IUPUI Next Steps in the Assessment of High-Impact Practices (HIPs)

Introduction and Importance of Assessing HIPs

Campus leaders are often charged with determining which educational practices are the most effective in terms of improving students' levels of academic success and learning outcomes. "High-Impact Educational Practices" (HIPs) have been advocated as effective strategies for promoting active learning and increasing rates of student retention and engagement (AACU, 2008). HIPs include First-Year Seminars, Learning Communities, Service Learning, Capstone Courses and Projects, Common Intellectual Experiences (core curriculum), Diversity/Global Learning, Collaborative Assignments and Projects, Undergraduate Research, and more.

According to Kuh (2008), creating opportunities for students to participate in at least two high impact activities during their undergraduate program, one in the first year, and one taken later in relation to the major field is an effective way to enhance students' levels of academic success and engagement. Kuh also notes that "to engage students at high levels, these practices must be done well" (p. 20). If high-impact practices have differing effects, we need to know the variability of impact not only across practices, but also between permutations of the same practice. Research has also shown that there are "conditions that matter" within the context of implementing high-impact practices (HIPs) such as the following:

- Expectations set at appropriately high levels
- Significant investment of time and effort
- Interactions with faculty and peers
- Experiences with diversity
- Frequent and constructive feedback
- Periodic and structured opportunities for reflection
- Relevance through real-world applications
- Public demonstration of competence

(Kuh, 2008; Kuh & O'Donnell, 2013)

High-Impact practices are positively associated with **the following educational outcomes:**

- Persistence and GPAs
- Deep approaches to learning
- Higher rates of student- faculty interaction
- Increases in critical thinking and writing skills
- Greater appreciation for diversity
- Higher student engagement overall
- *Underserved and underrepresented students benefit from HIPs and often have greater gains compared to majority students

(Bronwell & Swaner, 2010; Hansen & Schmidt, in press Journal of The First-Year Experience and Students in Transition; NSSE, 2007; Kuh, 2008)

Assessing High-Impact Practices at IUPUI

IUPUI uses the following approaches in assessing HIPs:

- Employ Mixed-Method designs using qualitative and quantitative methods.
- Attempt to understand how HIPs and RISE experiences influence students' success levels (e.g., retention rates, GPAs, engagement, civic outcomes).
- Administer end-of-course questionnaires (designed to provide information on students' perceptions of course benefits, learning outcomes, satisfaction levels, why decided to enroll)
- Administer campus-wide questionnaires
- Administer National Survey of Student Engagement (NSSE)
- Conduct focus groups and individual interviews.
- Collect direct measures of student learning (e.g., electronic portfolios and embedded course assessment)

Highlights of IUPUI Assessment Results

- **Approximately 5,300 Students Participate in RISE Each Year. A**pproximately 5,300 students enroll in RISE courses each year (number derived by using the RISE course tags).
- **Higher Retention Rates for Students Participating in RISE Experiences**. When using the RISE course tags to calculate one-year retention rates for students who participated in at least one course, the overall rate was 90% and varied by experience (e.g., Research was 92%, International Study Abroad was 83%, Service Learning was 82%, and Experiential Learning was 94%). Based on Fall 2014 RISE participants. Students were counted as retained if they enrolled or graduated as census of fall 2015. Students were counted once per RISE course they were enrolled in at census of fall 2014. Students may have been enrolled in more than one RISE course.
- **Higher Retention, Graduation Rates and Academic Performance for Students Participating in First-Year HIPs.** Students Participating in First-Year HIPs such as Themed Learning Communities (TLCs), First-Year Seminars, and Summer Bridge (SB) tend to have significantly higher first year cumulative GPAs compared to nonparticipants, even when taking into account HS GPA, SAT Score, Income Level (Pell Grant), and Registration Date (proxy for motivation and commitment. Summer Bridge participants have consistently higher one-year retention and four-year graduation rates compared to nonparticipants.
- **Underrepresented and Underserved Students Who Participate in FY HIPs Benefit.** Underrepresented and underserved students (African American students, Federal Pell Grant recipients, and 21st Century Scholars) who participate in SB and/or TLCs have significantly higher retention rates and academic performance levels compared to students in these groups who do not participate. Underrepresented and underserved students benefit more (greater differences in academic success outcomes when comparing participants to nonparticipants) than students who are not underrepresented or underserved.
- **Participation in Service Learning and TLCs in the First Year is Associated with Greater Learning Gains on NSSE Scales, Local Scales, and Better Academic Success Outcomes**. Service Learning participants had significantly higher scores on the Higher-Order Thinking, and Deep Approaches to learning NSSE scales compared to nonparticipants. Students who participated in TLCs had significantly higher scores on the Reflective and Integrative Learning NSSE Engagement scale compared to nonparticipants. Service Learning-TLC students had significantly higher GPAs and civic learning outcomes (e.g., developed a better understanding of complex real world social problems or issues) than students who participated in a TLC with no service learning.
- **Students Who Participated in Experiential RISE Experiences Have Better Self-Reported Learning Gains Compared to Students Participating in Other Experiences.** Students self-reported significantly higher learning gains (gain a sense of clarity about my career goals, feel a sense of purpose in pursuing my degree, decide on a future career or major, gain technical skills related to my chosen/ intended career or major) in experiential learning/internship experiences compared to other RISE experiences. Results based a survey distributed to all students tagged in RISE courses in Fall 2014. A total of 284 students responded.
- **Students Who Participated In Internships And Service Learning RISE Experiences Were More Likely To Report That They Engaged In Structured Reflection.** Students who participated in internships and service learning RISE experiences were more likely to report that they engaged in structured reflection compared to students that participated in other RISE experiences.
- **RISE Students Report Gains in Team Work Skills, Opportunities for Hands-On Experiences, and Greater Sense of Purpose/Commitment to Career.** Students' questionnaire open-ended responses were content analyzed and the following themes emerged: Team Work Skills, Opportunities for Hands-On Experiences, and Greater Sense of Purpose/Commitment to Career. Examples of actual comments included the following: "By participating in group activities and presentations, the RISE experience contributed to my learning by helping me collaborate with other group members in coming up with solutions to problems in class as well as on projects," "The course put me in a hands-on situation working with a real nonprofit organization. This allowed me to experience the issues firsthand and provide relevant recommendations accordingly," "The course put me in a hands-on situation working with a real nonprofit organization. This allowed me to experience the issues firsthand and provide relevant recommendations accordingly," "I completed a project that directly impacted me in my current career that contained applications from the course."
- **IUPUI Students are More Likely to Participate in HIPs Compared To Our Urban Peers and Other Research Public Institutions.** *National Survey of Student Engagement* results suggested that IUPUI students are more likely to participate in HIPs compared to our urban peers, sample of public research institutions, and the entire NSSE sample.
- **The More HIPs IUPUI Students Participate In, The Greater Their Gains In Higher-Order Thinking and Reports of Participating in Discussions With Diverse Peers.** According to NSSE results, the more HIPs FY and Senior students participated in, the greater there higher-order learning scores and the greater their discussions with diverse peers were.
  Please view http://irds.iupui.edu/ to view more comprehensive details of assessment results.

Implications of Assessment Results

- High Impact Practices have differential impacts.
- Underserved and underrepresented students benefit from HIPs. So reach out and encourage participation.
- Important to design internally valid studies that employ comparison groups.
- Important to clearly describe HIPs (activities, instructional strategies, assignments, intended outcomes).
- Critical that HIPs are done well and with fidelity.
- There are a lack of studies that investigate direct measures of learning at IUPUI and nationally.

Challenges

- Lack of fidelity in course tagging process. Fidelity is defined by Webster as "the quality or state of being faithful, the accuracy in details, exactness." Program fidelity assessment offers another level of detail about the program as implemented by examining the degree to which interventions are implemented as theoretically planned.
    - Poor Fidelity Examples
        - ➢ LC implemented with no integrative learning assignments.
        - ➢ SL implemented with no structured reflection.
        - ➢ Undergraduate Research with no faculty mentoring.
- The RISE Criteria is not always adhered to when courses are developed and not implemented well in courses. RISE courses must be formally identified, and the registrar must be notified of a course being designated as meeting the RISE criteria. The IUPUI RISE website describes the criteria for creating a RISE course, the four categories of RISE, and the process by which instructors can achieve a RISE designation for their your course(s). This relates to fidelity regarding criteria and the fact that there is no standardization in practice formally included in course design regarding the RISE criteria.
- It is not possible to test the effectiveness of an intervention if the intervention failed to be implemented as planned (Scott & Sechrest, 1989).
- Systematically collecting and analyzing direct and authentic student learning artifacts
- E-portfolios can be effective if used as a pedagogical tool and not viewed as busy work by faculty and students.
- Beneficial for all students, yet not all take part – differences by major, racial- ethnic groups, transfer status, first-generation
- Getting experience on students' radar–student recruitment
- Institutional impediments (including getting information out to RISE instructors, a system that ensures tags are removed if courses are no longer being offered as RISE, ensuring that school curriculum committees are educated about RISE criteria and expected to review newly developed RISE courses or those that are being revised)
- Recruitment of RISE instructors and incentives for faculty/staff
- Diversity, Equity and Inclusivity

Next Steps

- Full development and implementation of taxonomies (already developed for Service Learning, Internships, Study Abroad, Themed Learning Communities, Summer Bridge, Peer Mentoring). Workshop on taxonomy development scheduled for Wednesday, November 2nd from 9:00 am – noon. Benefits of taxonomies:
    - ➢ Fidelity Issues (taxonomies can serve as a guide to curriculum committees and course schedulers tagging RISE courses)
    - ➢ Assessment (the quality of the HIP experience can be evaluated and the intensity measured)
    - ➢ Course development (guide/tool for instructors interested in creating or improving RISE courses)
    - ➢ Resource (can be used when evaluating applications for course development grants and other HIP awards connected to curriculum)
- Sharing of taxonomies and use to guide curriculum and practice. Ideally, improve fidelity of course tags.
- E-Portfolios for RISE scholars and other HIPs participants to improve authentic and direct measures of student learning.
- Focus collectively on all HIPs rather than the four that are included in the RISE acronym
- Student incentives and recognition for completion of RISE requirements
- Opportunities outside of Study Abroad to complete the international experience in RISE

Vision for Assessment of HIPs at IUPUI

- Course tags or other tracking systems are accurate and indicate the students actually participated in a RISE or HIP experience.
- There is a data infrastructure and processes in place that allows us to accurately identify if students participated in a RISE or HIP experience.
- We have procedures in place to ensure that RISE/HIP experiences are done well with fidelity.
- We are able to conduct systematic investigations of the effects of RISE/HIP experiences on student success.
- Procedures, processes, and tools have been developed to systematically assess student learning outcomes directly and indirectly.
- Decision makers across IUPUI have the data and information they need about RISE/HIP experiences to make effective decisions about improving student learning and success.