

Creating a Global Learning Experience: The Role of Multi-institutional Partnerships in Course Design and Improvement

Dr. Suzanna Long, Engineering Management and Systems Engineering, Missouri S&T

Prof. Chris Moos, International Business, Missouri Southern State University

Dr. Anne Bartel-Radic, IMUS, Universite de Savoie, Chambéry



Presentation Abstract

- Virtual teaming is increasingly important in today's business environment. Providing real world opportunities that explore collaboration across organizational cultures, time zones, and practice gives students a tremendous competitive advantage and fosters experience-based learning.
- This presentation discusses lessons learned from a multi-institutional partnership of universities in the design and implementation of a global supply chain management course.



Presentation Outline

- Introduction
- Overview of Select Literature
- Project Background
 - Description of Programs
 - Collaborative Team Members
- Project Origins
 - Year One
 - Year Two
- Lessons Learned
- Future Plans



Introduction

- Importance of globalizing the curriculum has been discussed for 20+ years
- What does that truly mean?
 - Does this mean different things to different schools based on resources, impact, etc.?
 - What skills are important?
 - How do you transfer that knowledge?
 - How do you assess whether a student is becoming “globalized”?



Overview of the Literature

- Tremendous attention given to the topic of globalization in the literature
 - Emphasis placed on globalization by accreditation bodies (ABET, ACBSP, AACSB, etc)
 - Globalization of modern workforce
 - Global supply chains and organizational networks
 - Need for sophisticated collaborative technology
- Special Issue Journal of Engineering Education



Select Literature

- Need for more than technical competence; high level communications skills needed for global innovation (Tryggvason and Apelian , 2006)
- Flexibility, financial savvy, and an appreciation for cultural, ethnic, and gender diversity are critical factors for success in global markets (Pate-Cornell, 2001)



Literature Review, continued

- Few programs will be truly global in terms of their audience and scope, all can import an awareness of globalization to their students. (Lorange, 2003)
- Globalization of students and programs must be infused through a united front from university governing bodies to the classroom. (Jefferson, 2001)

MSSU Transportation-Logistics: Year One and Two Partner

- Program established in 2005 that builds on the needs for trained supply-chain logistics professionals in the region
 - Features quantitative management coursework similar to that found in many engineering management programs
 - Incorporates globalization into course design for all courses
 - BIE (Business and International Education) grant
- Course: Global Supply Chain Management
- Faculty: Long, Moos, Johnson



Universite de Savoie, Chambery: Year One and Two Partner

- IMUS
 - Two Year Executive MBA Style Program
 - Students study as part of their jobs
- Year-long coursework in Project Management and Logistics
- Faculty: Bartel-Radic, Erhel



Missouri University of Science and Technology: Year Two Partner

- Department of Engineering Management and Systems Engineering
 - Undergraduate emphasis areas:
 - Management of Technology
 - Industrial Engineering
 - General
- Course: Business Logistics Systems Analysis
- Faculty: Long



Collaborative Faculty Backgrounds

Self-introductions:

- Suzanna Long
- Chris Moos
- Anne Bartel-Radic



Project Origins

- MSSU-Savoie Cooperative Agreement
 - Faculty exchange
 - Student exchange
- BIE Grant Award
 - Develop Globalized Curriculum
- Existing collaborative provided effective mechanism for fulfilling scope of grant award.



Year One Timeline

- MSSU Global Supply Chain Course Developed, Summer-Fall 2007
 - BIE Grant Award Requirement
 - Global Certified Business Professional
- Pre-planning Information Exchange, Summer 2007: Internet
- Planning Meeting, Fall 2007: (Moos to Chambery)
- Global SCM Course Offered, Spring 2008
- Project Teams Formed, Spring 2008
 - MSSU Team Presentations
 - U-Savoie Team Presentations (Long to Chambery)



MSSU GSCM Course

- ❑ The Global Supply Chain Course (GSCM) was designed as the equivalent of a capstone course to focus on supply chain management from a global perspective.
- ❑ Team taught by faculty of Transportation Logistics and International Business, the course utilized a virtual team approach and included collaboration with MSSU SOBA exchange partner, the Universit e de Savoie in France.
- ❑ Projects were comparative in nature between organizational supply chain management approaches between French and U.S. This allowed each team to have some familiarity with part of the project, but also required that each team member study and learn from team members about another culture.
- ❑ Team project presentations were made in both the US and France. This required both sets of students to be familiar with the other culture to properly represent the comparative study.
- ❑ The structure of the class projects was specifically designed to include goal setting behavior for the projects and intercultural relations to enhance performance and improve self-efficacy (Schunk, 2000).



Student Team Formation

- Students were assigned to teams consisting of both US and French students and required to collaborate on course projects utilizing various methods of communication and contact consistent with the creation of an international classroom (Leask, 2004).
- This approach provided the basis for an experience with global supply chain issues, and also provided students with experience in a real world of intercultural communications, time zones, time management and virtual teaming.



Student Project Overview

- Student Project Goals
 - Global SCM/Logistics Pedagogy
 - Provide Real World Experience
 - Cultural comparison
 - Global Team-building
- Student Project Topics
 - Wal-Mart vs. Carrefour
 - Wine Production: Napa vs. Bordeaux
 - Future of SCM Technology



Project Team Formation/Management

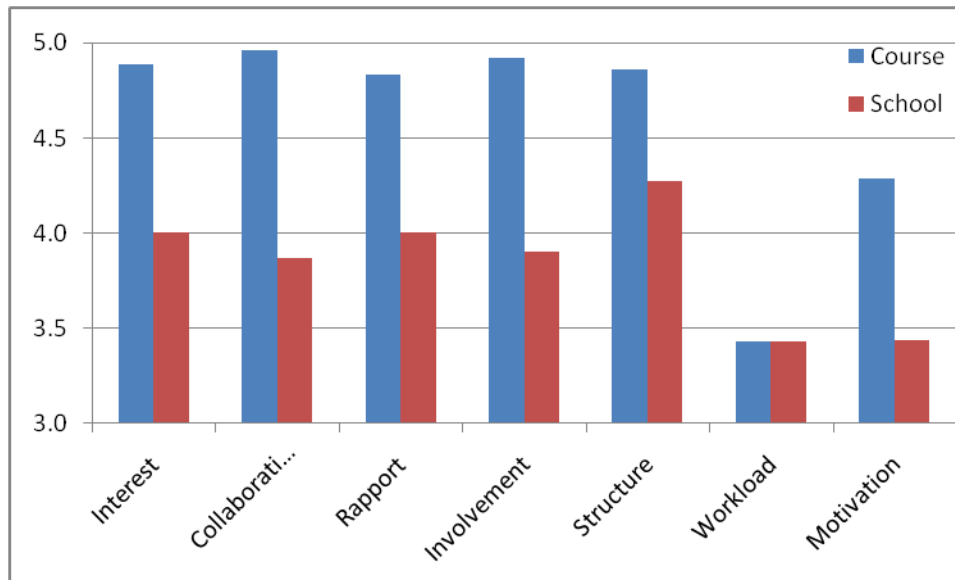
- Project Descriptions Defined Fall 2007
 - U-Savoie Teams formed Fall 2007
 - MSSU Teams formed Spring 2008
- Overall Project Managers:
 - U-Savoie MBA Students
 - Course work in project management
 - Year-long course of study
 - Team Leaders “elected” by each MSSU team, but teams formed by faculty



Did the Students Benefit?

- The addition of a cross-cultural, virtual component was new to both the program and the course
 - explored through the use of questions geared to assessing attitudes regarding the value of virtual teaming as a mechanism for achieving course and program goals.
- The course approach was well-received and student engagement and learning were statistically better than the overall reported level of engagement and motivation for the overall Marketing degree program.
 - The results fell within +/- 1 standard deviation and were represented by a normal bell curve. Using the sign test, a nonparametric technique used to determine significance; course evaluation differences were statistically significant.

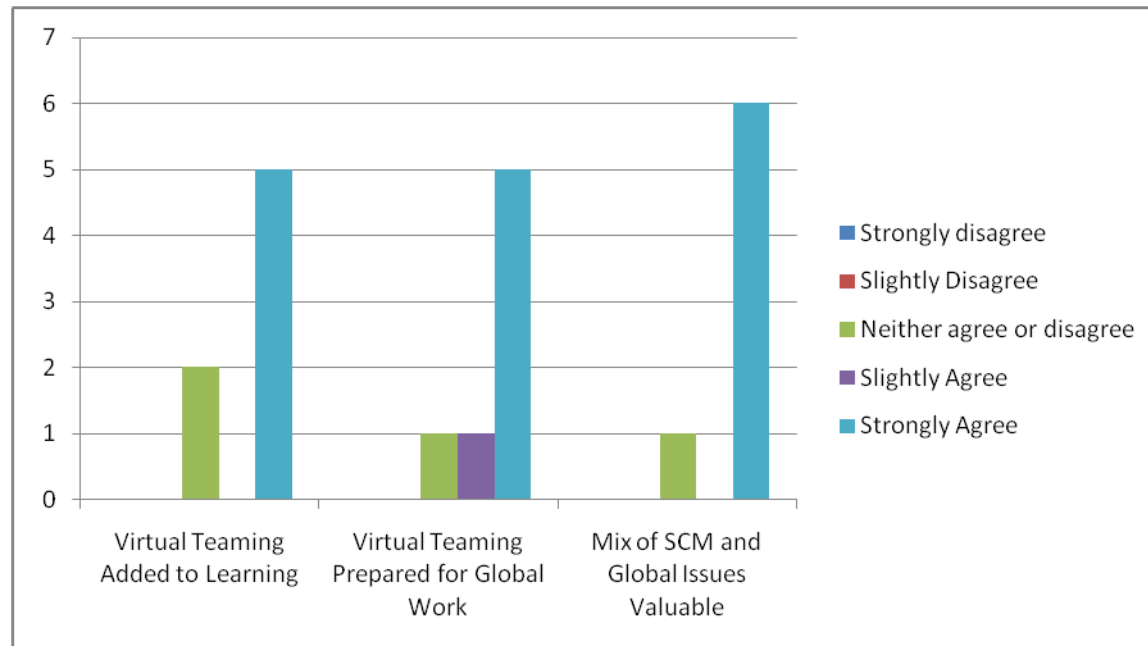
MSSU Student Engagement: Year One



MSSU Self-reported Student Satisfaction: Year One

- Student learning and satisfaction were further evaluated based on experiences with virtual, collaborative teaming between the two universities.
- Key questions included the following:
 1. The virtual teaming added to the learning experience
 2. The virtual teaming added to student preparation to compete in the global workplace.
 3. The course included a valuable mix of supply chain and globalization issues.

Year One: Self-Reported Satisfaction





Year One Lessons Learned

- ❑ Students had a good time
- ❑ Struggled with asynchronous communication (email) as key method of work
- ❑ Requested Skype be used to add “voice” communication
- ❑ More frequent “Professor Chats” and interactions across group lines seemed needed



Year Two Timeline

- Long accepts faculty position at Missouri S&T, Summer 2008
- Three University Collaborative Planning Begins, Fall 2008
 - Project Descriptions Developed
 - Global Financial Crisis: NO faculty exchange
- Year Two Project Teams Form, Spring 2009
 - Conference (Bartel-Radic to MSSU and S&T)



Projects Overview

- U-Savoie Overall Project Leaders
- Missouri Teams Volunteered/Selected Team leaders
- Projects:
 - Road Networks Comparison
 - Toyota Manufacturing Methods
 - Distribution Systems Comparison
 - Alternative Fuels



Course Assessment

- Comparable pre- and post-test assessments of student learning at Missouri schools
- Development of cultural learning/attitudes survey under development (lead: Bartel-Radic) for use with all three student groups



Year Two Lessons Learned

- Communications difficulties presented early driven by email system failures at the French partner university.
 - French students enroll for the equivalent of two US semesters and are not on campus full-time. The shortened window of collaboration required flexibility on the part of all student team members and created a real-world opportunity to experience asynchronous communication issues, along with cross-organizational planning.
 - Created ambiguity and conflict over project management
- Moreover, the “multiple bosses” reality of the virtual teaming presented challenges for both students and the collaborating professors in charge to maintain consistent messages and project outcomes.



Conclusions

- ❑ Great fun for the students and the professors
- ❑ Not without challenges!
- ❑ Students may be able to learn global content w/o travel, but benefit more from seeing/interacting with all of the professors
- ❑ Stricter project protocols necessary along with risk management and mitigation plan



Future Plans

- Although globalization has been incorporated into the curriculum, the effectiveness of methods has not yet been fully analyzed.
- The full implications of what this means in terms of longitudinal success beyond the classroom experience has yet to be determined.
- What does it mean to fully globalize a curriculum? Attitudes may change over the course of a semester, but are these changes long-term? Do changes in attitude continue into the workplace after graduation?
- Future research will examine these questions by tracking graduates of the program into the workforce and conducting periodic surveys to determine whether enthusiasm and perceived value for the instructional approach has waned over time.



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