AGENDA (REVISED)

1. Call to order
   Professor David J. Williams

2. Approval of Minutes of 9 September 2013

3. Acceptance of Agenda

4. Remarks by the Provost
   President Timothy D. Sands

5. Remarks of the Chairperson
   Professor David J. Williams

6. Résumé of Items Under Consideration by Various Standing Committees
   For Information
   Professor David A. Sanders

7. Question Time

8. Senate Document 13-1 Clinical/Professional Faculty Appointment and Promotion
   For Action
   Professor A. Charlene Sullivan

9. Longer, healthier, happier, more productive lives
   For Information
   PRF President & Chief Entrepreneurial Officer Daniel Hasler

10. Student Growth Task Force Update and Recommendations
    For Information
    Vice Provost for Academic Affairs Dale Whittaker and Chair of Psychological Sciences Jeffrey Karpicke

11. New Business

12. Memorial Resolutions

13. Adjournment
The meeting was called to order at 2:35 p.m. by Chairperson David J. Williams.

The minutes of the 9 September 2013 Senate meeting were approved as distributed.

The agenda was accepted as distributed.

Provost Timothy D. Sands presented remarks to the Senate (see Appendix A).

Professor Williams presented the remarks of the Chairperson (see Appendix B).

Professor David A. Sanders presented the Résumé of Items under Consideration (ROI) by various standing committees (see Appendix C). Chairman of the University Resources Policy Committee Professor Richard Johnson-Sheehan briefly reported on the activities of his committee. He and Vice President Michael Cline entertained questions from the floor concerning the short- and long-term plans for bicycle use on the campus.

Provost Sands answered questions from the Senators.

Professor Charlene Sullivan noted the President’s proposal for enhancing scholarship funds and that some of the money was included in the General Fund. She asked what would happen in the future with money targeted for scholarships. Vice President Al Diaz said that the process would be left to the discretion of the President and he did not know if there would be any General Fund offsets. Currently there are $45 million in the
General Fund specifically for scholarships.

Professor Peter Hirst asked Professor Williams if there had been any progress towards adding a faculty member to the Board of Trustees. Professor Williams stated that he had sent a proposal to the President suggesting that the President, Board Chairman and the Governor work with the legislature to change the Indiana Code to that effect. However, since he submitted his original proposal he has submitted a second proposal that is he will describe at the November Senate meeting.

Professor Michael Hill asked Provost Sands for clarification of the phrase “student-centered learning.” Provost Sands said that this referred to learning as viewed from the student perspective. This allows us to better grasp how students learn and adjust our teaching methods accordingly to maximize their learning and understanding of the course materials. He said that today’s presentation by Vice Provost Whittaker and Professor Karpicke would provide more information about this concept.

Professor Raymond DeCarlo mentioned that students learn a great deal outside of the classroom. He asked: What is Purdue doing to facilitate outside-the-classroom learning? Provost Sands said that we currently have study abroad programs, internship arrangements and undergraduate research programs. Support of these programs will continue. In addition, he discussed the possibility of microcredentialing for learning done outside the classroom.

Professor Sullivan observed that the study abroad programs have become more centralized. How will these centralized programs interact with the college-level programs? According to Provost Sands, the centralized programs are not intended to replace college-level programs which will continue. In addition, Purdue is working with other universities to collaborate on such programs.

Professor Tom Templin asked: What is the status of the report prepared last year by the Promotion and Tenure (P & T) Task Force? Interim Vice Provost for Faculty Affairs Laurel Weldon stated that a first draft of the Task Force’s recommendations has been reviewed by various stakeholders and a revision is being prepared that takes into accounts changes made by the reviewers. For example, P & T policies that will be recommended for the West Lafayette campus will not necessarily work well at the regional campuses. The revised draft document should be available soon for wider review.

Professor Jennifer Dennis brought up the issues of online and distance learning. She asked: What is Purdue doing in these areas? Provost Sands mentioned several initiatives as well as areas we are not pursuing. Purdue is not making any concerted efforts to design MOOCs. It is the intent of the University to create online and distance learning courses and programs that will have comparable quality to the traditional classroom courses and programs. It has been noticed that on-campus students are taking more online courses which enhances the schedule flexibility available to these students. The University is restructuring the online infrastructure available for instruction. For example, PurdueNext is a set of “...online courses aimed at a global audience with video lectures, interactive visualizations, and tools for students to interact with their peers and the professor.” There are also collaborations among the West Lafayette and regional campuses such as the Doctor of Nursing Practice Program that utilizes online instruction as well as more traditional coursework.
Professor Sullivan mentioned the budget model of Responsibility Centered Management (RCM) and wondered if Purdue is considering using this model. Vice President Al Diaz said that discussions on the current and possible future budget models were ongoing. Professor Sullivan asked: What are the advantages to the RCM model? Vice President Diaz mentioned that many large institutions do not follow a strictly RCM model, but some variation on the theme. The intent for Purdue and other institutions is to use models that are efficient and that enhance revenues. Professor Sullivan asked: What are the downsides to the RCM model? Vice President Diaz stated that there are often unintended consequences such as the creation of “silos” among colleges/schools as they compete for limited funds. There can also be competition for students that bring in revenue which can have a negative overall impact.

Professor A. Charlene Sullivan, Chair of the Faculty Affairs Committee presented, for Action, *Senate Document 13-1Clinical/Professional Faculty Appointment and Promotion*. Her motion to approve the document was seconded.

Professor David Kemmerer asked if Clinical Faculty members were eligible for sabbatical leaves. At this time, they will not be eligible for sabbatical leaves. However, the issue of sabbatical and other leaves may be explored in the future.

A Senator asked: What is the process for creation of Clinical Faculty lines? Interim Vice Provost Weldon said that it is up to the faculties in the colleges to establish these positions. Data provided by Associate Vice Provost Steven Abel show that Purdue currently has 121 clinical-track faculty members which constitute 6.3% of the total tenure- and clinical-track faculty members. The current policy allows 10% clinical-track faculty University-wide and the proposed policy would increase that to 15% of the total clinical- and tenure-track faculty University-wide.

Professor Saugata Basu expressed the concern that clinical-track faculty could not meet the same standards of scholarly and professional accomplishments as tenure-track faculty. Professor Sullivan explained that this is not a tenure-related issue and these individuals can be promoted. Departments can define the requirements for promotion based on the guidelines in the revised policy. One must remember that it was never the intent of the policy that clinical-track faculty meet the same requirements as tenure-track faculty in order to rise through the ranks.

Professor Michael Hill said that the definitions in the policy are too loose and he envisions that one of the long-term effects will be to erode the concept of tenure. Professor Gary Lantz views things from a different perspective. The clinical-track faculty are essential to the success of the clinical work and research done for the Veterinary Hospital patients.

Provost Sands stated that there was no underlying intent to change the faculty mix moving towards an emphasis on hiring clinical-track faculty rather than tenure-track faculty.

Interim Vice Provost Weldon asked for advice from the Senators with respect to the Statewide Technology faculty members. It is not clear to her how the new policy will apply to these individuals and she would like input on this matter. The revised policy also clarifies what we are already doing at Purdue.
The discussion ended and the vote was taken. The motion to approve Senate Document 13-1 was passed with 47 Senators voting in favor, 20 Senator voting in opposition and 4 Senators abstaining from the vote.

9. PRF President and Chief Entrepreneurial Officer Daniel Hasler updated the Senate on the activities of his Office (see Appendix D).

10. Vice Provost for Academic Affairs Dale Whittaker and Chair of Psychological Sciences Jeffrey Karpicke updated the Senate on the activities of the Student Growth Task Force (see Appendix E).

11. Memorial resolutions had been received for Dr. Marvin Diskin, Professor Emeritus of Communication, Dr. Joseph Haberer, Professor Emeritus of Political Science and Emeritus Director of Jewish Studies Program, Dr. Jay O’Brien Continuing Lecturer of Anthropology. Out of respect for their departed colleagues, the Senators stood for a moment of silence.

12. The meeting adjourned at 4:45 p.m.
UNIVERSITY SENATE

A Mid-term Report

Tim Sands
Executive Vice President for Academic Affairs
and Provost

October 21, 2013
STUDENT SUCCESS

- IMPACT
- Digital technology
- Building summer
COLLABORATION SUCCESS

OFFICE OF THE PROVOST

CENTER FOR INSTRUCTIONAL EXCELLENCE

INFORMATION TECHNOLOGY AT PURDUE

EXTENDED CAMPUS

LIBRARIES

DISCOVERY LEARNING RESEARCH CENTER

FACULTY FELLOWS
Student-centered learning environment is associated with:

- Greater perceived competence
- Lower perceived doubt
- Higher academic performance and retention
<table>
<thead>
<tr>
<th><strong>CLASS STRUCTURE BEFORE IMPACT</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Traditional</strong></td>
</tr>
<tr>
<td>~400 students</td>
</tr>
<tr>
<td>T/Th lectures in large hall</td>
</tr>
<tr>
<td>with Ellen Gundlach</td>
</tr>
<tr>
<td>Passive Mon recitations</td>
</tr>
<tr>
<td>with TA recapping lectures.</td>
</tr>
</tbody>
</table>
# Class Structure After Impact

<table>
<thead>
<tr>
<th></th>
<th>Traditional</th>
<th>Supplemental</th>
<th>Fully Online</th>
<th>Hybrid</th>
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<tbody>
<tr>
<td>Number of Students</td>
<td>~350 students</td>
<td>80 students</td>
<td>60 students</td>
<td></td>
</tr>
<tr>
<td>Lecture Schedule</td>
<td>T/Th lectures in large hall with Ellen Gundlach</td>
<td></td>
<td>Everything (except exams) done online</td>
<td>Lectures watched online</td>
</tr>
<tr>
<td></td>
<td>Active Mon recitations with TA</td>
<td></td>
<td></td>
<td>Fri classes in Hicks room with Ellen Gundlach for group work</td>
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</table>
Exam Scores Increased After Redesign

Exam 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Tra...</th>
<th>On...</th>
<th>Hy...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2012</td>
<td>74</td>
<td>69.3</td>
<td>74.6</td>
</tr>
<tr>
<td>Fall 2012</td>
<td>81.9</td>
<td>76.9</td>
<td>79.2</td>
</tr>
<tr>
<td>Spring 2013</td>
<td>83.4</td>
<td>78.2</td>
<td></td>
</tr>
</tbody>
</table>

Exam 2

<table>
<thead>
<tr>
<th>Year</th>
<th>Tra...</th>
<th>On...</th>
<th>Hy...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2012</td>
<td>74</td>
<td>66.8</td>
<td>80.1</td>
</tr>
<tr>
<td>Fall 2012</td>
<td>85</td>
<td>77.5</td>
<td></td>
</tr>
<tr>
<td>Spring 2013</td>
<td>87.8</td>
<td>78.6</td>
<td>83.2</td>
</tr>
</tbody>
</table>
BIG DROP IN DFW RATE AFTER REDESIGN

% OF STUDENTS RECEIVING A D OR F OR WITHDRAWING FROM COURSE

<table>
<thead>
<tr>
<th>Year</th>
<th>DFW Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>33.9</td>
</tr>
<tr>
<td>2009</td>
<td>30.3</td>
</tr>
<tr>
<td>2010</td>
<td>29.2</td>
</tr>
<tr>
<td>2011</td>
<td>25.3</td>
</tr>
<tr>
<td>2012</td>
<td>14.6</td>
</tr>
</tbody>
</table>

After redesign
Participating in active community of teachers and support staff

More intentional in what/how they teach

Appreciate that students have more options for learning
  - Traditional
  - Online
  - Hybrid
“My course is more effective.”

“My students have a better learning experience.”

“I am excited about working with my students and continuing to develop my course.”

“My students learn from me, I learn from my students, my students learn from each other.”
2007 Cohort
  • 2 or more Signals courses
    – 6-yr. graduation rate up 21.48%
  • 1 Signals course
    – 6-yr. graduation rate up 20.87%

2008 Cohort
  • 2 or more Signals
    – 5-yr. graduation rate up 24.36%

Message: Taking more than one Signals-enabled course significantly increases retention and graduation for students.
• Signals can begin offering feedback as early as the second week of classes.
• New PassNote helps instructors write messages using text that research has shown are most effective.
• Currently more than 125 courses (many with multiple sessions) use Signals.
DIGITAL TECHNOLOGY
SUITE OF SUPPORT
8% growth in 2013 summer credit hours

Charge from Trustees: grow more, faster

Think Summer Sooner website: 250+ courses guaranteed for next 3 summers to help students plan.

Working with Housing for year-round contracts & summer meal plans

Building up campus activities
Summer Credit Hours

Grad/Prof  Ugrad Campus  Ugrad Dist

1 All Credit hours except for study abroad and research
• Student success remains among our highest priorities.
• Appreciate your continued support and endorsement.
• Encourage your colleagues to investigate and ask for assistance when unclear.
UNIVERSITY SENATE

A Mid-term Report

Tim Sands
Executive Vice President for Academic Affairs and Provost

October 21, 2013
Welcome to the second meeting of the University Senate for the 2013-2014 academic year. Since our first meeting in September the University has identified funding for increasing our study abroad opportunities, an area where we lag behind our contemporaries. We have increased scholarships. Patty Hart, our Vice Chair, recently worked with Amy Noah, the Interim Vice President for Development, and learned for the first quarter of the 2013-2014 school year, there were a record number of gifts that came into the University in the form of scholarships and student support monies. In the first quarter, Purdue took in more than twice the amount in scholarship money than in the first quarter of last year, four times as much as 2010 and 2011, and $7,000 more than the highest previous year. Development reports things are even better this quarter.

Tuition remains frozen, and thanks to the largesse of a private donor, and matching University funds, $6 Million was given to the History Department for two chairs in the history of medicine and technology. President Daniels has unveiled his first ten initiatives to move Purdue forward, with more coming. Think groups all over campus are working on other ideas for the University’s future, and we will hear from one, the Student Intellectual Growth Task Force, later in the meeting. This is an exciting time for Purdue.

There has been considerable progress on the desire to see Purdue develop a comprehensive, centralized English language program for our international students. This has generated considerable discussion on campus, with the group growing to over 40, including people from all over the University who have tried to deal with this issue for years. This is not necessarily a negative as long as the final outcome is a big one, and not a band aid approach. I sense President Daniels is eager to put Purdue resources into this soon, and I have been assured a detailed report with recommendations will be in his hands next month.

Just prior to this University Senate session, the Academic Progress and Records Committee met to consider revisions to the Scholastic Deficiency and Drop Policy, also known as the 2.0 Rule. As you may recall, the Senate considered this policy last semester. Because the policy is related to the student transcript and because each student in the Purdue system has one transcript, the policy affected all Purdue campuses. The policy, as originally written, was well suited for a campus where almost all of the students are full-time, but it did not work well for campuses where a large portion of the students are part-time, which is the case at our regional campuses. The Academic Progress and Records Committee has now received input from the regional campuses and from the Intercampus Faculty Council (IFC) and is revising the proposed policy.

The process of developing this policy would have been much more efficient if we had considered the impact on all Purdue campuses from the beginning. Fortunately, the University has in place a group charged with "coordination of legislative and policy making actions of the various faculty governing bodies". Those words are from the University Code, Section C, entitled Intercampus Faculty Council. Before the next University Senate meeting, I will work with my colleagues, Paul Robinson, Past Chair of the University Senate and this year's convener of the Intercampus Faculty Council, and Audeen Fentiman, Special Assistant to the President working with regional campuses, to outline the process by
which we can ensure that the interests of all affected Purdue campuses are considered when the University Senate begins to develop new policies or procedures.

Charlene Sullivan, chair of the Faculty Affairs Committee, will present Senate Document 13-1 for further discussion and endorsement at this meeting. I have received many questions about this particular document and the process, so I want to remind you the Senate is advisory in all matters except those related to the curricula, degrees, athletic affairs and the calendar. This is in the University Code. In Professor Camp’s words, “the administration can do what they please in most matters, but this is not wise as shared governance should be practiced.” If you look at Section A of the University Code, specifically A 4.05, you will see that parts c, d, e, and k specify faculty powers. All other items are advisory to the administration or the Board of Trustees. I work with many clinical faculty in my College, and I know how they feel. A few years ago, when I was in Charlene’s position, I urged Beverly Davenport Sypher to do something to improve their situation. I am also aware of how some of you feel about them. This particular document is an opportunity for the Senate to demonstrate its support of clinical faculty at Purdue University and I urge you to vote for endorsement of 13-1.

Thank you.

David J. Williams
Chair
Purdue University
TO: University Senate  
FROM: David A. Sanders, Chairperson of the Steering Committee  
SUBJECT: Résumé of Items under Consideration by the Various Standing Committees

STEERING COMMITTEE  
David A. Sanders, Chairperson  
retrovir@purdue.edu

The primary responsibility of the Steering Committee is the organization and distribution of the agenda for each meeting of the University Senate. This committee also receives communications from any faculty member or group of members and directs such communications to appropriate committees or officers for attention.

ADVISORY COMMITTEE  
David J. Williams, Chairperson of the Senate  
diw@purdue.edu

The responsibility of the University Senate Advisory Committee is to advise the President and/or Board of Trustees on any matter of concern to the faculty.

NOMINATING COMMITTEE  
Michael A. Hill, Chairperson  
hillma@purdue.edu

The Nominating Committee is responsible for presenting nominations for the University Senate and University committees. In filling committee vacancies the Nominating Committee seeks to have all interested Senators serve on at least one committee.

EDUCATIONAL POLICY COMMITTEE  
Hal P. Kirkwood, Chairperson  
kirkwood@purdue.edu

1. GPA requirements after readmission
2. Transfer credit
3. Academic Year and Calendar Policy
4. Changes to Academic Regulations and Procedures - Add and Drop Deadline Policy, Grades and Grade Report Policy, Scholastic Records Policy and Degrees and Requirements Policy
5. Enhanced Recognition for Academic Achievement

FACULTY AFFAIRS COMMITTEE  
A. Charlene Sullivan, Chairperson  
sullivaa@purdue.edu

1. On-line Course Evaluation
2. NSF ADVANCE Initiative- policies to reduce unintentional bias in faculty hiring

STUDENT AFFAIRS COMMITTEE  
April J. Ginther, Chairperson  
aginther@purdue.edu

1. Student Conduct
2. Purdue Student Creed

UNIVERSITY RESOURCES POLICY COMMITTEE  
Richard Johnson-Sheehan, Chairperson  
rjohnso@purdue.edu

1. Campus Safety
2. Energy Issues
3. Bicycle Safety and Paths

The University Resources Policy Committee shall be concerned with, but not limited to, consideration of the following matters: planning optimal utilization of the physical facilities of the University, including buildings, the library, scientific and equipment and educational aids; studies of staff needs, utilization, and planning; interdepartmental cooperation for improved facilities and staff utilization; and nonacademic planning, including architecture, landscaping, parking, and traffic.

Chair of the Senate, David J. Williams, diw@purdue.edu Vice Chair of the Senate, Patricia Hart, phart@purdue.edu Secretary of the Senate, Joseph W. Camp, Jr., icamp@purdue.edu University Senate Minutes; http://www.purdue.edu/senate
To: The University Senate  
From: Faculty Affairs Committee  
Subject: Clinical/Professional Faculty Appointment and Promotion  
Disposition: University Senate for Discussion  
References: University Senate Document 07-1, “University Limits on Clinical/Professional Faculty” University Senate Document 93-10, “University Guidelines for Clinical/Professional Faculty within Purdue University”

The Faculty Affairs Committee (FAC) unanimously supports the policies contained in the document “Clinical/professional Faculty Appointment and Promotion (VI.F.)” and recommends it to the Senate for its support and approval.

Approving:  
Alan Beck  
Levon Esters  
Don Buskirk  
Janusz Duzinkiewicz  
Michael Levine  
David Kemmerer  
Phil Rawles  
Yuehwern Yih  
Charlene Sullivan (Chair)

Disapproving:  
J. Stuart Bolton  
Carlos Corvalan  
David Sanders

Absent:  

First Steering Gear

Invented by David Ross
The idea economy is here.®
... To advance Purdue’s quest for preeminence in discovery, learning and engagement through executive stewardship of assets

- Technology Parks
  - West Lafayette
  - Indianapolis
  - Southeast Indiana
  - Northwest Indiana

- Real Estate
  - Commercial
  - Residential

- Endowment
  - Alumni friends of Purdue

- Innovation Protection/Commercialization
  - Patent Protection
  - Licensing
  - Startup support

- Economic Development
- Employment

- Strategic Holdings
- Maximum Income

- Commercialization
- Startups
- Employment
Purdue Research Park of Northwest Indiana
715 employees 39 companies 393 acres
91 acres developed 60,000 total sq. ft.

Purdue Research Park of West Lafayette
3,248 employees 164 companies 725 acres
268 acres developed 1.7 million total sq. ft.

Purdue Research Park of Indianapolis
122 employees 15 companies 80 acres
4 acres developed 55,000 total sq. ft.

Purdue Research Park of Southeast Indiana
166 employees 18 companies 44 acres
8.6 acres developed 40,000 total sq. ft.
What Are We Trying To Do Here?

Improve the Human Condition

1) Maximize societal value of Purdue’s innovation
   Longer, happier, healthier, productive lives

2) Create an ecosystem for faculty, students
   “…neighbors and friends that…”
   demands, inspires, supports Ross’ dream
   “…invent something, create value”

3) Feed the goose!

Metrics

- Start ups
- Products
- Employment created
- Investment attracted
- Media buzz
- Number of faculty and students engaged
- Occupancy of tech parks
- Use of support systems
- Funds to Trask
  … to departments
  … to innovators
Purdue Patents and Disclosures

- Total Disclosures
- Total Patent Applications Filed
- Total Issued Letters Patents (worldwide)
The Virtuous Cycle...Boiler Up

Corporate $ 
Government $

R & Delivery Machine

Innovations (IP maybe)

Talent Capital

Startup 

Corporation License

Further Development

Research Funds 
Department

Innovator

Royalties

Next Gen Workforce
Hoosier Employment
Purdue Value to Market

In-state 
Out-of-state
# Sources of Influence

## Studies / Documents
- Purdue University and Innovation Realization - Purdue Communication Network
- Purdue West Coast Partnership Strategic Plan
- Entrepreneurship Launch Team Report
- Huron Study
- SV BIG Top Ten
- Accelerating Purdue’s Transfer of Discoveries
- Purdue University Entrepreneuristic Activities
- Entrepreneur Wish List from Entrepreneurial Ambassadors Group
- A Paradigm for Interdisciplinary Research
- The Anvil Quotes and Testimonials

## Groups / Individuals
- P-3 Alliance
- Entrepreneurial Ambassadors Group
- Pekny
- Cosier
- Ramani
- Robinson
- Regnier
- Garimella
- Huber
- Fulton
- Nauman
- Nohadani
- Duval-Couetil
- Dunlap
- Robinson
- Kissinger
- McKillip
- Bentley
- McCartney
- Cerney
- Cook
- Irazoqui
- Asem
System Improvements / Experiments

R & Delivery Machine

- Deliberate Innovation Faculty Fellows

IP / Innovation

- Student owned IP
- Express License 2.0
- Reconveyance Option
- SBIR option

Startup

- Foundry
- Anvil
- Discovery Park Partners
- Makers Space
- MatchBOX (Lafayette)

Corp License

- Simplified contracts 3 to 1

Employment

Purdue Products to Market
Ground Zero for Purdue Entrepreneurship

**FOUNDRY SUPPORT SERVICES**

- Opportunity & Client Needs Assessment
- Education & Training
- Legal Assistance
  - Corporate
  - Immigration
- Funding Support & Grant Writing
- Technical Guidance
- Market Assessment & Marketing

**FOUNDRY SUPPORT SERVICES**

- Business Planning
- Accounting & Finance
- Alumni Network Expertise & Mentoring
- Incubator Oversight
- Website & Web Training Tools
- Regulatory Guidance
- Community Network

Burton D. Morgan Center
Deliberate Innovation Faculty Fellows
“Company Hunters”

Identify
- Opportunity Technologies/Areas

Determine
- Best Research Direction

De-risk
- Investor Ready

Define
- First Product/Customer

Develop
- Value Proposition

Startup
“Shots on Goal”

Life Sciences Medicines
Nano Manufacturing Nano Materials
Defense Homeland Security
IT
Krannert
Phase II
System Improvements / Experiments

- Deliberate Innovation Faculty Fellows
- Student owned IP
- Express License 2.0
- Reconveyance Option
- SBIR option
- Foundry
- Anvil
- Discovery Park Partners
- Makers Space
- MatchBOX (Lafayette)
- Simplified contracts 3 to 1
- Predictability of License

Corporate Engagement

R & Delivery Machine

Business Talent

Employment

Purdue Products to Market

Startup

IP / Innovation

Corp License
What Are We Trying To Do Here?

**Improve the Human Condition**

1) Maximize societal value of Purdue’s innovation
   Longer, happier, healthier, productive lives

2) Create an ecosystem for faculty, students
   “...neighbors and friends that...”
   demands, inspires, supports Ross’ dream
   “…invent something, create value”

3) Feed the goose!

**Metrics**

- Start ups
- Products
- Employment created
- Investment attracted
- Media buzz

- Number of faculty and students engaged
- Occupancy of tech parks
- Use of support systems

- Funds to Trask
  … to departments
  … to innovators
STUDENT INTELLECTUAL GROWTH TASK FORCE

University Senate

Jeffrey D. Karpicke and A. Dale Whittaker
Co-Chairs

October 21, 2013
CHARGE

• In April 2013, commissioned by President Daniels to examine ways to measure growth during students' time at Purdue

• Identify and evaluate strengths/weaknesses of possible tools for measuring student growth
• Faculty across colleges with expertise in education, learning, assessment, pedagogy, and learning technologies

• Support staff from assessment, institutional research, the Provost Office and the President's Office
MEMBERS

• Diane Beaudoin
• Gina DelSanto
• Heidi Diefes-Dux
• Frank Dooley
• Brent Drake
• Audeen Fentiman
• Andrew Hirsch
• Jeffrey Karpicke
• Neil Knobloch

• Chantal Levesque-Bristol
• Yukiko Maeda
• Rab Mukerjea
• Sarah Mustillo
• David Rollock
• Bill Watson
• Gabriela Weaver
• Dale Whittaker
• Defined scope of "student growth"
• Identified student attributes
• Identified potential tools
• Created set of criteria for evaluating tools
• Reviewed research in sub-groups
• Engaged experts (Gallup, Council for Aid to Education, Educational Advisory Board)
• Developed initial recommendations
• Measuring student growth should function in the service of improving student learning

• Allow us to know:
  – How students are doing
  – Where students are getting better
  – How we are doing relative to others

• T-shaped individuals: Deep in discipline, broad in capacity to think, learn, and lead
THREE ATTRIBUTE CLUSTERS

• Intellectual growth
  – Critical thinking, quantitative reasoning, information literacy, creative thinking, integrative knowledge, discipline specific knowledge/skills

• Personal development
  – Identity development, responsibility, lifelong learning, self-efficacy, ethical reasoning, metacognitive skills, and self-advocacy

• Interpersonal skills
  – Written communication, oral communication, teamwork and leadership, global citizenship, intercultural knowledge and effectiveness
RECOMMENDATIONS

Personal Development, Interpersonal Skills

• Develop an index of non-academic factors related to student success, based on a model presented by Gallup Education
Intellectual Growth, Disciplinary Competence

- Collegiate Learning Assessment (CLA+): Assesses critical thinking, problem solving, quantitative reasoning, written communication, information literacy

- Discipline-specific assessments: Used or developed by discipline
E-Portfolios

• A unified E-Portfolio system, e.g., Passport, a system developed at Purdue, where students achieve digital badges for demonstrating mastery in areas
PROCESS RECOMMENDATIONS

• Implementation team
  – Develop specific plans for collecting data

• Evaluation team
  – Are instruments measuring what we intended?
  – Are results useable for students and faculty?

• Research team
  – Continue research on assessment tools
  – Draw meaning from the information collected
Email by October 31

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## CALENDAR OF STATUS OF LEGISLATION

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<td>Faculty Affairs Committee</td>
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*Approved