Engaging Students in Internationalization

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Outline

- Motivation
- Methodology
- Student Engagement
- Internationalization
- Course Matrix
- Contributions
- Conclusions

Research Goals

1. To develop a better understanding of student engagement and course internationalization

2. To combine elements of student engagement and course internationalization

3. To incorporate active international components into an existing course

Research Questions

1. How can we engage students in global issues, ideas and discussion?

2. Can course internationalization be easy, fun and interactive for students and faculty?

Study Definitions

Student Engagement

- – Allowing students to have fun while actively learning
- – Getting students involved in education

Course Internationalization

- – Adding an international component to an existing course
- – International content in any course

Methodology

Phase	Research
Literature Review	▪Read student engagement literature ▪Read course internationalization literature ▪Identified deficiencies and inconsistencies
Conceptual Model	▪Cross-referenced existing theories ▪Identified and combined factors of interest ▪Developed Course Internationalization Matrix
Data Collection	▪Identified multiple cases of interest ▪Completed empirical study ▪Gathered paper and electronic documentation
Data Analysis	▪Organized and documented large volume of data ▪Initial Analysis – read data and wrote case narratives ▪Detailed Analysis - coded, sorted and displayed results

Student Engagement
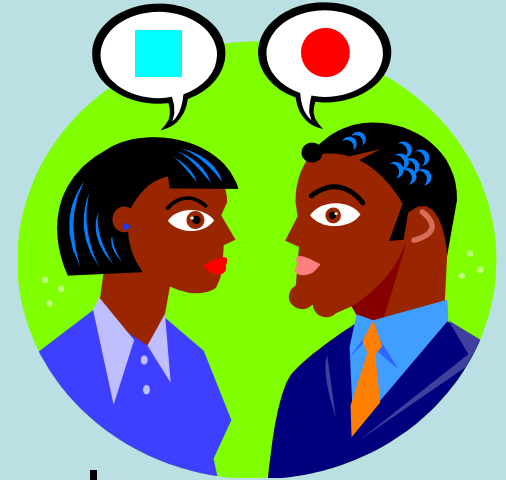
1. Technology
2. Industry (and Academic) Visitors
3. Research, including written and oral presentations and poster sessions
4. Discussion, in-class and electronic
5. Debate
6. Games – Jeopardy, Mind Aerobics, Brain Age
7. Quiz

Course Internationalization

1. Joint projects with students at global universities
2. Explicit coverage of multinational corporations
3. More coverage of issues: outsourcing, tax, law
4. Perspectives of international students in course
5. Volunteer groups like Engineers without Borders
6. Local international groups with technical needs
7. Major international project from above ideas
8. Develop international course research database

Course Internationalization Matrix

	Technology	Visitor	Research	Discussion	Debate	Games	Quiz
Other Universities	X		X	X			X
Corporation		X	X	X	X		X
Issues			X		X	X	X
Students				X	X	X	
Volunteer		X	X	X			
Local	X	X	X			X	
Project	X		X	X	X		
Database	X		X			X	X

Empirical Study

- Used in a fourth-year CS course
- 48 students in Winter 2009
- Started an international database
- Industry visitor spoke about offshoring
- Participated in international research and presentations, in-class and online discussions, debate and Jeopardy game
- International student perspective as well

Selected International Topics

- Global financial trading systems
- Outsourcing and offshoring
- Legal and tax rules, standards, control
- Multinational corporations
- Electronic supply chains
- Virtual work, control and management
- UAE, China, India, Singapore, Ireland

CS 490 Student Objectives

- Understand global corporate and technology issues

- E-business: legal and tax concerns – whose jurisdiction – buyer/seller/both?

- Databases: who controls the information?

- International standards – computer systems, culture, ethics

- National decisions with global impact

International Discussions

1. Because of the disparate culture impacts and comparative complexity in passing work through multiple time zones around the world, would global operations be better than running a 3-shift operation at one particular site?

2. Is a quick text message the best way to update your manager? Think about cultural concerns in China and Japan.

Global Data Management

Just as there is essentially one global telephone system and one global computer network, some believe that eventually there will be one global data management system. What are some of the issues and problems which might need to be addressed in such a complex project?

Some Solutions

- Accuracy
- National borders
- Security
- Control/ownership
- Privacy
- Standards
- Who pays for it?

In-Class Debate Rules

- Half the class defends the statement; half the class refutes it

- Usually left side against right side of the room rather than front versus back

- Five minutes or so to get a few ideas on paper; then a verbal debate in class

Sample Debate Topics

1. It is more important for an IS manager to have business and communication skills rather than technical skills.

2. All businesses should be e-businesses.

E-Business

PROS

- It's the current thing to do
- More global customers
- 24/7 customer access
- Less cost
- Less staff
- Up-to-date paperwork

CONS

- Customers don't want it
- Prefer human connection
- Don't have time
- Expensive to set up
- Technical support needed
- Competition will see us

Data Collection

- 23 informal interviews with 48 students
- 121 archival e-mails from 36 student correspondents over 4 months
- 60 discussion posts
- Written reports, PowerPoint presentations, examination answers, class attendance, in-class participation
- International questions on the final exam

Data Analysis

- Engagement and international elements
- Engagement in small group work in class
- Quality and quantity of discussions, research, class attendance
- Written material evaluated for student understanding of international concepts (research papers, presentations, examinations)

General Results

- Both international knowledge and student engagement were improved as measured by quality and quantity of discussions, research and class attendance.

- Student papers showed a broader focus, multiple viewpoints, higher marks overall

- Had fun, enjoyed doing research, enjoyed learning from each other's presentations

Specific Results

- Students are more aware of international cultural differences, North American bias (outsourcing is bad), technology bias (e-business is good), more cell phones in Europe and Asia; don't text your boss in China
- Solid interaction with industry visitor
- Excellent collaborative international research papers and presentations

2009 Results

Description	2009	2008
Number of Students	48	83
Overall Average	76%	75%
100% Class Participation	77%	58%
In-class Discussions	92%	78%
Final Report Marks	89%	78%
Voluntary Presentations	100%	76%
International Question Marks	91%	N/A

General Contributions

- Increased understanding of student engagement and course internationalization complexities

- Provided new insight linking student engagement, course internationalization

- Tested engagement and international knowledge

Specific Contributions

1. Literature Reviews
   a) Student Engagement
   b) International Knowledge
2. Course Internationalization Matrix
3. Empirical Study Results
   a) Student Engagement
   b) International Knowledge
   c) Student Narratives

Conclusions

1. Developed a better understanding of student engagement and course internationalization through multiple literature reviews

2. Combined elements of student engagement and internationalization through CI Matrix

3. Incorporated active international components into CS 490, an existing course

Future Research

- Pre and post course student questionnaires

- Deeper student engagement strategies

- More complex international ideas

Audience Involvement

- Game of Jeopardy
- Discussion about one global database
- Debate about e-business