The Recentered Curriculum in the De-centered University

Project-based Learning Institute

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Georgetown University
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The future of higher education, and indeed the very survival of your institutions, entirely pivots on what you will be doing the next three days.
INTRODUCING OUR CURRICULAR EXPERIMENTS
Provost Robert Groves announces the first set of curricular experiments that Georgetown will develop for the Future(s) initiative.

Yes. A University can reinvent itself.
If we were designing the university for this moment in history what would it look like?

*The Design Question*
In the new landscape, there are only two dimensions of education that will be unique to universities in 2025, 2030....

Mentored learning

The arc of learning
President Obama vowed Wednesday that he would soon unveil a plan to promote significant reform in higher education -- with an emphasis on controlling what colleges charge students and families.
Learning Analytics:

Personalization of instruction...through data...at scale
Purdue-Gallop Poll on Engaged Work and Flourishing

Two most important predictors of success:

1) Adult mentor who cared about you
2) Sustained project

The Undergraduate Experience: Support and Experiential and Deep Learning

<table>
<thead>
<tr>
<th>Support</th>
<th>% Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I had at least one professor at [College] who made me excited about learning.</td>
<td>62%</td>
</tr>
<tr>
<td>My professors at [College] cared about me as a person.</td>
<td>27%</td>
</tr>
<tr>
<td>I had a mentor who encouraged me to pursue my goals and dreams.</td>
<td>22%</td>
</tr>
<tr>
<td>Strongly agree with all three support statements</td>
<td>34%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Experiential</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I worked on a project that took a semester or more to complete.</td>
<td>32%</td>
</tr>
<tr>
<td>I had an internship or job that allowed me to apply what I was learning in the classroom.</td>
<td>29%</td>
</tr>
<tr>
<td>I was extremely active in extracurricular activities and organizations while attending [College].</td>
<td>20%</td>
</tr>
<tr>
<td>Strongly agree with all three experiential statements</td>
<td>60%</td>
</tr>
<tr>
<td>Strongly agree with all six statements</td>
<td>33%</td>
</tr>
</tbody>
</table>

Based on Web surveys of nearly 30,000 college graduates with Internet access from Feb. 4–March 7, 2014. Gallop-Purdue Index.

Life in College Matters for Life After College

New Gallup-Purdue study looks at links among college, work, and well-being

by Julie Ray and Stephanie Kafka

WASHINGTON, D.C. -- When it comes to being engaged at work and experiencing high well-being after graduation, a new Gallup-Purdue University study of college graduates shows that the type of institution they attended matters less than what they experienced there. Yet, just 3% of all the graduates studied had the types of experiences in college that Gallup finds strongly relate to great jobs and great lives afterward.
Changing Capacities and Outcomes for the 21st C

“The human labor market will center on three kinds of work:
solving unstructured problems,
working with new information (including complex communication),
and carrying out non-routine manual tasks.”
More and more people in education agree on the importance of learning stuff other than academics.

But no one agrees on what to call that "stuff".
In the new landscape, there are only two dimensions of education that will be unique to universities in 2025, 2030....

*Mentored learning*

*The arc of learning*
The Re-centered Curriculum
High impact integrative curriculum

Formal undergraduate curriculum

Experiential co-curriculum

Massive Online

Blended interactive online

Engaging Difference
Ethical Judgment
Self-Reflection
Practitioner education, leadership

Foundational Knowledge
Some generic and interchangeable expertise
Some institutionally-distinctive expertise

Institutional Brand and Identity

Local and Identity
Jesuit and Catholic Mentor-based tradition
Residential, Diverse
Where are the high-impact practices located?

Formal undergraduate curriculum

Experiential co-curriculum

Experiential co-curriculum

Experiential co-curriculum

Student Affairs Advising

Internships

Undergraduate research

First-year Seminars

Collaborative Assignments

Writing-intensive Capstone courses

Community-based learning

Study abroad

Internships

Experiential co-curriculum
What makes High Impact Practices high impact?

- Invest time and effort (time on task)
- Accountable talk and thinking
- Get (and give) frequent and meaningful feedback
- Make daily decisions – judgment in uncertainty
- Meet challenges to perspectives and belief, take risks, operate outside comfort zone
  - Opportunity to integrate, synthesize, make meaning

**NEW ECOLOGY FOR LEARNING**
Formation and the future recentered Curriculum

**Foundational Knowledge**
- Some generic and interchangeable
- Some institutionally-distinctive expertise

**Self-authorship**
Students learn on an arc that moves them **inward and outward**

**High impact integrative curriculum**

**Contribution to a knowledge community**
- Unstructured complex problems
- Authentic work
- Interdisciplinary Inquiry
- Social learning

**Reflection and sense-making**
- Opportunities for integrating theory and practice, connecting disparate learning experiences

**HOW DO WE DESIGN FOR THIS CENTER?**

**Local and Identity-specific**
- Urban setting
- Community-based
- Mentor-based
- Residential, Diverse
Design Principles for project-based learning in the Recentered Curriculum

(1) Integration from the inside out.
New paradigm for higher education?

The white space of ... formation, transformation and whole student development
Design Principles for project-based learning in the Recentered Curriculum

(1) Integration from the inside out.

(1) Put granular designs in service to the integrative
The great tension of our time in education is between integration and dis-integration.
The split logic of the learning paradigm

Disintegrative:
- Design of discrete or granular learning experiences
- Competency-based learning
- Learning decoupled from formal boundaries
- Analytics that track narrow or micro learning

Integrative (holistic, coherent):
- Design of whole learning experiences
- Curricular and co-curricular Competencies conceived as part of a whole
- Connections & integration
Course Features

ENACTING LEARNING
Our courses proactively engage students to put new knowledge into practice and to assess their own progress. Activities and assessments embedded throughout the content help to ensure that students understand concepts rather than only memorize facts.

Features for Students
In addition to high-quality text, our courses also include practice activities, self-assessments, and graded assessments. All course content is included and structured to support the student's achievement of clearly defined learning objectives.

OPENNESS + ANALYTICS
The infinite variety that OERs provide creates challenges for using learning analytics to drive adaptive teaching and learning, support iterative improvement and demonstrate effectiveness. OLI's John Rinderle and Norman Bier discuss this topic at the Open Education 2011 conference.

UX + INSTRUCTIONAL DESIGN
15-week Traditional Statistics Course

8-9 weeks with OLI materials + Professor

Remaining 5-6 weeks

Applied projects on student Interests

Advanced topics and problem-solving
Lay a foundation for project-based learning even in foundational courses.
The Drake Equation

Habitable Worlds is organized around the Drake equation, which estimates the number \( (N) \) of detectable extraterrestrial civilizations that might exist in our galaxy today.

Explore the equation:

\[
N = R^* \cdot f_p \cdot n_e \cdot f_l \cdot f_i \cdot f_c \cdot L
\]

JOIN THE QUEST TODAY!

I WANT TO LEARN  \hspace{1cm}  I WANT TO TEACH
Virtual Field Trips allow exploration of exotic settings and the science at work there.

Simulators – bring scientific concepts to life.

Social Networking gives students the power to help each other while building a help archive.

Intelligent Tutoring System gives instructor tutoring power to design, structure, and analyze "smart" lessons.

Developers:
Professor Ariel Anbar: anbar@asu.edu
Dr. Lev Horodyskyj: LevH@asu.edu
http://www.habworlds.org

Developed jointly with ASU Online, Mary Lou Fulton Teacher's College, College of Liberal Arts and Sciences, and the NASA Astrobiology Institute.
Design Principles for project-based learning in the Recentered Curriculum

(1) Integration from the inside out.

(1) Put granular designs in service to the integrative

(1) Create contexts for reflection and sense-making (social, communal)
Connect to Learning Project (23 U.S. institutions); Making Connections National Resource Center, LaGuardia Community College; Bret Eynon, Director
What Difference does ePortfolio Make?

C2L evidence supports 3 preliminary claims

Sophisticated ePortfolio initiatives:

1. Advance Student Learning & Success
2. Make Student Learning Visible
3. Catalyze Institutional Change
Claim #2: ePortfolio Initiatives
Make Student Learning Visible

ePortfolio initiatives support reflection, social pedagogy, and deep learning.

Helping students reflect on and connect their learning across academic and co-curricular learning experiences, sophisticated ePortfolio practices transform the student learning experience. Advancing higher order thinking and integrative learning, the connective ePortfolio helps students construct purposeful identities as learners.
<table>
<thead>
<tr>
<th>Building my ePortfolio</th>
<th>Agree/Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helped me make connections between ideas</td>
<td>75.6%</td>
</tr>
<tr>
<td>Helped me think more deeply about course content</td>
<td>64.4%</td>
</tr>
<tr>
<td>Allowed me to be more aware of my growth &amp; development as a learner</td>
<td>69.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>My (ePortfolio-enhanced) course engaged me in...</th>
<th>Quite a Bit/Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthesizing &amp; organizing ideas, information or experiences in new ways</td>
<td>83.1%</td>
</tr>
<tr>
<td>Applying theories or concepts to practical problems or in new situations</td>
<td>77.2%</td>
</tr>
<tr>
<td>My course contributed to my knowledge, skills and personal development in understanding myself</td>
<td>78.6%</td>
</tr>
</tbody>
</table>
Making Learning Visible to Others

ePortfolio as a Social Pedagogy

• Feedback, Peer Critiques
• External Audiences – Family, Professionals, Experts in the field
• Collaborating on Shared Projects
• Constructing Sustained Knowledge Communities

This student describes how she feels looking at the painting.

This student describes the painting’s formal qualities in comparison to more conventional art.

This student responds to the content of the painting and proposes a narrative.
Building my ePortfolio helped me to make connections between ideas...

% Agree/Strongly

Low Instructor Feedback: 37.6
High Instructor Feedback: 82.3
Low Student Feedback: 49.1
High Student Feedback: 89.2
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(1) Connect what has not been connected
Formation and the future recentered Curriculum

Self-authorship
Students learn on an arc that moves them inward and outward

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HOW DO WE DESIGN FOR THIS CENTER?

Formal learning

Informal learning
Problem Statement

FORMALIZED COURSE-BASED TEACHING IS FAILING TO MAKE LEARNING INTEGRATIVE AND HIGH-IMPACT.

PAY FOR AN EXPERIENCE, NOT DISPARATE KNOWLEDGE
WHAT IF GEORGETOWN COULD PROMOTE KNOWLEDGE SYNTHESIS THROUGH COLLABORATIVE PROJECTS FROM DAY 1 TO GRADUATION, INVOLVING STUDENTS, PROFESSORS, STAFF AND PRACTITIONERS?

SYSTEM FEATURES

IUGIS
UNLOCKING MECHANISM
SKILLS-BASED CORE
DASHBOARD
PORTFOLIO
iugi

Iugis are project families that reverse the course-centric learning model.
iugi taxonomy
pathfinder

[exploration] [elaboration] [integration]

vp dao | ryan giarusso | nandini mullaji | ben weiss
university as a design problem, may 2015
pathway as disjointed lines

pathway as narrative
**Formational education and the future recentered Curriculum**

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(1) Link high-impact on students to the impact the institution has on the world
Three interlocking and inseparable elements of the University:

• **Formation of men and women**

• **Knowledge-creation through scholarship and research**

• **Public Good and the Common Good**
Formation
(Whole Student)
Integration
Transformation
Thank You!

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