SGTF Oversight Committee

REPORT TO THE ACADEMIC AFFAIRS COMMITTEE

AGENDA ITEM: UPDATE ON STUDENT GROWTH ASSESSMENTS

December 19, 2014

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University Senate Vice-Chairman
Assessment Progress Initiation

November 2013: SGTF submitted final report – *Understanding Growth: A Purdue University Commitment*

That report recommended, among other things, a pilot study using:

- **CLA+** to measure critical thinking, quantitative reasoning, written communication, and information literacy.

- General Self-Efficacy Scale to measure the longitudinal development of self-efficacy in students.
The SGTF Pilot Project Recommendation also recommended:

The creation of an **Oversight Team** to ensure that results are being used in an appropriate way.

The creation of an **Implementation Team** to work with the Office of Institutional Research, Assessment & Effectiveness (OIRAE) to develop specific plans for administering the selected tools, collecting and analyzing the data, and disseminating the results to campus.

The creation of a **Research Team** to extract meaning from the assessments, to find any correlations between activities and outcomes, to examine the results to determine if the instruments are actually measuring what we want them to measure, to search out and potentially develop future instruments, and to develop hypotheses for further study.
Student Assessments Progress

Development & Implementation of Pilot Project

Summer 2014: Office of Institutional Research, Assessment & Effectiveness (OIRAE) selected pilot instruments to be administered during Boiler Gold Rush, Fall 2014.

The instruments chosen were:

Critical Thinking – three instruments:
- CLA+ (Collegiate Learning Assessment Plus)
  - produced by the Council for Aid to Education (CAE) http://cae.org/
- CAAP (Collegiate Assessment of Academic Proficiency)
- CCTST (California Critical Thinking Skills Test)
  - produced by Insight Assessment http://www.insightassessment.com/

Intercultural Knowledge – two instruments:
- Global Perspective Inventory (GPI)
  - produced by the Global Perspective Institute https://gpi.central.edu/index.cfm
- Miville-Guzman University-Diversity Scale (MGUDS)
  - produced by Dr. Marie Miville http://psycnet.apa.org/journals/cou/46/3/291/
Student Assessments Progress

BGR Test Administration

**August 2014**: Number of students tested, instrument costs, results

**Critical Thinking** –
- CLA+ - 128 students (36%) tested, $35/student, *no results reported yet from CAE*
- CAAP – 74 students (21%) tested, $14.75/student, results received
- CCTST – 87 students (24%) tested, $10.22/student, results received
- CCTDI – 70 students (19%) tested, $10.22/student, results received

**Intercultural Knowledge** –
- GPI – 85 students tested, $3.25/student, results received
- MGUDS – 171 students tested, $0.00/student, results received
Student Assessments Progress

BGR Test Administration – Purpose & Results (OIRAE)

Stated Purpose of Pilot Tests by OIRAE:

“To examine and compare how three tests of critical thinking and two surveys of intercultural knowledge and how their ability to measure change in incoming Purdue freshmen’s to think critically and development of intercultural communication skills.”

- *Student Growth Task Force Preliminary Report, OIRAE.*

General Preliminary Findings by OIRAE:

Critical Thinking –

CLA+ - No results received to date (12/17/14)
CAAP – “Purdue freshmen score higher (mean=65.2) than counterparts across the country (59.4), but still room for growth.”
CCTST – Overall scale mean & median 80 of 100, Purdue freshmen, when compared to aggregate, is 66. “Initial findings show the test will be able to measure growth.”
CCTDI – This measures whether a person has traits correlated with ability for critical thinking skills. “Overall, this sample of incoming Purdue students show that they have the traits that correlate with positive critical thinking skills, and that there is room for students to improve.”
General Preliminary Findings by OIRAE:

Intercultural Knowledge – the two tests do not measure the same thing.

GPI measures how a person thinks, how they view themselves as a person, and how a person thinks about others from different cultures.

MGUDS – measures a person’s experience with other cultures, how diversity impacts a person’s self, and comfort with differences.

GPI – “When compared with all undergraduates, this sample indicates incoming freshmen have an overall lower knowledge of, experience with, and attitudes about people who are different than them. Mean scores indicate some room for growth.”

MGUDS – “It will be able to assess growth.” OIRAE
Oversight Committee General Comments

Purdue should continue in a pilot/experimental mode rather than a broad and continuous implementation mode.

At this time no research plan exists, the experimental design has not been clearly articulated or vetted. (For example of what this might look like see, for example, Wabash National Study of Liberal Arts Education, http://www.liberalarts.wabash.edu/study-instruments/, http://www.changemag.org/Archives/Back%20Issues/2013/March-April%202013/wabash_full.html.) A complete experimental research plan must be developed for this work to have validity.

No faculty Implementation Team or Research Team has been assembled as recommended in the SGTF Pilot Recommendation.

We do not yet have results of more than 1/3 of the cognitive tests administered - the CLA+ tests.
Student Assessments Progress

Oversight Committee Recommendations

• Immediately adopt the principles for institutional-level assessment and student growth measurement recommended in the Oversight Committee report.

• Create a faculty Research Design team composed of a small group of experts in social science experimental design. – Complete by 12/31/14. Responsible parties – Provost & University Senate Chair. Suggested Oversight Committee liaisons – Pat Kain and David Rollock.

• Create a faculty Implementation team composed of a small group of experts in social science experimental design implementation. – Complete by 12/31/14. Responsible parties – Provost & University Senate Chair. Suggested Oversight Committee liaisons – Pat Kain and David Rollock.

• Create a formal and substantive report of the results of each of the pilot studies once the CLA+ results come in. – Compete by January 15, 2015. Suggested Responsible Parties – Brent Drake/OIRAE and Richard Johnson-Sheehan.
Student Assessments Progress

Oversight Committee Recommendations

• Design an experimental plan for the continuation of a small-scale study to be performed during BGR Fall 2015. – Compete by 2/1/15. Responsible Parties – Research Design Team & Implementation Team, OIRAE with Oversight.

• Present the Fall 2015 experimental plan to the BOT at the February 11-12, 2015 meeting.

• Design an experimental plan for a longitudinal study of student growth at Purdue. – Complete by May 1, 2015. Responsible Parties – Research Design Team & Implementation Team, OIRAE with Oversight.

• Present the experimental plan for the longitudinal study of student growth at Purdue to the BOT at the May 14-15 meeting.

• Implement the small-scale study during BGR, Fall 2015.

• Commence the longitudinal study no later than Fall 2016.