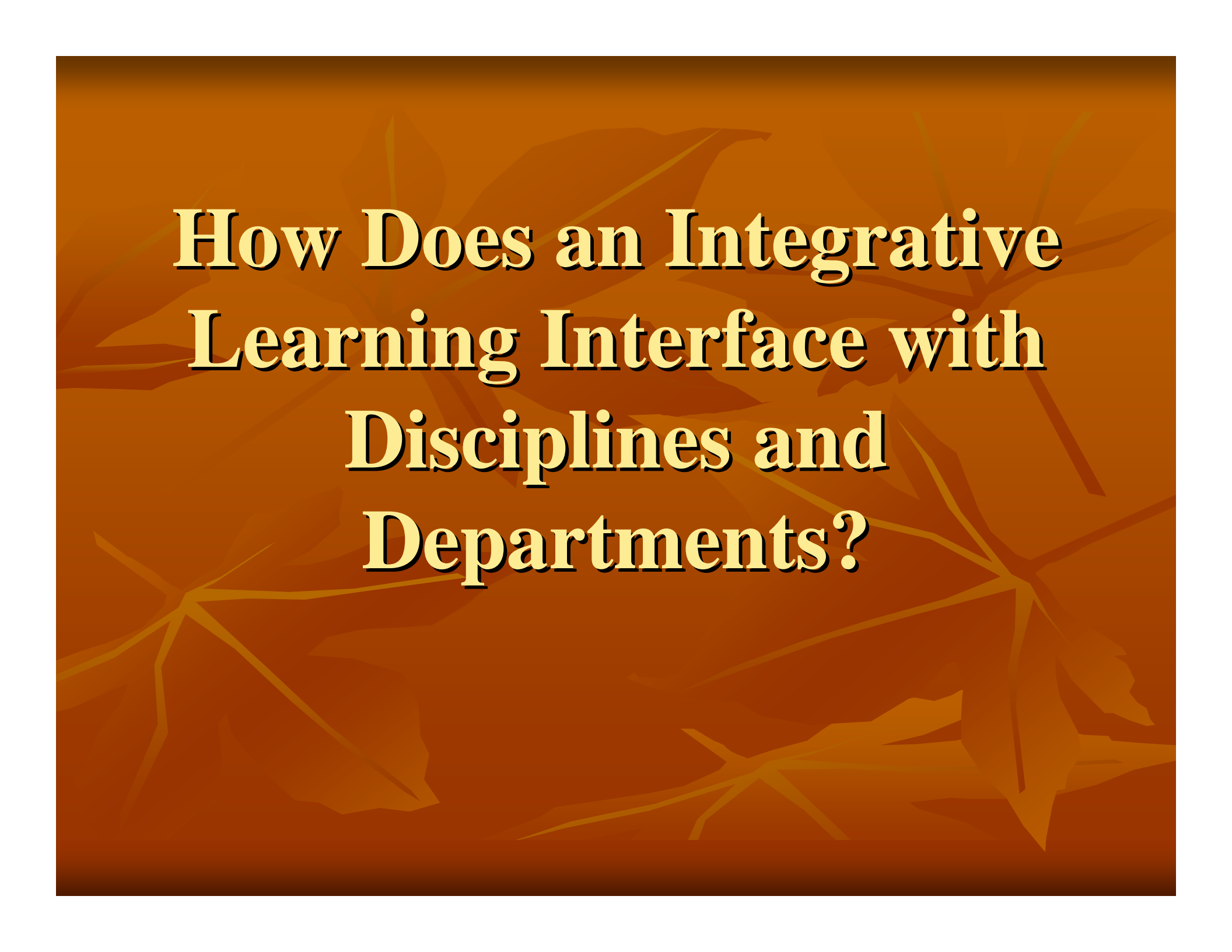
- Interacting with people who hold different interests, values, perspectives (60%)
- Understanding cultural differences in the workplace (53%)
- Adapting to situations of change (50%)

Gardner, P. (2004) Recruiting Trends 2004-2005. A Report From the Collegiate Employment Research Institute. East Lansing, MI: Michigan State University

For More Information on the LEAP  
Campaign, and the Employer and  
Student Surveys:



[www.aacu.org/advocacy/leap](http://www.aacu.org/advocacy/leap)

The background of the slide features a pattern of overlapping autumn leaves in various shades of brown and orange, creating a textured, organic feel. The text is centered and rendered in a bold, serif font with a yellow-gold color and a subtle drop shadow.


**How Does an Integrative  
Learning Interface with  
Disciplines and  
Departments?**

# Levels of Integrated Learning

- 1) courses in different disciplines without formal opportunities to connect learning in these areas – distribution model
- 2) opportunities for students to share insights from different disciplines as in a capstone course; integration is often left to the student

## Levels – cont.

- 3) students and faculty join in the process of integration as in team-taught courses; faculty often maintain their roles as representatives and advocates for their disciplines
- 4) conscious effort on part of students and faculty to integrate material into an intellectually coherent entity based on understanding of disciplinary frameworks, tools, and methods and the contributions each makes to the new whole

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- The background of the slide is a solid dark brown color with a faint, stylized pattern of autumn leaves in various shades of brown and tan. The leaves are scattered across the frame, some overlapping, creating a textured, organic feel.
- Shared Faculty
  - Shared Students
  - Student mentors
  - Linked courses
  - Connective courses
  - Shared Goals and Outcomes

# Shulman's Table of Learning

- Engagement and Motivation
- Knowledge and Understanding
- Performance and Action
- Reflection and Critique
- Judgment and Design
- Commitment and Identity

- Learning begins with student engagement, which in turn leads to knowledge and understanding. Once someone understands, he or she becomes capable of performance and action. Critical reflection on one's practice and understanding leads to higher-order thinking in the form of a capacity to exercise judgment in the face of uncertainty and to create designs in the presence of constraints and unpredictability.

- Ultimately, the exercise of judgment makes possible the development of commitment. In commitment we become capable of professing our values, our faith and our love, our skepticism and our doubts, internalizing those attributes and making them integral to our identities. [Shulman 2002]

The background of the slide is a solid dark brown color with a pattern of lighter brown, stylized autumn leaves scattered across it. The leaves have prominent veins and are in various orientations, creating a textured, seasonal feel.

# **Let's Take a Look at Where We Are**

# Context for Federal Education Policy

3  
0

- Broke
- Highly Partisan
- Ethical Clouds
- Election

Terry W. Hartle, ACE, March 3, 2006

# Secretary's [Miller] Commission on the Future of Higher Education

- Access
- Affordability
- Accountability
- Quality

# The National Commission on Accountability in Higher Education

*Report was  
released*

*March 10,  
2005*



# What is “Better Accountability?”

- ◆ Not the status quo – Unfocused, unread, unused reporting exercises;
- ◆ Not measuring performance, rewarding performance or punishing the lack of performance;
- ◆ Not centralized bureaucracies, but

**A WAY TO IMPROVE PERFORMANCE**

# The National Commission on Accountability in Higher Education

## Fundamental Principles

- ◆ Responsibility for performance – *and* accountability – is shared among
  - Teachers and learners
  - Policy makers and educators
- ◆ Effective accountability will be based on:
  - Pride, not fear
  - Aspirations, not minimum standards
- ◆ Effective accountability will be:
  - A tool for self-discipline, not finger-pointing

# The National Commission on Accountability in Higher Education

## Components of Effective Accountability

- ◆ **Affirm and pursue fundamental goals**
  - The public agenda vs. market position
- ◆ **Establish and honor a division of labor**
  - Top-down centralization is a dead end
- ◆ **Focus on a few priorities at every level**
  - No focus, no progress
- ◆ **Measure results, respond to evidence**
  - Elementary Baldrige

# The Obstacles

- Academic departments and schools which see their responsibility as socializing students into a particular discipline or profession
- Split between general education and the major – exacerbates the problem
- Bachelor's degree is defined more in terms of courses and credits than by a vision of what the degree should mean
- Systems of faculty roles and rewards that have been slow to recognize interdisciplinary and applied scholarship
- Extra efforts entailed in designing, teaching and assessing courses aimed at integrative learning
- Gaps between the professions and liberal arts and sciences
- Gaps between curriculum and co-curriculum
- Gaps between campus and community

The background of the slide is a solid brown color with a pattern of faint, overlapping autumn leaves in various shades of brown and tan. The leaves are scattered across the entire area, creating a textured, seasonal feel.

# **What Are We Talking About?**

**Why Bother?**

# Integrative Learning

- Self-directed learning (medicine and social work)
- Metacognition – knowing what one knows and does not know, predicting outcomes, planning ahead, efficiently apportioning time and cognitive resources, monitoring one's efforts to solve a problem and learn.

# Integrative Teaching

- Explicit statement of goals
- Learning communities
- Interdisciplinary themes
- Engaged learning
- Scaffolding
- Reflection

# Scholarship

- Questions to answer
- Goals
- Expected outcomes
- Student learning
- Faculty vitality

# Integrative Assessment

- Implies more collaboration among faculty
- Not know simply that connections are a goal but to specify what *kinds* of connections (between theory and practice? Across disciplines?) in what *contexts* (community based learning? Capstone?) and *how* demonstrated
- Beyond individual classroom

# Integrative Assessment - cont.

- Conceptual level – *how* and *when* students develop abilities
- Developmental approach – first year through last year
- Student self-assessment [Huber and Hutchings 2004]

**“...whether we and our faculty colleagues are willing to consider the possibility that the student’s ‘general education’ consists of something more than the content of what is taught and the particular form in which this content is packaged.” (Astin, 1993)**

# Integrated Learning Project

Carnegie Foundation for Advancement of Teaching, and the  
Association of American Colleges and Universities

[http://www.carnegiefoundation.org/programs/index.asp  
?key=24](http://www.carnegiefoundation.org/programs/index.asp?key=24)

During this three-year project, the two organizations worked with ten selected campuses to develop and assess advanced models and strategies to help students pursue learning in more intentional, connected ways. Fostering students' abilities to integrate their learning will nurture the habits of mind that prepare them to make informed personal, professional, and civic decisions throughout their lives.