Proceedings

Enhancement of the Global Perspective for Engineering Students by Providing an International Experience

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Assessing the Value of the International Experience

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Assessing the Value of the International Experience

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Assessing (by what means?) the value (to whom?) of (whose?) international experience
Outline

• Assessment?
• Student surveys: our students’ voices
• Data analysis: international experience for faculty
• A blended approach: assessment of international engineering programs in the US
• Afterthoughts
To assess, assessment, etc.

"...assessment is defined as the systematic basis for making inferences about the learning and development of students."

Erwin, T. Dary
Self-reporting: Our students’ voices

• Anecdotal evidence or systematic inquiry?
• Structured or open-ended questions?
• Pre- and/or post- reporting?
• Results from approximately 1300 student evaluations of their studies abroad experience, 1996-2003.
Our students’ voices: the world

- “I feel like my eyes have been opened to the world. I am curious about things. I want to know what is happening in the world.”
- “Understand that you are foreigners and that you should abide by their customs.”
- “I learned so much about…national identity and what is means to be colonized.”
- “Be prepared to stick out. You definitely don’t blend in here!”
- “Don’t be arrogant and let people see American stereotypes.”
Our students’ voices: lessons on being human

• “Realize that you will be a minority for a change and that is ok.”
• “Take nothing personally.”
• “I learned that negative experiences have good effects on a person.”
• You realize “…how strong (or weak) a person you are.”
• “Don’t talk so d**m much! Absorbing is much more important.”
Our students’ voices: on working in another culture

• “We operated in an American fast paced lifestyle in a European slow lifestyle.”

• “The work was more intensive because you had to learn to complete it in a completely opposite environment.”

• “Find the strength to ask questions… Communicate with others as clearly as you can to avoid misunderstandings.”
Our students’ (funny) voices

• On unfamiliar customs: “Socks and shoes have to be worn at the dinner table.”
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• “Our 4 am curfew [in Spain] was just too restrictive!”
Pros of open-ended student evaluations

• Disclose unexpected aspects of the international experience (ex. impact of absence of family)
• Can reveal “out of class learning,” good and bad
• Provide insights into time management issues
• Makes clear the youth of our students!
Cons of open-ended student evaluations

• Give no reliable insight into effect of specific experiences, courses, etc.
• Grammar and spelling can be off-putting for the reader
• Some students gloss over the whole chore
• Can be an opportunity for a last-minute whine
International experience for faculty

The research

• 1000 questionnaires reviewed (about 60% return rate)
• A decade of data
• Anonymous reports
• Many quantifiable results
• Valuable background data on respondents
Findings

• Development experiences have more impact on creation of new courses than on initiation of new research projects.

• Development experiences have the most impact on the revision of existing courses to make them international.

• Faculty are willing to pay part of the expenses.
More findings

• 85%+ said that the experience had a great impact on their total professional life.
• Majority of participants were from the social sciences (esp. history, political science)
• No engineers participated despite topics such as environmental preservation in New Zealand, and an over-view of modern-day Turkey offered by the Middle East Technical University (METU) in Ankara.
Conclusions from assessment

• International experience for engineering faculty would be a good investment and would predictably bring about a beneficial internationalization of the curriculum.

• Resources are available for group experiences if an engineering college wanted to focus on a particular part of the world.
More conclusions

• It will take some effort to persuade some engineering faculty to be “internationally developed.”

• If the expected outcome of a development experience were explicitly in the area of teaching, rather than research, that would have benefits for the students and encourage more teaching oriented faculty to participate and to change.

• Data analysis of questionnaires gives actionable results.
Assessment in engineering

• Sufficient data exist now to permit good information to be gathered on what engineering students learn in an international experience.
• Field may be moving too rapidly for some to capture essential information.
• International experiences delivered through electronic means present particular problems for assessment.
University of Rhode Island Assessments

- High-level review of project reports
- Tracking of job placements
- Feedback from graduates
- Student satisfaction surveys
- Enrollment figures
- National and international awards
- [http://www.uri.edu/iep/index.html](http://www.uri.edu/iep/index.html)
Afterthoughts

• It’s time to collect assessment information from across universities
• It’s also time to look for comparable data from engineering schools around the world
• There may be some interesting data from other professional fields
• The public’s demand for assessment data doesn’t seem to want to go away.
For more information

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