CI-STEP Internal Advisory Board Meeting

Minutes

July 25, 2012

11:00 am-1:00 pm CE 310

Present:
Jeffrey Watt
Kathleen Marrs
Andrew Gavrin
Charles Feldhaus
Stephen Hundley
Howard Mzumara
Lisa Ncube
Mariah Judd
Janet Dalzell
David Russomanno
Simon Rhodes
Nancy Lamm
Jay Howard
Nasser Paydar
Michael DeBourbon

Introductions and Agenda Overview – Charles Feldhaus (slides 1-2 in Powerpoint presentation)

Overview of NSF STEP grant - Jeffrey Watt (slides 3-8)
Presentation on the grant’s mission, directives, and trajectory.
  • Suggestion to separate out E&T in statistics on “Profile of Students and Challenges Facing the STEM Talent Gap at IUPUI.”

Website Introduction – Mariah Judd (slide 9)
New CI-STEP website was created in early 2012 and was introduced at this meeting. A tour of the full website was given. http://step.iupui.edu
Website suggestions:
  • Create graph that tracks Ivy Tech transfer students, include under “Progress” tab
  • Incorporate “student centric” components to the site
  • Create “how to” information for site visitors for things like JiTT and PLTL
Higher Education Services 2nd year Review of CI-STEP Grant – Kathleen Marrs (slides 10-12)
Review of the CI-STEP Initiatives. Major categories include Student Centered Pedagogies, Career Services, Student Success and Articulation with Ivy Tech.

Mini-Grants – Kathleen Marrs (slides 13-15)
Call for proposals was distributed in 2011 and awarded throughout 2011- early 2012. 12 mini-grants were awarded to faculty at IUPUI and Ivy Tech. Annual progress reports will be sent to each mini-grant recipients in late 2012 to be completed by December 1st. These will serve as one part of the evaluation of the mini-grants effectiveness and success. For December External Advisory meeting, will have 1 page vignettes for each mini-grant which will include an internal summary/evaluation of each grant. At the same meeting, there will also be a poster session with the mini-grant recipients to highlight their work and how it is working to help meet the grants mission.

Suggestions by site visitor:
- Instead of having proposals be open, make it “by invitation only” so that the mini-grants can work more directly toward the CI-STEP grant’s missions.

Comments by Internal Advisory Board:
- Need to think about sustainability of initiatives and mini-grants (Rhodes)
- Much of the grant’s money is going toward the development of programing which will make sustainability easier going forward.
- Demographics of the Midwest and at IUPUI are changing in scope and composition. Is the grant making attempts to address this? Need to understand this new reality for recruitment purposes (Rhodes)
- Website would be a good tool to recruit and advertise to students.
- In addition to the progress reports completed by the mini-grant recipients, an internal unbiased evaluation should be conducted (Russomanno).

Site Visit Recommendations and Response – Kathleen Marrs and Jeffrey Watt (slides 16-19)
STEP site visitor (May 14th) reviewed our objectives and progress and made suggestion to focus on key effective initiatives. Question was posed to board on what those initiatives would be.

Areas of focus will include:
- Articulation with Ivy Tech
- Mini-grants by invitation
- JiTT and PLTL training and implementation
- Bridge

Recommendations from Board:
- Research experiences are typically given to high achieving students. To increase retention (and graduation by extension) in STEM, a research experience for “at risk” students might help. Professors are not quick to take on an “at risk” student. A good mini-grant might be one that pays for student researchers; 1 high achieving student AND 1 at risk student. 2 for 1. (Russomanno)
• Students fall into 4 categories: High achieving in STEM, High achieving not in STEM, low achieving in STEM, low achieving not in STEM. Need to develop strategies that connect students to STEM. Pathways to STEM, target specific students, connect with industry for attractive internships and job placement. (Nasser)

Mathematics Expansion at Ivy Tech – Janet Dazell (handout)
“Degree Program progress: Central Office has re-defined Ivy Tech degree requirements in a way that makes them far more flexible overall. The many degree options that were available have been eliminated for a Liberal Arts degree with a concentration called a Transfer Cluster. We plan to support a mathematics Transfer Cluster requiring the six courses below. The process of approval of Transfer Clusters will not be complete until 2013, as input from transfer institutions is being sought.”

Assessment Progress – Howard Mzumara (slides 20-28 + handout)
Selected highlights on project assessment/evaluation activities was presented. The assessment is a two-phase assessment framework with assessing processes and assessing outcomes. Some of the assessment data being gathered are Progress metrics, outcome metrics and demographic data analysis. To date, the overall graduation numbers are on track with the goals set by the grant to increase the number of STEM graduates by 5% each year. There is also a sharp increase of students receiving math minors.

Outreach, Conferences, Presentations, Assessment conference – Stephen Hundley (slide 29 + handout)
A list of all outreach involvement, conferences attended, and presentations given was hand out.
• 2012 Assessment Institute in Indianapolis is October 29-30th. Suggested that CI-STEP partner with this institute to have a regional STEP meeting. Write supplemental grant to invite other STEP PI’s from other institutions. Use NSF S-STEM Scholarship as example. (Russomanno).

Questions and Comments – (Gavrin as facilitator)
• Problem with engagement. Need to get students to ask questions early. Military precision. (Rhodes)
• Good idea to award math minor as soon as requirements are met, not waiting on B.A/B.S. has been completed. (Russomanno)
• Look into national best practices surrounding grant initiatives like career services and internships. (Nasser)
• Create scholarship to reduce working hours for STEM student to increase retention
• Life Health Science Internships keeps students on campus instead of them leaving for off campus job. Historically, it is the best students that are chosen for this award. Maybe focus on “at risk” students to retain those students. (Rhodes)
• Focus on High ability-low achieving students. Develop criteria to identify students with promise.
• In previous experience, online courses significantly increased retention and encouraged transfer possibility. (Nasser)

• Many students are lost in the first 2 years. Making internship experiences available early might help keep students in the major (especially in engineering). Possibility to model after Biology Freshman work program. (Lamm)

• Create Facebook group to connect students. STEM FB group. (Nasser)

• Have representation at Fall Convocation. 1 slide to increase visibility.