Integrating Academic and Career Development

Strategies to Scale Experiential Learning and Reflection Across the Curriculum
1. Moving Beyond the Either/Or Debate Surrounding Career Preparation

2. Best Practices in Integrating Academic and Career Development

3. Preview of Full Report and Additional Resources
Canadian Policymakers Push Industry Alignment

Beginning to Emphasize Career Outcomes

$73M
Funding from the Canadian government to support work-integrated learning activities

100%
Goal set by Business Council of Canada for student participation in workplace experience during college

Immediate Salary and Industry Metrics Driving Policymakers

State Focus on Job Prep Not New, but Mounting

Industry-Aligned Completions and Salaries Driving Policy Incentives

Minnesota
Performance-based funding criteria include yearly 4% increase in employment outcomes

Ohio
Board of Regents pushes required career preparation

Colorado
State government unveils Launch My Career online tool comparing colleges and majors by graduates’ earnings

Indiana
New website ranks colleges by long-term career outcomes

Kentucky
Gov. Matt Bevin promises “more incentives to electrical engineers than French literature majors.”

Texas
60x30 strategic plan requires all universities to work with businesses to identify “marketable skills” for all degree programs by 2020

Louisiana
Performance-based funding criteria include post-graduation employment outcomes

Florida
Gov. Rick Scott proposes to defund non-STEM majors at state universities

Is There a True Skills Gap?

Unclear Who to Blame for Post-Graduation Underemployment

Underemployment Rates Rising for Recent College Graduates

Job Quality\(^1\) Among Underemployed College Graduates Decreasing


96% Of provosts say their graduates are prepared to succeed in the workplace\(^2\)

11% Of business leaders strongly agree that graduates are prepared to succeed at work\(^3\)


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1) Defined by higher salary, skill requirements, and career orientation (i.e. electrician vs. cashier).
2) 2014 Inside Higher Ed Chief Academic Officer Survey.
Ontario’s Post-Graduate Employment Picture

Post-Recession Outcomes Failing to Rebound to Pre-Recession Levels

**Employment Rates, Ontario University Graduates**
6 Months and 2 Years Out, by Graduating Class, 1996-2013

Source: Survey of Graduate Outcomes, Council of Ontario Universities.
Busting (or Complicating) the ‘Barista Myth’

Painting a More Positive Picture

Findings from the EPRI-ESDC ‘Tax Linkage’ Project

Ross Finnie
Director, Education Policy Research Initiative (EPRI)
Full Professor, Graduate School of Public and International Affairs

“Engineering, Mathematics & Computer Science, and Business graduates generally had higher incomes and greater earnings growth than others, but graduates of almost all other fields of study, including the oft-maligned Humanities and Social Sciences bachelor’s graduates, also performed well. Fine Arts graduates had the lowest earnings levels. Very few graduates had truly barista-level earnings even to start, and they increasingly moved even further from that level as they gained labour market experience.”

Distribution of Earnings by Percentile (2005 cohort)

Analysis combines student data from 14 PSE institutions in Canada and tax data from Statistics Canada, examining student graduate cohorts from 2005 to 2013.

Source: http://www.epri.ca/tax-linkage
Two Worrisome Trajectories Facing Underprepared Graduates

2) Director, Michigan State University Collegiate Employment Research Institute.

There are really only two choices for graduates who want a lot of employment options—to be a technically savvy liberal arts graduate or a liberally educated technical graduate.”

Phil Gardner

“Among graduates with a baccalaureate degree only, those with humanities and social sciences degrees consistently earn less than anyone else, peaking at about $58,000 a year.”

Emphasizing Alignment, Engagement, and Advancement in Outcomes

Success Beyond Salary

- Personal *fulfillment* in day-to-day responsibilities
- Engagement
- Advancement
- Financial Success
- Alignment
  - Match between role and *skills, interests, goals*
  - Potential for career *growth* and success in supervisory roles

Source: EAB interviews and analysis.
Beyond Salary

How Many Graduates Are Engaged in Their Work?

Students who reported having an internship or job that allowed them to apply what they were learning in the classroom during college were **two times more likely to be engaged at work**, but only 29% of students had that experience.

Of the six high-impact experiences identified as contributing to work engagement, **25% of graduates participated in zero, and only 3% participated in all six.**

A Constructive Path Forward

‘High-Impact Practices’ Span the Divide Between Extremes

“College should be a purely intellectual experience”

“A Surprisingly Fertile Common Ground”

“Colleges should focus only on training students for jobs”

• Active, experiential, and project-based learning
• Articulating translatable learning outcomes
• Aligning personal and career goals
• Rethinking general education
• Encouraging lifelong learning
• Global and community engagement
• Innovation and entrepreneurship
• Undergraduate research

The involvement of students in rich and meaningful educational activities is what keeps students making progress toward the degree, and it is what produces the outcomes that we associate with a college degree. But trying to distill the infinitely varied outcomes down to a list or a test, for accountability purposes, is a formula that, rather than improving education, more likely undermines the quality of the educational activities themselves.”

Robert Shireman, The Century Foundation

The Rise of Outcomes Marketing

Case in Point: American University’s ‘We Know Success’

For AU **Undergraduates** with a degree in **History** in the **College of Arts and Sciences**

Not just basic outcomes...

92% Working, grad school, or both

...but where they went...

41% Working For-Profit
33% Working Nonprofit
24% Working Government
21% Attending Grad School
7% Working and Attending Grad School

...and what they did to get there

74% Participated in an internship
53% Took advantage of study abroad

**Top Internships For Credit**
- National Museum of American History
- US Department of State
- US Holocaust Memorial Museum
- American University
- Bonhams Auction House

**Top Study Abroad Locations**
- United Kingdom
- Spain
- China
- Belgium
- Chile

Source: American University, “We Know Success,” www.american.edu/weknowsuccess; EAB interviews and analysis.

1) Results based on Graduation Census as of six months after graduation.

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### The Train Has Left the Station

Indiana College Value Index Gives Many Campuses an ‘Incomplete’

Other measures include **on-time completion** and how well alumni say the institution **prepared them for post-college life**.

<table>
<thead>
<tr>
<th>Colleges</th>
<th>Completion</th>
<th>Competency</th>
<th>Career</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>After 1 year</td>
<td>After 10 years</td>
<td>Recent alumni</td>
</tr>
<tr>
<td>IUPUI</td>
<td>55%</td>
<td>98%</td>
<td>?</td>
</tr>
<tr>
<td>Purdue West Lafayette</td>
<td>49%</td>
<td>99%</td>
<td>15%</td>
</tr>
<tr>
<td>Purdue Calumet</td>
<td>46%</td>
<td>100%</td>
<td>?</td>
</tr>
<tr>
<td>IU Northwest</td>
<td>43%</td>
<td>100%</td>
<td>?</td>
</tr>
</tbody>
</table>

**Visibility** of state dashboard emphasizes need for more data collection.

Longitudinal measures reveal disparities between **short-term and long-term salary outcomes**.


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Too Little, Too Late

Central Career Services Approach Won’t Be Enough

Innovative career office programming...
Advances in technology and new approaches to student and alumni engagement have enhanced the impact of Career Services

...but only reaching a small population of students
- Median FTE of 4 staff
- ≈$30k non-personnel operating budget
- Up to 1:6,000 student-to-advisor ratio
- Only 1/3 offer for-credit career development classes

Growing focus on internship placement...
Participation, offer, and offer acceptance rates are at decade highs, and internships are now a competitive prerequisite in many fields

...but limited partner and support capacity
- Many internships are unpaid and/or non-credit-bearing
- Not enough employer partners to go around, especially in rural areas
- Skepticism about rigor and learning outcomes

Growth in experiential learning requirements...
Once a distinctive quirk, more and more universities (even large publics) are requiring hands-on learning experience to graduate

...but merely another hurdle without broad investment
- Uneven adoption between academic and pre-professional disciplines
- Access and time-to-degree concerns for at-risk students
- Debates over “what counts” complicate enforcement

Intentional Blurring of Boundaries Reflects Holistic Student Goals

Source: EAB interviews and analysis.

Only 55% report to Student Affairs, down from 68% in 2008\(^1\)

41% have recently changed their name or rebranded\(^2\)

\textit{Evolving “Parallel” Services to Meet Student Needs}

- Student Affairs
- Career Services
- Alumni Relations
- Enrollment Management

\textbf{Academic and Career Development Strategy}

- Campus Involvement
- Program Design
- Career Advising
- Active Learning
- Career Mentoring
- Curricular Planning
- Outcomes Marketing
- Service Learning

\textbf{Engaging the Academy in Experiential Learning}

- Deans and Chairs
- Teaching and Learning
- Academic Advising
- Undergraduate Studies

82% of faculty believe it is “essential” or “very important” to prepare students for post-graduation employment, up from 73% in 2005\(^3\)

3) HERI Surveys of Undergraduate Teaching Faculty, 2004-05 and 2013-14.

Source: EAB interviews and analysis.
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Strategies to Scale Experiential Learning and Reflection Across the Curriculum

Enhancing the Market Value of the College Experience

1. Equip students to proactively align curricular and co-curricular plans with personal goals

2. Encourage ongoing reflection and narration

3. Augment the core curriculum to address skill and experience gaps

Scaling Experiential Learning Opportunities to Underserved Populations

4. Expand faculty engagement with experiential learning

5. Lower access barriers to applied learning outside the classroom

How can we help students make more informed choices early in their academic careers?

How can we ensure that our students can articulate what they’ve learned?

How can we extend skill development opportunities beyond pre-professional majors?

How can we create more credit-bearing opportunities for applied learning?

How can we reach students with fewer resources and reduce the risk of co-curricular commitments?
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### Strategies to Scale Experiential Learning and Reflection Across the Curriculum

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#### Scaling Experiential Learning Opportunities to Underserved Populations

4. **Expand Faculty Engagement with Experiential Learning**

5. **Lower Access Barriers to Applied Learning Outside the Classroom**

### Profiled Practices:

1. **Co-curricular Planning Tool**
   - Queens

2. **Point-Based Engagement Incentives**
   - University of Tennessee at Chattanooga

3. **Proactive Major Alignment Pathing**
   - FIU
   - Purdue University

4. **Hybrid Intake Advising**
   - James Madison University
   - University of Wyoming
   - University of Chicago

5. **Industry-Based Career Coaches**
   - George Mason University

6. **First-Year Field Exposure**
   - Western Washington University
   - Endicott College

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Practice 1: Co-curricular Planning Tool

Beyond the Degree Plan

2015-2016 History MAJOR MAP

GET THE COURSES YOU NEED

1ST YEAR

Take one of HIST 111, HIST 112, HIST 132, or HIST 134.

2ND YEAR

You may repeat one 3-year and one 4-year course one time. 
You must complete 30 credits before proceeding to your next level. 
You may repeat a course at the same department website.

3RD OR FINAL YEAR

You must complete all required courses and fulfill your graduation requirements. 
You must complete all required courses and fulfill your graduation requirements.

4TH OR FINAL YEAR

Apply to graduate at QSUN.

GET RELEVANT EXPERIENCE

Volunteer or work on campus as a Student Consultant (SQC) or a Queen's International Affairs Volunteer, or in the Queen's International Affairs Office.

GET CONNECTED WITH THE COMMUNITY

Volunteer or work on campus as a Student Consultant (SQC) or a Queen's International Affairs Volunteer, or in the Queen's International Affairs Office.

GET THINKING GLOBALLY

A Queen's Undergraduate Program in the United States, Canada, or Europe.

GET READY FOR LIFE AFTER GRADUATION

Explore different career paths by creating a resume and cover letter. 
Start networking by attending career fairs and connecting with alumni. 

Focus on experiential, service learning

Third-year co-op recommended for all students

Career ideas in diverse fields

Where would you like to graduate?

Anthropology

Archaeology

Biological science

Business administration and management

Chemistry

Communications

Community development

Counselling

Data science

Events management & networking

Geological research

Human resources

Insurance

Intelligence analysis

International development

International relations

Journalism

Law

Library science

Management consulting

Marketing and marketing research

Medical lab & research

Museum curator

Museum management

Policy analyst

Public administration

Publishing

Social work

Technology writing

Tourism and travel

Urban and regional planning

Visiting career.queensu.ca/majormap.html for the online version with links.

Visit careers.queensu.ca/students/wondering-about-career-options/major-maps-2015; EAB interviews and analysis.

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Map serves as gateway to online resources

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Focus on experiential, service learning

Third-year co-op recommended for all students

Career ideas in diverse fields

Integrated Maps Emphasize the Value of Experiential Learning

Practice 1: Co-curricular Planning Tool

Emphasizing High-Demand Skills

- Maps developed by Career Services, Faculties and Departments, Students
- Revised annually

Emphasis on skill-building potential of clubs and activities

Getting what you need to succeed in the workplace

WHAT DO EMPLOYERS WANT?

1. People skills
2. Communication skills
3. Problem-solving skills
4. Analytical skills
5. Leadership skills
6. Industry-specific knowledge

HOW DO I GET THE SKILLS I NEED?

- Read and develop a broad range of historical events and trends
- Understand how historians study the past
- Knowledge of how political, social, economic, and cultural changes
- Understanding of the relationship between history and current events
- Oral and written communication - communicate through writing and present research to a group
- Analytical skills - make judgments based on available historical evidence
- Research skills - appreciate the importance of accuracy and authority of sources
- Analyze data - analyze texts and historical arguments
- Problem-solving - develop systematic procedures for investigating a problem
- Resources and time management

WHAT CAN I LEARN STUDYING HISTORY AT QUEENS?

- Knowledge of a broad range of historical events and trends
- Understanding of how historians study the past
- Knowledge of how political, social, economic, and cultural changes
- Understanding of the relationship between history and current events
- Oral and written communication - communicate through writing and present research to a group
- Analytical skills - make judgments based on available historical evidence
- Research skills - appreciate the importance of accuracy and authority of sources
- Analyze data - analyze texts and historical arguments
- Problem-solving - develop systematic procedures for investigating a problem
- Resources and time management

List of skills gained in the specific major

Summary of in-demand skills

65K+
Views in the first year

95%
Of surveyed students agreed that the maps help them understand the skills and careers associated with programs

89%
Of surveyed students agreed that the major maps help them be more aware of experiential learning opportunities

Incentives Encourage Student Action on Major Map Recommendations

My Major Map History, Year 2

**Courses**
- History 204 (EL)  
  20 Points

**Job Experience**
- Shadow a lawyer at the ACLU  
  10 Points

**Community**
- Judge high school poster fair  
  2 Points

**Global**
- Attend study abroad info session  
  2 Points

**Career Preparation**
- Attend interview prep session  
  2 Points

Experiential learning-designated course

Non-academic credit-bearing experience

Community event

Campus event

Activities and point values tracked in co-curricular transcript accessible through SIS

**Near- and Long-Term Incentives**

20+ points per term

- Priority registration
- Celebratory dinner
- Semester award

120+ points total

- Recognition at graduation
- Designation on transcript
- Special banquet

**Results**

1,143 Additional hours of student-initiated experiential learning projects in 2013-14

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1) Defined as a semester-long project initiated by students and consisting of both attendance at events and pre- and post-reflection.

Source: The University of Tennessee Chattanooga, “ThinkAchieve: Creating Connections,” [https://www.utc.edu/think-achieve](https://www.utc.edu/think-achieve); EAB interviews and analysis.
Practice 3: Proactive Major Alignment Pathing

Putting Career Exploration First, Not Last

Equip Advisors with Student Interest Data for Proactive Pathing

Pre-application Survey Links Personal Interests to Career Fields

Which of these activities interests you the most?
- Leading a team
- Managing a budget
- Designing a website

Management: 90%
Marketing: 75%
Education: 60%

Survey Results Enable Major Fit Discussions at Orientation

Good Major/Interest Fit
- Recommend courses
- Discuss co-curricular, experiential options

Major/Interest Mismatch
- Revisit major choice motivations
- Discuss alternatives
- Introduce academic support options

Bridging the Structural Divide

Three Steps Toward a Hybrid Advising Model

1. Co-locate
   - House advising alongside career counseling
   - Increased visibility and easier referrals

2. Collaborate
   - Share student records and case notes
   - Use common protocols and programing

3. Merge
   - Cross-train intake advising staff in academic and career support
   - “One-stop shop” for students

Not always co-located

Practice 5: Industry-Based Career Coaches

Providing Industry-Specific Guidance

George Mason University’s Industry Advisor Model

1) Employer Focus
- Role includes relationship-building with local employers
- Coordinates campus visits and events

2) Industry Experience
- Several have previous entry-level HR experience
- Familiar with hiring practices and industry trends

3) Student Preparation
- Works with students interested in specific industries
- Helps students tailor job search to industry norms

John Connington
Manager, Industry Advising and Employer Development

- Consulting
- Consumer products
- Finance
- Real estate
- Retail
- Health care
- Sciences
- Construction
- Engineering
- Technology
- Transportation
- Criminal justice
- Government
- Law
- Education
- Hospitality
- Tourism
- Human services
- Nonprofit
- Sports
- Recreation
- Advertising
- Arts
- Entertainment
- Marketing
- Media
- PR

# Exploring by Doing

**Early Opportunities for Application Allow Students to Test Long-Term Goals**

## A Brief Glimpse

**Typical:**
Class field trip to a company or research laboratory

## Structured Exploration

**Typical:**
Lunch with alumni or departmental panel session

## Intensive Experience

**Typical:**
Traditional internship—but not until third or fourth year

### Best Practice:

**“Scientist for a day”: Hands-on field experience**

**Externship Program**
- Off-campus job shadow
- Students typically complete during first-year spring break

**Internship 100**
- 120-hour, 2-credit internship during January of first year
- Prep course covers professionalism and intern expectations

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Scaling Experiential Learning Opportunities to Underserved Populations

4. Expand Faculty Engagement with Experiential Learning

5. Lower Access Barriers to Applied Learning Outside the Classroom

Profiled Practices:

7: Experience-Spanning Reflection Exercises

8: Thematic Core Curriculum Pathways

9: Vocational Alignment Capstone

10: Syllabus Competency Matching

11: Student-Facing Reflection Tools
‘Tell Me Why You’re Qualified’

Students Struggle to Articulate Applicability of Academic Experiences

- Experiential Learning
  - “I spent a semester in Paris. It was fun!”

- General Education
  - “I completed my core courses.”

- Individual Courses
  - “I got an A in chemistry.”

- College Degree
  - “I have a bachelor’s degree.”
Practice 7: Experience-Spanning Reflection Exercises

When Preparation Meets Opportunity

Three Ways to Add Academic Rigor to Co-curricular Experiences

<table>
<thead>
<tr>
<th>Before Experience</th>
<th>During Experience</th>
<th>After Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical practice</td>
<td>Best practice</td>
<td></td>
</tr>
<tr>
<td>No preparation, or basic orientation covering logistics</td>
<td>Online “mini-MOOC” focused on NACE(^1) competencies</td>
<td>Students complete guided inquiries with faculty advisor throughout co-op</td>
</tr>
<tr>
<td></td>
<td>Pre-internship career workshop series</td>
<td>Students take an online portfolio development course concurrent with co-op</td>
</tr>
<tr>
<td></td>
<td>Co-op prep course on professional skills</td>
<td>Faculty engage in site visits with community partners</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Students complete assessment with employers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Co-op employers evaluate student self-reflection pieces</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post-work learning outcomes discussion with co-op employer</td>
</tr>
</tbody>
</table>


1) National Association of Colleges and Employers.
Experiential Learning Reflection Toolkit

(Forthcoming Resource)

Exercises to help students translate their curricular and co-curricular experiences into skills and career-oriented competencies

- Learning assessment rubrics
- Work experience reflection templates
- In-course evaluation surveys

Example resource: Student learning outcomes assessment rubric (George Mason University Students as Scholars program)

Source: George Mason University, “Students as Scholars,” http://oscar.gmu.edu; EAB interviews and analysis.
### Building a Narrative Around General Education

**From Mere Exposure to Meaningful Experience**

"I want a college degree so that one day I can work to solve environmental sustainability problems and help people in developing countries get clean water."

#### Typical Practice

<table>
<thead>
<tr>
<th>Transcript</th>
</tr>
</thead>
<tbody>
<tr>
<td>- English Composition</td>
</tr>
<tr>
<td>- General Chemistry</td>
</tr>
<tr>
<td>- Biology of Sustainability</td>
</tr>
<tr>
<td>- Intro. to Anthropology</td>
</tr>
<tr>
<td>- Environmental Studies 1</td>
</tr>
</tbody>
</table>

"I took some courses in different topics and learned about the majors I could study."

#### General Education Themes

<table>
<thead>
<tr>
<th>Transcript</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Scientific Journalism</td>
</tr>
<tr>
<td>- Water Chemistry</td>
</tr>
<tr>
<td>- Biology of Sustainability</td>
</tr>
<tr>
<td>- Natural Resources in Society</td>
</tr>
</tbody>
</table>

**Theme:** Sustainability

"I learned how I can combine skills across disciplines to research solutions to global resource shortages."

#### Experiential Pathways

<table>
<thead>
<tr>
<th>Transcript</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Scientific Journalism</td>
</tr>
<tr>
<td>- Water Chemistry</td>
</tr>
<tr>
<td>- Biology of Sustainability</td>
</tr>
<tr>
<td>- Natural Resources in Society</td>
</tr>
<tr>
<td>- Environmental Internship at Water for People</td>
</tr>
</tbody>
</table>

"I did research during my internship that put my knowledge into action, and tested a new water purification method."

ME104B – Designing Your Life

- Launched in spring 2010
- Uses design thinking to help students reflect on their time at Stanford and plan their “Odyssey Years”: the 3-5 years following graduation
- 2 units
- Pass/fail
- 10 weeks
- Open to juniors and seniors
- Taught by faculty from the School of Design

Designing the Professional

Stanford offers a similar course for graduate students which incorporates both academic and non-academic opportunities into “Odyssey Years” planning exercises.

50%

Of Stanford undergraduates enroll in the course

Practice 10: Syllabus Competency Matching

A Light (but Critical) Lift for Faculty

Identify Transferable Skills in Existing Curricula

Sample Syllabus – English 111

**Presentation – 30%**
*Students will form groups and present on a course topic.*

- Portfolio – 30%
  *Students keep a journal to record reading, reflections, and experiences.*

- Class Participation – 10%
  *Students are expected to attend, be prepared, and actively participate.*

- Final Exam – 25%
  *Written exam taken in class at the end of the semester.*

**Competencies Developed by Deans, Faculty, and Administrators**

- Working within the dynamic of a group
- Research skills
- Oral presentation skills
- Leadership skills
- Ability to work within a set time frame
- Critical-thinking skills

No course redesign necessary; faculty map existing lessons to professional competencies

Memorial U found that employers were more likely to interview students who discuss coursework in terms of *competencies* than subject matter or academic field
# Practice 11: Student-Facing Reflection Tools

## Constructive, but Not Disruptive

New Credentialing Tools Best Leveraged to Inform, Not Replace Resumes

### Student Activities, Experiential Learning, and Coursework

<table>
<thead>
<tr>
<th>Co-curricular Transcript</th>
<th>E-Portfolio</th>
<th>Badges</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Records participation in co-curricular activities</td>
<td>• Repository of student coursework and projects</td>
<td>• Visual representation of verified mastery of skills</td>
</tr>
<tr>
<td>• Maps activities to types of experiential learning (e.g., service learning)</td>
<td>• Student-facing portfolio includes reflection piece for each artifact</td>
<td>• Two applications: one sets up challenges to earn badges, one allows faculty to create badges</td>
</tr>
<tr>
<td>• Memory aid for students in writing resumes</td>
<td>• Links coursework to specific professional competencies</td>
<td>• Platform to display app’s and Mozilla’s badges</td>
</tr>
</tbody>
</table>

73% of HR managers unfamiliar with e-portfolios; 93% want to see student’s resume

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1) According to 2008 survey of 600+ employers.

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# Data Speaks Louder Than Words

People Analytics Threaten to Disrupt Traditional Job Seeking

## The Status Quo

### Keyword Resume Screening
Software sorts resumes based alignment between competencies listed in both the resumes and the job listing.

Qualified applicants who fail to clearly articulate competences on their resumes will be sorted as underqualified.

## A Fast-Emerging Approach

### Gamified Skills Assessments
Online modules test both technical and soft skills through a series of games and traditional tests.

Applicants without traditional degree-based credentials can outperform graduates if these graduates struggle to apply their training beyond the classroom.

## On the Horizon

### Predictive Trajectory Matching
Longitudinal analysis identifies characteristics associated with the most successful employees.

The digital footprint of a specific degree, program, or co-curricular activity will need to demonstrate a measurable link to career success for employers.

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4. Expand Faculty Engagement with Experiential Learning

5. Lower Access Barriers to Applied Learning Outside the Classroom

Profiled Practices:


13: Embedded Professional Tracks

14: Problem-Based Experiential Fellowships

15: Applied Degree Core
Many Graduates Lack Broad Pre-professional and Technical Competencies

Students struggle to articulate basic professional skills all employers look for:

- **Boundary-Crossing Competencies**
  - Teamwork, communication, global perspective, etc.

Many Disciplines

- Developed through gen ed requirements

Many Systems

- Developed through major(s) and minor(s)
- Developed in some pre-professional programs (computer science, etc.)

Deep in at Least One Discipline

- Students lack opportunities to develop broad technical skills

Multiple Barriers Keep Liberal Arts Students from Career-Oriented Minors

- Design
  - Courses have limited capacity
- Engineering
  - Requires fulfillment of prerequisites
- Business
  - Students unaware of minor option
  - Low level of student interest
- Liberal Arts Major
- Data Analytics
  - Students unaware of minor option
- Engineering
  - Requires fulfillment of prerequisites
- Law
  - Different course scheduling systems

Source: EAB interviews and analysis.
Meeting the Liberal Arts Halfway

Mount Holyoke’s Nexus Program

Professionally Oriented Tracks Supplement Liberal Arts

- Focused on emerging fields:
  - Development studies
  - Engineering
  - Global business
  - Nonprofit organizations
  - Data science
  - Educational policy and practice
  - Law, public policy, and human rights
- Prepare students for internships, research projects, careers
- Tracks run by interdepartmental faculty advisory groups or rotating chairs

<table>
<thead>
<tr>
<th>Pre-experience Programming</th>
<th>Preselected course options tailored to track</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Academic Courses</td>
<td>Related internship, research project, or summer job</td>
</tr>
<tr>
<td>Practical Experience</td>
<td></td>
</tr>
<tr>
<td>Curriculum-to-Career Course</td>
<td></td>
</tr>
<tr>
<td>Presentation on Experience</td>
<td></td>
</tr>
</tbody>
</table>

9 Nexus tracks available

100 Students declared a track in 2015

Source: Mount Holyoke, “Nexus: Curriculum to Career,” [www.mtholyoke.edu/acad/nexus](http://www.mtholyoke.edu/acad/nexus); EAB interviews and analysis.
The ‘Bachelor of Innovation’ (BI) Program

Inside the U of Colorado – Colorado Springs’ New Degree Model

The BI degree type leaves the traditional academic major untouched.

<table>
<thead>
<tr>
<th>BA/BS</th>
<th>BI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compass Curriculum</td>
<td>Cross-Discipline Core</td>
</tr>
<tr>
<td>Electives</td>
<td>Innovation Core</td>
</tr>
<tr>
<td>College Area Requirements</td>
<td>Compass Curriculum</td>
</tr>
<tr>
<td>College Area Requirements</td>
<td>Electives</td>
</tr>
<tr>
<td>Major</td>
<td>Major</td>
</tr>
</tbody>
</table>

BI students take 15 credits in a complementary discipline.

24-credit sequence teaches boundary-crossing competences.

Sample BI Programs

- Computer Science
- Electrical Engineering
- Early Childhood Education
- Business Administration
- Computer Security
- Game Design and Development
- Chemistry
- Communications
- Visual and Performing Arts
- Women’s and Ethnic Studies

Surprisingly Broad Uptake

BI Enrollment Growing Far Beyond Initial Projections

Sample BI Courses

**Introduction to Entrepreneurship**

Designed to provide an introduction to the process of turning an idea into a successful start-up business

**Innovation Teams**

A 3-course sequence where students at different levels work in multidisciplinary teams on real projects for external clients

**Entrepreneurship and Strategy**

Bachelor of Innovation capstone course. Teams are coached in the creation of a business or the implementation of an innovation

**Students Enrolled in the Bachelors of Innovation**

<table>
<thead>
<tr>
<th>Year</th>
<th>2012-13</th>
<th>2013-14</th>
<th>2014-15</th>
<th>2015-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollment</td>
<td>134</td>
<td>183</td>
<td>270</td>
<td>384</td>
</tr>
</tbody>
</table>

Initial estimate of max program enrollment was 180 students

Source: University of Colorado Colorado Springs, “Innovation Core,” [http://innovation.uccs.edu/innocore](http://innovation.uccs.edu/innocore); EAB interviews and analysis.
Integrating Academic and Career Development

Strategies to Scale Experiential Learning and Reflection Across the Curriculum

Enhancing the Market Value of the College Experience

1. Equip Students to Proactively Align Curricular and Co-curricular Plans with Personal Goals

2. Encourage Ongoing Reflection and Narration

3. Augment the Core Curriculum to Address Skill and Experience Gaps

Scaling Experiential Learning Opportunities to Underserved Populations

4. Expand Faculty Engagement with Experiential Learning

5. Lower Access Barriers to Applied Learning Outside the Classroom

Profiled Practices:

16: Cohort-Based Faculty Fellowship

17: Community Partnership Liaisons

18: Central Support Portal
Focus Faculty Engagement on Existing Academic Priorities

Experiential Learning

“I don’t coordinate internships.”

Global Engagement

“My students will change the world.”

Undergraduate Research

“We’re building students’ skills to solve the problems of tomorrow.”

Community Service Learning

“We need to help live the mission of the institution beyond the classroom.”

Leadership and Civic Engagement

“We are responsible for preparing the citizens and leaders of tomorrow.”

Innovation and Entrepreneurship

“Our students need the skills to drive the economy of the future.”

Source: EAB interviews and analysis.
Encourage Faculty Participation Through Recognition and Ongoing Support

**University of Alabama – Birmingham Faculty Fellowship**

**Faculty Apply**
- Scoring process promotes multidisciplinarity
- Faculty asked to recommend colleagues new to service learning

**Trained and Mentored**
- Discussion seminar once a month for a year
- Each faculty member meets with mentor throughout program

**Become a Mentor**
- Faculty participants present to home departments
- Some return as panelists or mentors

**Accepted, Given Grant**
- Can use grant for teaching and research materials, travel, support staff

**Teach**
- Teach newly developed or revised course

**10-12**
Faculty accepted each year

**$1,500**
Grant awarded to each participant

**70**
High-demand courses developed or redesigned

Source: EAB interviews and analysis.
Practice 17: Community Partnership Liaisons

Matching Faculty to Community Partners

Dedicated Administrative Staff Streamline Partnership Building

Barriers to Partnership

Faculty Member

“Where would I even start to look for a community partner?”

Community Partner

“I used to host lots of students, but my contact at the university left years ago.”

University Sees Gains in Community Partners

Number of Partnerships

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-2012</td>
<td>183</td>
</tr>
<tr>
<td>2014-2015</td>
<td>350</td>
</tr>
</tbody>
</table>

Center for Ethics and Social Responsibility

- 5-6 staff members oversee database that enables communication between stakeholders (students, faculty, partners, staff)
- Use database to match faculty with community partners
- Help faculty find funding sources

Source: Black, S, "Building a Service-Learning Culture," Center for Ethics and Social Responsibility, University of Alabama, 2016, cesr.ua.edu; EAB interviews and analysis.
Easing the Logistical Burden

York University’s Experiential Education Toolbox

**Experiential Education Toolbox**

Experiential Education (EE) is a pedagogical approach that affords students the opportunity to apply theory to a concrete experience in a manner that advances the learning objectives of a course or program.

- **Course Focused Experiential Education**

**Reflective Learning Activities**

Students apply theory and course content to concrete experiences that encourage reflection and conceptualization.

- **Community Focused Experiential Education**

**Community Based Learning (CBL)**

Community partners are invited into the classroom to present pre-defined problems, questions or issues to be explored and analyzed.

- **Community Based Research (CBR)**

Students work on a research project that has been developed through collaboration between a community partner and a researcher.

**A Comprehensive Resource**

Covers every supported experiential learning activity

- Reflective Learning
- Community-Based Learning
- Community-Based Research
- Community Service Learning
- Student Work
- Internships
- Co-Ops

**Clarifying Logistical Requirements**

Each activity includes links to forms, rules, and information to reduce faculty legwork.

Integrating Academic and Career Development

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Profiled Practices:

19: Student-Run Consulting Services

20: Online Mini-internship Crowdsourcing

21: On-Campus Partner Satellite Space

22: Student Worker Professional Development

23: On-Campus Internship

24: Enterprise Co-Op Programs

25: Interdisciplinary Project Incubator

26: Career Readiness Bridge Program
An Uneven Playing Field

Abundant Challenges to Engaging All Students in Experiential Learning

**Insufficient Local Capacity**

*Few Community Partners in Immediate Area*

- Economics major wants to work in finance but her institution is located in a rural area with few potential finance partners

**Resource Constraints**

*Students Lack Time and/or Funds to Take Part*

- Sophomore with full course load cannot leave campus to work at a part-time, unpaid internship

**Risk Aversion**

*Entrepreneurship Requires Significant Personal Investment*

- Potential Mark Zuckerberg has a brilliant start-up idea but too much existing debt to finance a new business

**Lack of Network**

*URM and First-Gen Students Have Fewer Industry Contacts*

- First-generation student wants an internship in sports medicine but has no existing personal connections to the field

**Reputational Risk**

*Experience Necessary to Represent the University Well*

- Junior unprepared to work in an office environment could risk new relationship with a local employer

Source: EAB interviews and analysis.
Lowering the Lift for External Partners

Augustana College’s EDGE Center

**Augustana College**
A private not-for-profit institution of ≈2,500 students; located in a small city, Rock Island, IL

**Program Beginnings**
A student group begins to provide web design services to the community; the career center adopts the program and locates additional support through small grants

**Student Type**
Students from any major may join the program regardless of prior skill set; previous presidents have been biology and philosophy majors

**The EDGE Center**

- **220**
- Local employers using EDGE services
  - Offer web-design, e-commerce, public relations, and creative services
  - Clients pay a small fee that supports program overhead
  - All skills necessary for client projects (e.g., web development, Photoshop, coding) are taught by faculty experts

**Impact Highlights**
"Our goal is to turn as many students as possible into ‘dual threats’—employees who can work on both the design and coding aspects of web development."

- All students develop a portfolio of their web and graphic design projects

**Sample Clients**

Source: National Girls Collaborative Project; Augustana College, “Entrepreneurial Center (EDGE),” [https://www.augustana.edu/academics/core/entrepreneurial-center](https://www.augustana.edu/academics/core/entrepreneurial-center); EAB interviews and analysis.
Practice 20: Online Mini-Internship Crowdsourcing

An Opportunity for Exponential Scalability

UVA Professor Leverages Partnerships to Match Students and Partners

Digital Internships: Crowdsourcing Employer Problems to Learners

Intern from a Distance:
Undergraduates and mid-career professionals seeking resume experience during MOOC

1. Select a learning module on a specific workplace skill (e.g., Determining Competitive Positioning)
2. Pair with an optional, real-world project on that workplace skill (e.g., develop a competitive analysis)

Meeting Them Where You Are

U of Cincinnati Rents Campus Office Space to Partner Organization

University of Cincinnati

- Demand for internships is greater than supply
- Students cannot access internships due to full course schedule
- Students lack mode of transport to downtown businesses

Cincinnati Insurance

- Demand for local UC students as part-time workers
- Seeking pipeline for better trained entry-level, full-time staff

Cincinnati Insurance Rents Space On-Campus to Access Students

- On-campus space allows students to work flexible, drop-in hours
- Students receive full-time training over the summer and work 20 hours per week during the school year
- Cincinnati Insurance hired 5-6 of their first 20 interns post-graduation

Enriching Part-Time Work

Turning Jobs of Necessity into Valuable Opportunities

Establish Division-Wide Learning Outcomes
To improve productivity and engagement, determine list of nine skills all student jobs should teach.

Pilot Supervisors Submit Job Descriptions
Supervisors in pilot offices send job descriptions to a dedicated career services staff member.

Job Duties Reviewed Against Outcomes
Staff member ensures all nine skills are represented or suggests additional responsibilities.

Division-Wide Expansion
Gradually expand the program to include all student on-campus jobs.

Setting the Tone for Learning
“...This whole system is designed to help students understand that their on-campus job—even with occasional mundanity—is actually directly related to their employability after graduation. The learning domains, and this exercise, help students practice articulating their skills to prospective employers.”

John Austin, Executive Director of Student Affairs
Ryerson University

Source: EAB interviews and analysis.
The University as Employer

Western Oregon University (WOU) Community Internship Program

Typical Internship Components Also Exist on Campus

- Position within a functioning business
- Reporting line to a professional with expertise in the field
- Assignments target field-specific learning outcomes
- Skills developed are transferable to other organizations or companies
- Access to resources and facilities necessary for learning outcomes

WOU Registrar Data Analyst Internship Proposal

Purpose of the Internship: To support the function of the Office of the Registrar in the area of catalog curriculum.

Learning Objectives: Gain a strong understanding of how a large scale database works, the interrelated tables, and the importance of quality and complete data in such a system.

Responsibilities: Analyzing data, recommending actions, and inputting complete, accurate data into the Banner student information system. The intern will have set up the system so that we can port curricular data and html tags from the Banner database to webpages and printed materials.

Department Provides Interns, Career Development Provides the Funds

32

Number of internships developed on campus

$1,000

Interns are paid $10/hour, 10 hours/week for 10 weeks

Internship Applicants Receive Career Development Regardless of Outcome

WOU Community Internship Application Process

All applicants must complete a professional skills and internship prep workshop

Applicants encouraged to complete a resume review with career services

Every applicant is guaranteed a first-round interview with career services

Rejected applicants can reapply in the next semester with a stronger application

32 Students received on-campus internships in 2016

110 Students received career development as part of this program in 2016

Final offer made by host unit

Source: EAB interviews and analysis.
### Enterprise Co-Op Timeline

1. **Student from any major develops a business idea and applies**

2. **Choose or be matched with a faculty or professional mentor; develop learning outcomes for the semester**

3. **Enroll in optional course, Foundations of Venture Creation, to supplement mentor guidance**

4. **Apply for grant funding or accelerator programs**

5. **Evaluated on elements like leadership, problem solving, organization, communication**

6. **Enroll in optional follow-up courses (e.g., Growing Early-Stage Ventures)**

### Enhances Entrepreneurship with Learning

- **Accountability for learning outcomes**
- **Simultaneous course focuses learning and entrepreneurial activity**
- **Dedicated expert mentor**

### The Myth of the Millennial Entrepreneur

“There is also some evidence that young people’s appetite for risk-taking has declined at the same time that their student debt has grown. **More than 40% of 25- to 34-year old Americans said a fear of failure kept them from starting a company in 2014; in 2001, just 24% said so.**”

*Derek Thompson, The Atlantic*

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Hamilton College’s “First Year Forward” (FYF) Program

Year-Long Career Development Initiative

1. Students selected in first year to participate based on financial need and first-generation college student status

2. Students complete self-assessment and career exploration

3. Students attend monthly group sessions on professional development topics

4. Students complete three informational interviews over winter break

5. Students participate in four individual appointments with career counselors or peer advisors

6. Students who complete academic year components participate in career-related summer experience

Source: EAB interviews and analysis.
“The unemployment rates of black and Hispanic college graduates remain much more elevated than those of whites. This suggests other factors may be in play, such as discrimination or unequal access to the informal professional networks that often lead to job opportunities.”

The Class of 2015, Economic Policy Institute

1. Moving Beyond the Either/Or Debate Surrounding Career Preparation

2. Best Practices in Integrating Academic and Career Development

3. Preview of Full Report and Additional Resources
More Practices and Resources in Our Full Report

Addressing the Full Scope of Career Development Strategy

29 Best Practices for Integrating Academic and Career Development

7 Additional Practices Focusing on Career Development for Graduate Students

Implementation Resources

• Experiential Learning Reflection Templates
• Experiential Learning Impact Analyses
• Faculty Support Resource Center
• Vendor and Career Services Platform Summary
Integrating Academic and Career Development

Strategies to Scale Experiential Learning and Reflection Across the Curriculum