



Assessing Engineer of 2020 Attributes through Transformative Global Experiences

Engineer of 2020 Seed Grant Lunch - October 6, 2009

Project Investigators

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Why global engineering education?

- Specific objectives noted in the Purdue's new strategic plan include: "expand[ing] pathways to global education," "developing successful global citizens and leaders," "prepar[ing] graduates for a dynamic global workplace," and "graduating students with global credentials."
- In the Purdue Engineering Strategic Plan, Goal 1 is "Graduates Effective in a Global Context." These graduates should be prepared to act as global citizens, celebrate diversity, respect differences, and lead from a global perspective.



Research Question & Outcomes

How do global educational experiences support student achievements related to Engineer of 2020 target attributes, such as:

- work effectively in diverse and multicultural environments
- work effectively in the global engineering profession
- open-ended design and problem skills
- ethically responsible in a global, social, intellectual, and technological context
- adaptable in a changing environment.

Primary outcome: Develop and pilot two assessment instruments for global engineering education, each designed to measure the attainment of at least one Engineer of 2020 target attribute.



Project Phases

Phase 1 (*Summer – Fall 2009*)

- Develop first **survey instruments** and establish protocols for conducting **interviews** and **focus groups**.

Phase 2 (*Fall 2009*)

- Administer **survey** and conduct **interviews** and **focus groups** with relevant populations of **students, faculty, and industry partners**.
- **Analyze** all collected **data**.
- Use results to inform **development of two new assessment instruments**.

Phase 3 (*Spring – Summer 2010*)

- **Assessment instruments** developed during Phase 2 **piloted** with select engineering students who participate in global educational experiences during Spring 2010.
- **Final summary report** and revised **assessment instruments** will be available on **GlobalHUB.org**.



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