

Report on the Plenary GE3 Roundtable Discussion

MATCHING STUDENTS' WISHES AND HOME CAMPUS NEEDS WITH HOST CAMPUS CONSTRAINTS

Breaking down barriers to enhance study abroad options and experiences



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The Round-table Session

An international orientation and a global mind-set are among the key attributes that young engineering graduates should have for a successful career. It is GE3's reason for existence. Although the students' interest grows and all members of the GE3 network show a good willingness, practice shows many complications and barriers exist in what students wish, the home campus needs, and what the host university can offer.

At the GE3 Annual Meeting in Singapore I organised a round-table discussion on May 14 (Plenary Session 4) to address the concerns of incoming students: what host institutions are expected to deliver with respect to learning outcomes, course content and planning, and what students expect from host campuses. The background for this workshop lay in the first GE3 exchange experiences of my home institute. As a newcomer in the GE3 network we were very pleased about the seven US students interested in studying on our campus, but much to our disappointment eventually six withdrew during their orientation process for various reasons. For all GE3 members it is relevant to learn how a host campus can enhance exchange opportunities, and how students and home campuses can improve flexibility and adaptability for a more streamlined and effective process.

The objective of this roundtable session were:

- A. to achieve insight in the variety of obstructions that exist in getting more (US) engineering students interested in a study abroad and actually making this happen.
- B. to establish creative work-around solutions to better match student wishes and home campus needs with conflicting host campus constraints and regulatory requirements.
- C. to draw some conclusions and "agree" on a number of widely applicable solutions

The preparations for the round-table session started during Monday lunchtime. All participants were invited to write on flip charts the barriers they experience in achieving a smooth exchange of students. This input was categorised into three problem areas:

- I. Academic calendar alignment
- II. Demanding curricula
- III. Relevance and attractiveness

From the input I established three main questions. During the round-table session each table would get a flipchart with one these questions as input for discussion. The round-table session started with a brief presentation of the challenges and collected input. Eight groups (one per table) of participants were then invited to discuss and write down possible solutions and scenarios as a response to the question that was formulated on the flipchart. Then transfer their chart to an neighbouring table, and discuss the flipchart with solutions from a neighbouring table, and then give a plenary 2-minute elevator pitch.

In brief:

1. What wishes do visiting students usually have?
2. What needs and constraints apply from the home campus?
3. What constraints and requirements apply at the host campus?
4. What are the main barriers, considering curriculum and study culture?
5. What creative work-arounds could resolve some of the main conflicts between students' wishes, home campus needs and host campus constraints and requirements'?

The discussions, presentations and pitch talks were inspiring and very lively.

They yielded interesting outcome, and equally important, mutual understanding of the ambitions and hindrances that were experienced.

This document contains all input, rough material, and outcomes of the round-table session to give everybody access to all material and pick what suits you best. In the list of outcomes I have selected Five Tops, which are my personal favourites, that are obviously related to the context of the education at TU Delft.

I sincerely hope the workshop and its results help the GE3 network members to tackle the most prominent barriers. It would be great if we could continue this workshop in 2015 in Michigan, and in subsequent years, in which we share the progress made, based on ideas that originated from this 2014 workshop, and add new ideas to further enhance the study abroad options and experiences for our students

Barriers as written on the Flipcharts Monday lunch session

Barriers to attract students

- Too few programs or courses in English
 - Especially for 2nd-year students
- Course equivalence
 - Content and Availability
- MA/BA mismatch (3+2 vs 4+1)
- Academic calendar mismatch
- Attractiveness
 - Lack of advertisement among member universities
 - Campus locations
 - Lack of accommodation

Barriers to send students out

- Course equivalence
 - Content and Availability
- Relevance of exchange abroad
 - Making study abroad as important as an internship
 - Getting faculty buy-in to promote study abroad
 - Overcoming parent perceptions of study abroad
 - Motivating students and professors
 - Informing (US) students about available options beyond the few major institutions they know of
 - Advertising the possibilities among member universities
- System of reciprocity does not work
- Financial restrictions

Introductory presentation



Breaking down study-abroad barriers
 Matching student's wishes and home campus needs with host campus constraints
 Aldert Kamp, Delft University of Technology
 14 May 2014

GE³ New York 2013

"Experience the unique student life in the Netherlands"

- Most people speak English
- The Dutch are known for their tolerance and liberal ideas
- Enjoy the exciting student life in Delft
- Live in a multinational student environment and meet many different cultures
- Explore Netherlands and the rest of Europe
- Experience the liberal state of mind the Dutch are known for



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Study-abroad barriers

Causing the GE³ withdrawals

- Academic calendar mismatches
 - Fall semester ends after Christmas
 - Exam in wrong period or too late
- Demanding curricula
 - How to fill 1 semester without overlapping content with home curriculum?
 - Interweaving of courses abroad is not feasible with home curriculum
 - Seeking high-level course equivalence
 - "Which book is used?"
 - "Is Matlab used in Differential Equations course?"
 - Core courses required at home institute
 - Only (very) few courses can be transferred into credits for study program
- Personal preference of students

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Session of today:

Do some engineering: Creative solving of challenges

1. Demanding curricula
 2. Academic calendar alignment
 3. Relevance and attractiveness
- Disgarding
 - Personal and social factors
 - Culture and language
 - Campus location
 - Financial restrictions
 - Transfer of credits

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Roundtable Session

- Step 1: Creative solutions for the challenge on the flipover chart on your table (18 min)
- Step 2: Handover of chart to your adjacent table
- Step 3: Complete and sharpen the solutions on the flipover chart (12 min)
- Step 4: Elevator pitch (2 min each) of main tips per table
- Step 5: Wrap-up (2 min)

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Three Main Questions for the Roundtable Session

From the input on the Monday lunch flipcharts I derived the following three main assignments for the creative engineering session during the roundtable:

Relevance and attractiveness

Creative feasible solutions for making a study abroad period as obvious, valuable and attractive as an internship is (considering institution, staff, student, parent perception).

Academic calendar alignment

Creative feasible solutions for making student's study abroad program less dependent on the misalignment of the academic calendars between the home and host university (courses, projects, deliverables, exams).

Demanding curricula

Creative feasible solutions for making student's study abroad programs less dependent on the curricular demands of the home university (e.g. equivalence, BA+MA 4+1/3+2, language).

Roundtable Session Outcome

Relevance/Attractiveness

Creative feasible solutions for making a study abroad period as obvious, valuable and attractive as an internship is (considering institution, staff, students, parental perception).

- Start thinking about studying abroad as a freshman student.
- Pre-determine credit transfer through departments and/or faculties (colleges) and publicize it.
- Adopt a structure that does not compete (e.g. semester vs. summer). Don't try to make everything achievable for all programs.
- Allocate scholarship resources to Global E3 program.
- Decrease financial disincentive to save earning 'dollar sign' interning.
- Make communication easy through the use of electronic media.
- Focus on what students gain to help employment. Use recruitment criteria from employers. Images to target audience, e.g. men/women.
- Incorporate existing experience, communicate with other administrative entities to streamline administrative processes and facilitate the students.
- GE3 task: create common templates for certain processes (e.g. applications?).
- Compare + exchange information about credit transfers + course equivalencies.
- Provide credit for research and make information available to GE3 members.
- "Education abroad" vs. "study abroad" to also include research, internship, online, etc.
- Build an internship in the curriculum abroad.
- Make study-abroad as valuable and important as an internship in your communication
- Work with international partners to build industry visits into a term abroad.
- Design programs that are a term of study followed by an internship.
- Include foreign language requirements/training and intercultural experiences.
- Offer on-campus research as part of study abroad terms. Could count as engineering elective or special topics.
- Work with development to get additional scholarships, travel grants, etc.
- Study Abroad must be priority for the Dean.
- Work with Career Centre to spread the word about the value of international and intercultural skills.
- Include industry partners to emphasize globalization.

Five Tops:

- i. Start thinking about studying abroad as a freshman student.*
- ii. Focus on what students gain from studying abroad to help employment, based on data from company recruiters.*
- iii. Design program of an exchange semester (preferably with broad options for credit transfer) and an internship at a company or institute in the country of the hosting university.*
- iv. Offer on-campus research as part of study abroad terms.*
- v. Give students ownership of their study abroad period; let him motivate why they want to follow which courses or do what research at which university.*

- Train students to better articulate the value of their experience: returnees are your best ambassadors
- Respond to the needs of students.
- Stimulate teaching staff to work abroad for a while to also get the international mind-set (particularly US).
- Hiring new staff: shall get international experience during career.
- Push the semester abroad option instead of summer.
- Consider broader options for credit transfer (free electives or technical electives).
- Parental perceptions: Dean or Faculty or Study Abroad office proactively communicate to parents and reassure them about details of program, safety, etc.
- Organize in advance the sharing of course content so the student is assured of credit transfer.
- Getting corporation to validate a study abroad experience. Tie in study abroad summer experience with a paid internship.
- Promote breadth of experience by having one study abroad experience earlier on and doing internship later (e.g. study abroad in 2nd year or summer after freshman year; internship 3rd year or summer after sophomore /junior year).
- Faculty buy-in: Alumni + Faculty involvement in promoting study abroad.
- Use the brightest flames in your university to spark interest and serve as an example (facilitate weblogs, presentations, promotion activities).
- Give student ownership of his study abroad period; let him motivate why he wants to follow the courses/research that he proposes.

Academic Calendar Alignment

Creative feasible solutions for making student's study abroad programs less dependent on the misalignment of the academic calendars between the home and host university (courses, projects, deliverables, exams).

- Academic mapping (which courses which semester per institution).
- Help students re-think their summer plans – studying summer schedule to winter possibly.
- Exam proctoring at home and host universities.
- Develop summer/winter research projects. Non-credit projects, or credit-bearing. Students go both ways.
- Assist faculty to be flexible and accommodating to study abroad students with respect to exams and schedules.
- Utilize technology (record lectures) and alternative versions of exams.
- Special exams – earlier and alternative content / weighting of final exams.
- Take exams at home institution (proctored exams) if schedule host conflicts with home calendar.
- Pre-post session on home campus (including study) to complete/prepare content.
- Deliver (part of) course content online (host institution); as a remedy to overcome mismatch in academic calendars. (Online does not give an experience abroad as such).
- One world academic calendar (would be great, but...)
- Consortium of quarter term schools to hold special courses abroad.
- Research exchanges which are more flexible.
- Co-teach classes between home and host institution (syllabi are critical for planning).
- Condensing exam period at host institution for international students.
- Modularise courses.
- Mobility Window in curriculum.

Five Tops:

- i. Design a Mobility Window in the curriculum.*
- ii. Proctored exams at home and host university when calendars conflict.*
- iii. Part of course content online (recorded lectured, online assignments by host institution) as a remedy.*
- iv. Co-teaching of classes between home and host institution.*
- v. Exploit potential of summer or winter research projects as exchange with flexibility.*

Demanding Curricula

Creative feasible solutions for making student's study abroad programs less dependent on the curricular demands of the home university. (e.g., equivalence, BA+MA, 4+1/3+2, language)

- Clear guidance in course review, focus on overall course goal, less on details. Numerical guide? (“75% match”?).
- Provide full syllabi. Create worksheet for students to guide the faculty. Let the professors decide.
 - ➔ Faculty Workshop at the home institution to prepare students and professors; GE3 2015 (model/pilot); To evaluate sample course syllabus/transcript.
- Comprehensive GE3 database of course equivalencies.
- “Seal of approval” from other institutions.
- Pre-approved semesters with courses (course packages) with preferred partner universities.
- Allow “block” (generic) credit transfer (not necessarily subject-to-subject) especially for electives.
- Pragmatic policy for credit accreditation. Don't aim for “perfect” equivalence.
- Select a shortlist of preferred partners per discipline, and sort out courses that are favourite, the right level, and compatible with calendar.
- Focus on electives during Semester Abroad term.
- Mobility window in curriculum (“free” term in plan of study) to enable Semester Abroad.
- Summer programs.
- Offer special courses that are part of a certificate or a minor program.
- Preselect courses to do abroad with / pre-approval/ equivalency.
- Make a choice: foundational core courses abroad, or set of coherent courses on special disciplinary knowledge not given in the major?
- Course/module that is multi-disciplinary (e.g. on sustainability or entrepreneurship which appeals to many majors).
- Focus on break periods/intersession.
- Develop strategic programs with partners (SAPIENS).
- Educate home faculty on different education systems and differences between research.
- Link research and exchange programs to deepen links between home and host institutions.
- Dedicated design or research project at home university in collaboration with international partner university, or with “imported” students from abroad.
- Make dedicated online courses with one or more partner university, specifically for GE3.

Five Tops

- i. *Clear guidance in course review, focus on overall learning objectives, less on course details.*
- ii. *“Block” credit transfer(not necessarily subject-to-subject) for pragmatic equivalence.*
- iii. *Establish pre-approved semesters with coherent course packages with a shortlist of your preferred partner universities (“seal of approval”).*
- iv. *Credit-bearing Summer programs with special courses or Summer research.*
- v. *Interdisciplinary courses combined with a design or research project that are produced for a class of national and international students and which appeal to many majors.*

- Focus on engineering electives.
- Equivalency based on ABET learning outcomes, and not content.
(Build an engineering school-wide community of practice (ERASMUS) through faculty coaching).
- Go for a Minor in International/ Global study.
- Global collaborative (co-teach) distributive capstone project, limited to capstone research.
- Undergraduate research during summer period.
- Summer research exchange.
- Research based exchange
 1. Financially incentivise semester abroad.
 2. Build job-related capacities through semester abroad (semester-long).
 3. Develop on-campus research opportunities for student summer internships.
 4. Identify companies who have potential development in certain countries.