

# Central Indiana STEM Talent Expansion Program

## External Advisory Board

Friday December 7<sup>th</sup>, 2012

11:00am-1:30pm

University Library – Room 1125M

Present: Michael Evans, Simon Rhodes, Victor Roeske, Lisa Ncube, Brooke Huntington, Cary Marston, Cindy Munerol, Pratibha Varma-Nelson, Keith Vogalsang, Stephen Hundley, Kathy Marrs, Jeff Watt, Howard Mzumara, Charlie Feldhaus and Mariah Judd

11:00 am – Mini-grant poster session. Poster presented:

- Summer Industrial Projects Program presented by Robert Durkin (MET)
- Develop a Rigorous Two-Year Mathematics Degree presented by Janet Dalzell (Ivy Tech)
- Engineering and Technology - Alliance for Retention for Multicultural Students (ET-ARMS) presented by Patrick Gee (ET)
- Transfer Student Recruitment and Support Proposal presented by Marilyn Mangin (ET)
- Using the Inductive Learning Methodology to reduce Student Failure Rates in MET 220: Intro to Thermodynamics and Heat Transfer presented by Paul Yearling (MET)
- Improving the Retention of Freshman Engineering Students through Proactive Peer Mentoring presented by Danny King (EE)
- Enhancing Student Comprehension and Success in Genetics through Recitation presented by Mariah Judd (SoS)
- Organic Chemistry Workshop Series presented by Rob Minto, Ryan Denton and Sarah Wilson
- From Studio to Student: e-Mentoring in Computer Graphics Technology presented by Jan Cowan and Dan Baldwin (Arch Tech)

The mini-grant poster session ran from 11:00am-12:10pm. All of the mini-grant recipients, external advisory members and grant administration were present and conversed during the poster session.

At 12:00pm, the external advisory members were invited to go through the lunch buffet and meet in UL1125M to start the meeting. Following the advisory board, the mini-grant recipients were invited to eat lunch.

12:15 pm – Start of External Advisory Board Meeting

This meeting entails updates on what has been accomplished in the last year and to seek advice on what to do better or change for the future.

- I. Introductions around the table lead by Charlie Feldhaus.
- II. Tour through the “new” CI-STEP website by Mariah Judd. <http://step.iupui.edu>
  - a. The new website features the grant’s initiatives, the mini-grant recipients work, highlighted pedagogies (peer mentoring, JITT and PLTL), how to get involved, and recent grant happenings.
  - b. To be added at the request of the board is a list of the external advisory board as well as their contact information and links to their respective organizations.
- III. Jeff Watt discussed the current progress that has been made with the CI-STEP grant as outlined in the second annual report to the NSF.
- IV. Howard Mzumara discussed the current evaluation and assessment plan for the grant as a whole as well as the individual mini-grant projects. Dr. Mzumara provided handouts as well as a few supplemental Powerpoint slides to aid his presentation. These materials are available on the CI-STEP website (see above).
- V. Stephen Hundley lead the discussion for the third year review and opened it up to the board for suggestions, comments and questions.
  - a. Cary Marston: Return on Investment (ROI) is key. Keep what you have and reinvest in the students. Who wins when we invest in the students? How many graduates did IUPUI put into the economy last year? We need a more productive workforce.
  - b. Michael Evans: Productivity in society over life of individual. Investment in our young people is an investment in our society. We need to produce graduates that are active in society.
  - c. Brooke Huntington: The more we can quantify our workforce the better argument to be make to investors/funding sources. Are degreed students getting jobs? Are we graduating students that are competent in their degree area? Graduates tend to stay locally, so graduating competent degrees increases a competent workforce in Indiana.
  - d. MAIN THEMES:
    - i. Brain Drain – Brain Gain
    - ii. ROI sustain by increasing revenue. From more students – understand the model
    - iii. ROI specifically from workforce. Investment cost/output/ultimate economic productivity (STEM)
    - iv. STEM jobs matter! STEM competence matters!

1:35 pm - Meeting adjourned