Developing Effective, Sustainable, Mutually Beneficial International Collaborations in Engineering and Technology

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Developing Effective, Sustainable, Mutually Beneficial International Collaborations in Engineering and Technology

ASEE Global Colloquium, Cape Town, RSA October 2008

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Real Experience!

We share, not a conceptual exploration of what might be, but rather a practical, reality-based view of best practices that derive from our institutions’ ongoing effort to evolve sustainable linkages.

Highlight a range of possibilities for such linkages; including, but not limited to:

- Student Exchange
- Faculty Exchange
- Faculty Collaboration – both instruction and research and development

We then share some of the key characteristics that make each collaboration type possible and successful, e.g.:

- Institute Calendar matching
- Course equivalency mapping for accreditation
- Time-to-degree considerations

Range of possibilities: 1

- **Student Exchange.** A variety of mechanisms exist to provide students international experience. These include, but are not limited to:
  - Enrollment in classes or study abroad.
  - International study tours lead by faculty from the students’ home institution.
  - International content/activities infused into existing courses
  - International internships or cooperative learning experiences (credit or non-credit) in business or industry.
  - Research project activity, undergraduate or graduate, conducted at an overseas institution and guided by a faculty member other than one from the student’s home institution.
  - International work experience

Annual Student Exchange Plan

6 Students

In Each Direction

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New Challenges

It’s Different Here

Range of possibilities: 2

- Faculty Exchange
  - effective international faculty experience and collaboration constitutes an essential precursor building block necessary before any widespread international student experience can occur.
  - as simple an experience as merely traveling and spending some time at the exchange institution, preferably while the counterpart faculty member is there as well.
  - The most important part of such experience is that sufficient time is provided to go beyond merely “popping in & sightseeing”
  - long exchanges and sabbaticals. These could involve full instructional responsibility for a course and more.
  - Alternatively specific project focused exchanges, e.g., accreditation or facility planning, can also be valuable.

Range of possibilities: 3

- Faculty Collaboration. A descriptor that covers a wide range of other possibilities, e.g.
  - research collaboration. Writing collaborative grant/funding proposals
  - distance learning technology makes faculty and student collaboration on course instruction a distinct possibility– Team teaching, with faculty from internationally separated institutions
  - Membership on collaborating program advisory committees
  - Sponsorship/leadership of a collaborative student club/organization activity
  - Collaborative book authorship
  - Serving as external program/course examiner
  - Joint paper authorship

Case study-identified factors

- Institutional calendar matching
- Course equivalency mapping
- Accreditation
- Time-to-degree considerations
- Example procedures
  - making student counselors/program advisors aware of the opportunities
  - Student selection
  - visa and immigration regulations. Institutions also bear some responsibility for exercising due diligence for the safety of their students.
  - Careful orientation procedures

Key Characteristics of Effective Collaborations

- a long-term and serious perspective that systematically builds the linkage.
- A three-to-five year planning time frame seems most appropriate for the initial phase.
- Commensurate investment of time and money is a concomitant necessity.
- the partner(s) must be carefully selected for a high level of “goodness of fit”
- Our experience was one which began with strong and consistent signals by institutional and unit leaders.
- seed funding and other support systems

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MEMORANDUM OF UNDERSTANDING (MOU)

I. Goals:
...desire to promote the enrichment of their teaching and learning, research and discovery, and engagement missions; and desire to strengthen and expand the mutual contacts between the two universities; and desire to provide for an exchange of faculty and students and other collaboration between the two universities...

II. NOW THEREFORE, it is mutually agreed as follows:

• A. Short and Long-term Faculty Exchange
• B. Undergraduate and Graduate Student Exchange
• C. Collaborative Research and Discovery, Learning and Teaching, and Engagement

III. Period of Agreement - This Agreement shall be effective _______, 2004, and will remain in force for a period of five years. Prior to the expiration date, the agreement may be reviewed for possible renewal for a further five-year period.

IV. Activities Under This Agreement – Expectations

V. Funding of Activities

VI. Nondiscrimination

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Continuous Improvement

Future Challenges

- Develop Collaborative Multi-Disciplinary Design Projects
- Sustainable funding model post-2011
- Potential for Joint/Dual Degree

Valued New Perspectives

“The whole experience was awesome and I wouldn’t take it back for anything”

Ryan Fleming. June ‘08
Purdue Exchange Student
At DIT Spring ‘08

Thank-You

Q&A?

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