

## **What Have we Learned? Results of the Project**

### **Executive Summary:**

For both Örebro and Stanford, new uses of ICT tools in the collaboration stations, the group blogs, and the cross-cultural analysis presentations through Marratech facilitated effective team-based activities and deep learning.

The exit narrative of Swedish student Dennis Rydgren affirms this outcome: “The idea to have a cross cultural rhetoric education between Örebro and Stanford is something unique... a first step towards a global university and a new kind of education.” Dennis emphasized that he developed knowledge about “how to be understood” as well as “how to understand others.” His words show achievement of project goals: developing intercultural competencies – sensitivity and cultural understanding – as mediated by effective ICT practices.

### **Project Evaluation Measures:**

We developed ICT-pedagogy activities as part of our curriculum to facilitate intercultural competencies in students. To ascertain how the implementation of these activities might have reached our Project Goals, we developed two research measures for our evaluation:

1. The first measure, emerging from the technology and pedagogy theory of Gail Hawisher and Cynthia Selfe, concerns how to develop “situated knowledge” that are global in scope.
2. The second measure emerges from the diverse body of intercultural theory and builds on theorists Dixie Goswami and Carl Lovitt’s definition of intercultural competencies as facilitating “sensitivity to and consideration for others.”

To assess whether or not we have accomplished our goals for this project, our project evaluation for the WGLN work consists of the following six measures:

- 1) analysis of filmed class debrief sessions captured after each video conference;
- 2) quantitative and qualitative analysis of exit survey data and open responses, conducted by a team of Sociology graduate students;
- 3) qualitative analysis of student letters to PIs at both institutions over both quarters;
- 4) review of external observer notes;
- 5) qualitative analysis of 40+ hours of video and Marratech stream footage of globally-distributed teamwork; and
- 6) focus groups for further mining of survey data results.

### **Fall Results:**

Initial quantitative data from the fall exit survey show successful accomplishment of specific project learning outcomes with mean ratings well above the midpoint (3.0 on 6.0 Likert scale; see Figure 2). The highest rating (mean = 5.4) is for the measure “sensitivity to and consideration for others,” two key traits identified in the scholarly literature as essential for effective intercultural communication. The lowest scores, while still strongly positive at 4.9 and 5.0, concern communication and collaboration skills for future interactions (see Figure 1).

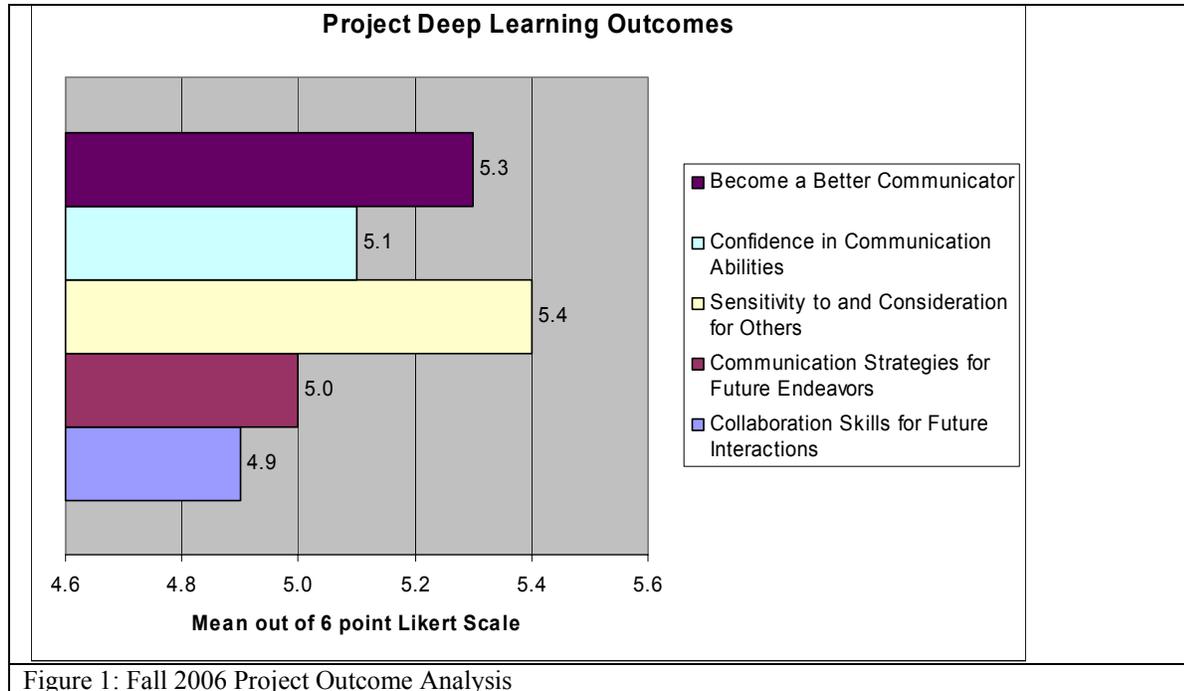


Figure 1: Fall 2006 Project Outcome Analysis

We also learned that a rhetorical approach to cross-cultural texts led to increased sensitivity and cultural understanding; students achieved deep learning of intercultural competencies from collaborative rhetorical analysis of political texts (mean = 5.3), from analysis of writing (mean = 5.1) and from exchange of cultural identity (mean = 5.0).

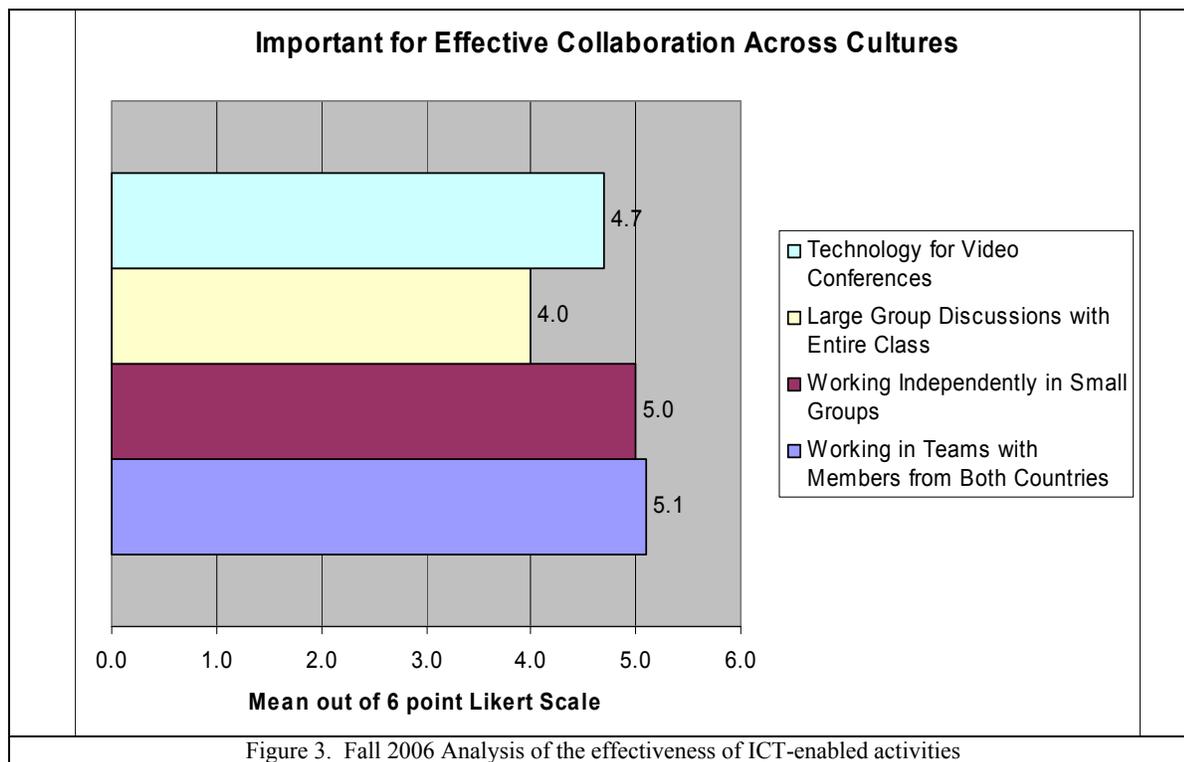


Figure 3. Fall 2006 Analysis of the effectiveness of ICT-enabled activities

In rating activities designed to facilitate intercultural competencies and cross-cultural collaboration (see Figure 3), our findings indicated that students learned most when working within a globally-distributed team across both countries mediated by effective use of information

and communication technologies (ICTs ) at a mean = 5.1. Subsequently, the study team redesigned the use of ICTs at both Örebro and Stanford to facilitate group collaboration in a *dedicated learning space*. This solution, made possible by acquisition and effective implementation of new technologies in the form of collaboration stations, enabled students to form strong interpersonal relationships that facilitated successful group-based learning and self-determined production of new media texts.

Qualitative data from winter confirm the success of the revised ICT implementation, as one open-response on the exit survey reveals: “I learned that by doing group work assignments [in globally-distributed teams or pairs], our ideas can really form within the cross-cultural context. We can really learn a great amount by sharing these ideas found within these small exchanges.”

**Winter Results**

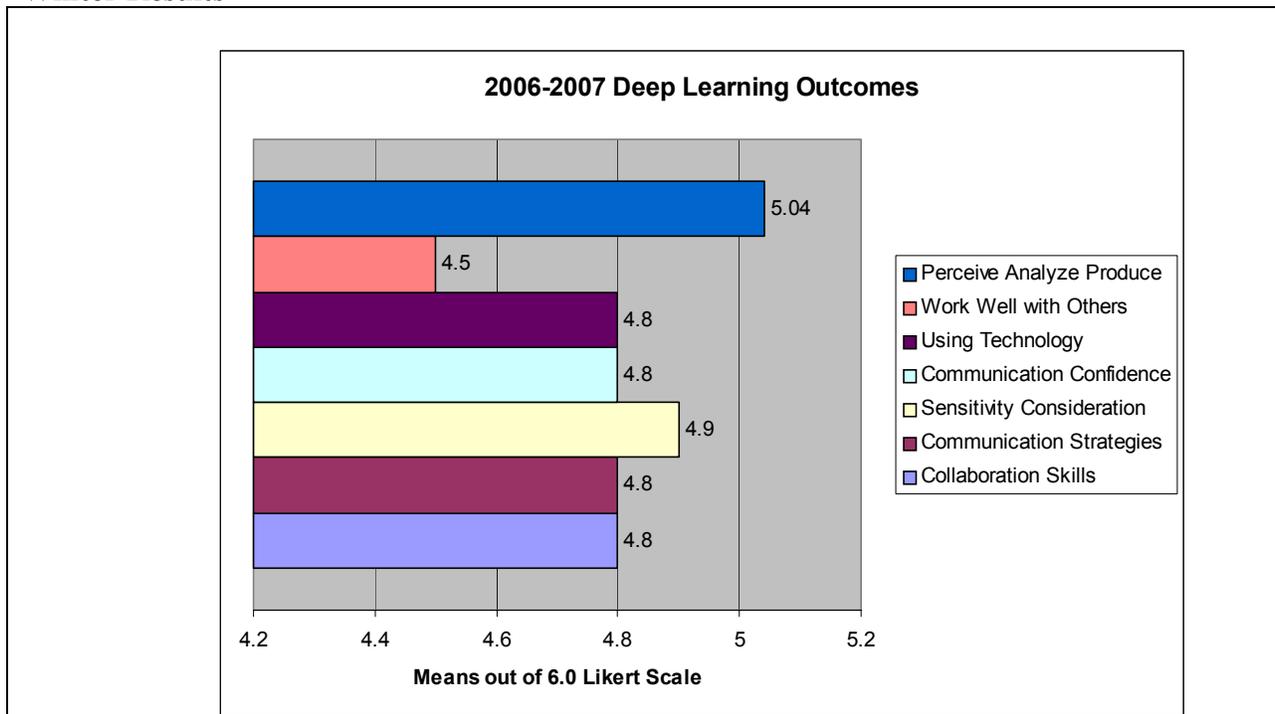


Figure 3: Intercultural Competencies core values scored strongly above mid-point of 6.0 scale for aggregate quarters in 2006-2007.

After the strong results from fall 2006, we were pleased to find similarly high scores for quantitative data in winter 2007. The winter exit survey showed accomplishment of specific project outcomes with a mean of 4.6 on a 6.0 Likert scale for our core measure “sensitivity to and consideration for others”—key traits identified in the scholarly literature as essential for effective intercultural communication. In aggregate data combining fall and winter, 93.4% of students agree (somewhat to strongly agree) that they learned intercultural competencies through the measure “developing sensitivity to and consideration for others from diverse cultural contexts,” the precise definition of “intercultural competencies” provided us by theorists Dixie Goswami and Carl Lovitt. Moreover, 95.7% of students across fall and winter agree (somewhat to strongly agree) with our second core measure for intercultural competencies, namely, “developing a better understanding of how people from different cultural contexts perceive, analyze, and produce knowledge in the form of visual, written, or spoken texts.” This question achieved a combined mean of 5.04 in the aggregate data (see Figure 3).

In terms of assessing the use of ICTs in cross-cultural pedagogy, we found that in winter we were able to successfully replicate high scores for our methodology. Specifically, data indicated that our rhetorical approach to cross-cultural texts does lead to increased sensitivity and cultural understanding. In winter, students achieved deep learning of intercultural competencies from collaborative rhetorical analysis of political texts (mean = 4.7), from analysis of ads and websites (mean = 4.8 and 4.6 respectively) and from cultural identity wiki writing and small group presentations (mean = 4.5). In rating activities designed to facilitate intercultural competencies and cross-cultural collaboration, our winter findings confirmed our fall results, with data indicating that students learned most when working within a globally-distributed team across both countries mediated by effective use of Marratech video and collaborative authoring technology (mean = 5.3).

Qualitative data from winter confirm the high scores for globally-distributed teamwork made possible by effective ICT implementation; as one student wrote, “the interaction was the highlight of the class; [it] enabled us to deeply consider how even the most minor movement, image choice or location in an advertisement, political speech or website might be misinterpreted by another culture.” Another expressed our own aims: “I hope this use of technology will further advance the realm of academic collaboration in the future so that many other students will also benefit from this type of interactive cultural exchange.”

It seems our redesign of ICT use at both Örebro and Stanford to facilitate group collaboration in a *dedicated learning space* was effective in meeting our core project goals. This solution, made possible by acquisition and effective implementation of new collaboration station technologies, enabled successful group-based learning and self-determined production of new media texts, such as collaborative blogs, co-authored visual texts, wiki posts, and other forms of asynchronous writing.

### **Research Lines for Further Study**

Data scores concerning communication and collaboration skills for future interactions are equally strong across both quarters. What interests us most, however, are the statistically significant results comparing both quarters and comparing gender and institution. We are puzzled by findings that show significant differences in learning intercultural competencies, with males scoring higher than females (4.95 versus 4.73), and Stanford students higher than Örebro students (5.02 versus 4.52) (see Figure 4).

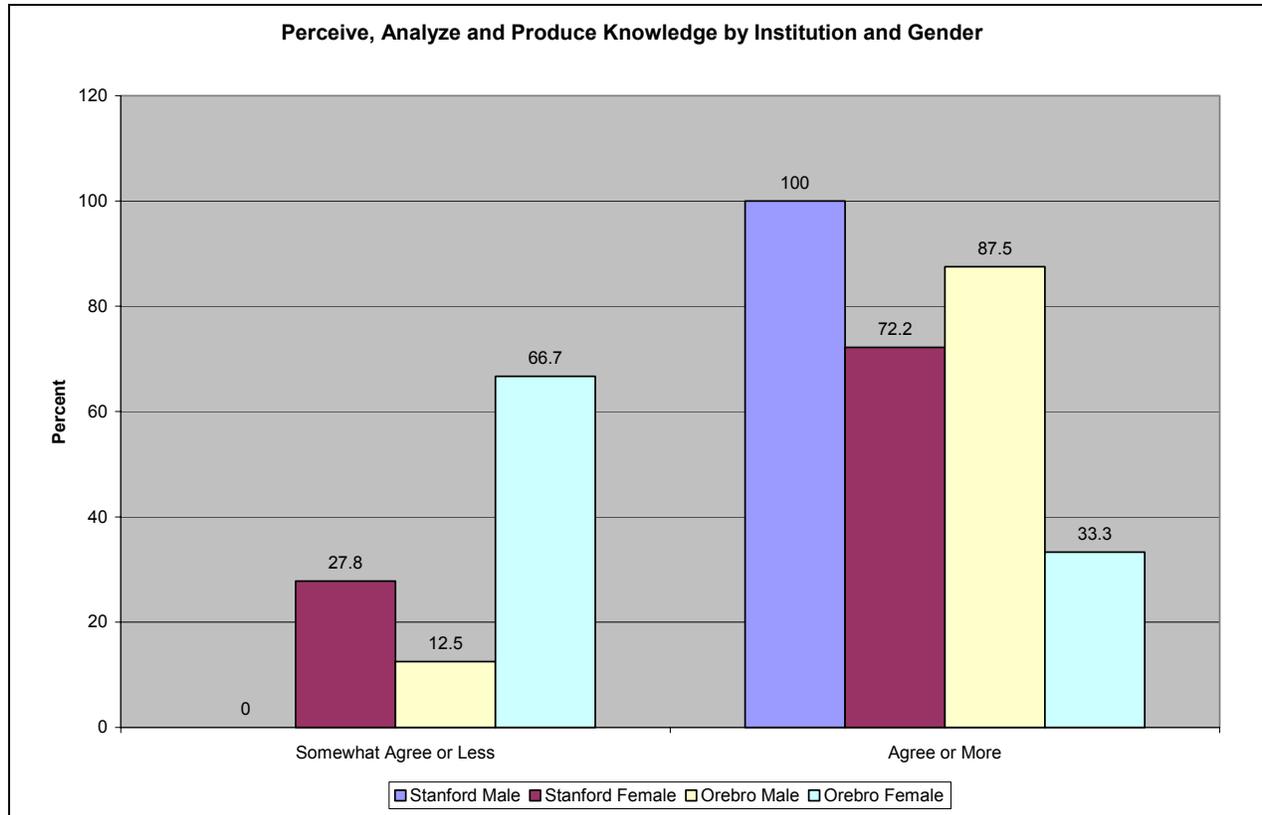


Figure 4: Statistically significant findings in multivariate analysis of gender and institution across fall and winter quarters for core value relating to “intecultural competencies”

In Year 2, we will focus on these variables to offer more sophisticated recommendations for best learning practices with attention to specific university contexts and specific learners (males versus females, international versus local populations, university versus pre-college students). In addition, as we move forward with the project and look ahead to a second year, three challenges remain to be addressed (from the exit survey data):

- 1) students articulate the need to expand the audience beyond two institutions
- 2) students request equity in asynchronous writing assignments
- 3) students show differences in learning across gender and institutional variables.

We hope to address these issues in a second project year, with the expectation of results as rich as we have encountered this year.

### Significance of Year 1 Progress

How did our methodology meet our two research measures?

If we look at the project’s core learning objectives, we find that the scores for our first measure – our core variable for intercultural competencies, namely how students “develop a better understanding of how people from different cultural contexts perceive, analyze, and produce knowledge in the form of visual, written, or spoken texts” -- achieved a combined mean of 5.04. Our second research measure -- “sensitivity and consideration for others” – the precise definition of intercultural competencies as provided by theorists Dixie Goswami and Carl Lovitt – scored 4.9 in aggregate on 6.0 scale.

Thus we feel optimistic that we have developed a model and a method for teaching intercultural competencies and effective cross-cultural communication through ICTs such as Marratech-enabled rhetorical analysis activities for globally distributed teams. And we feel optimistic about the potential scalability of this project to future universities and even pre-college institutions through our methodology, our new workshop model, and our new global partners for next year.

Overall, then, in Year 1, we found that globally-distributed team work mediated by effective use of digital technologies can influence people to approach cross-cultural exchanges with greater sensitivity, understanding, and ethical awareness in order to bring about improved international relations. The project implementation and preliminary data analysis both confirm the importance of strategic use of technologies as tools for developing intercultural competencies.

Significantly, our research identifies three factors that need to be met in the establishment of an effective protocol for digitally mediated cross-cultural collaboration and consequent intercultural understanding: *dedication of focus* to the task at hand; *simulated proximity* to the communicators; and close *transparency* of medium.

In addition to these new discoveries, our analysis of 40+ hours of video and Marratech stream footage, in conjunction with our review of notes by external observer, has led us to define five new research lines for further study:

- 1) analysis of in-group/out-group dynamics;
- 2) assessment of impact of teacher intervention;
- 3) linguistic analysis of dialogue styles;
- 4) examination of contact and connection as precursors to collaboration; and
- 5) scrutiny of group size's effect on collaboration efficacy.

We hope to explore these areas in order to contribute new learning to the field, even as we broaden our project through new associated partners at three Swedish universities (Södertörn, Uppsala, and Umeå) as well as at universities in Australia, South Africa, Canada, and Singapore.

As we look to year 2, we seek to publish articles on the significance of our work to date and implement additional pedagogical activities to secure additional empirical data in support of these findings. We are currently drafting articles on these findings for disciplinary journals in pedagogy and technology, such as *Computers and Composition*, *Kairos*, the Swedish journal *Retorikmagasinet* and the *Journal of Intercultural Communication*.

#### References:

- Goswami, Dixie. “Teaching and Research Directions for International Professional Communication.” *Exploring the Rhetoric of International Professional Communication*. Ed. Carl Lovitt and Dixie Goswami. Baywood, 1999.
- Hawisher, Gail and Cynthia Selfe. *Passions, Pedagogies, and 21st Century Technologies*. Logan: Utah State UP, 1999.
- Lovitt, Carl R. “Rethinking of the Role of Culture in International Professional Communication” in *Exploring the Rhetoric of International Professional Communication*. Baywood Publishing Company, 1999.
- Lovitt, Carl R. And Dixie Goswami. *Exploring the Rhetoric of International Professional Communication*. Amityville, NY: Baywood, 1999.
- Selfe, Cynthia. *Technology and Literacy in the Twenty-First Century: The Importance of Paying Attention (Studies in Writing and Rhetoric)*. Southern Illinois UP, 1999.
- Selfe, Cynthia and Gail Hawisher. *Global Literacies and the World Wide Web*. New York: Routledge, 1999.