

External Level Assessment

Each year WPI holds an internal competition for all students completing the project described in this paper. External judges from academia, industry, and government evaluate both student reports and presentations. The top five place finishers are nearly always GPP products. External program review also occurs at the national level and the WPI's Global Perspective Program has recently won much attention. These awards include recognition from TIAA-CREF Hesburgh, NAFSA, AACU and IIE's Heiskell Award. And, some student work has been recognized by the Smithsonian (Harriss, 2002) and featured by the National Geographic Channel (Zwingle, 1999; ____, 2002). Most importantly, student results and recommendations are locally implemented by the sponsoring host agencies.

Summary

The examples presented at the beginning of this paper are from real WPI student projects and are typical of GPP experiences. Third-year engineering and science students can solve ambiguous open-ended problems in off-campus contexts, contribute to the local environment, and simultaneously satisfy general education and technical graduation requirements. This experience is not restricted to an elite group of highly-qualified students but in fact happens with a majority of our students. However, being able to provide high quality off-campus, and in most cases international, experiences for our students did not appear suddenly nor was it implemented casually. The complexity of offering experiences like these to most of our undergraduate body demands constant supervision and tweaking when appropriate. Ongoing assessment at all of the various levels of operation is a critical component of our success and the success of our students.

Our assessment process was designed to evaluate several aspects of our extensive and fairly complex GPP. Results consistently show that GPP participants satisfy our important educational objectives at higher performance levels than non-participants. Assessment results have also guided improvements and resource allocation for the on-campus experience. In the future our work will move more from the assessment level to the research level. We desire to progress beyond simply knowing that our students satisfy some educational objectives and accreditation requirements. What sort of lasting intellectual, professional, and personal growth occurs? Does the experience prepare them well for a lifetime of learning? Can this short-term sojourn develop an appropriate level of cultural awareness and world-mindedness? How do language skills, particularly the lack thereof, affect the quality of the learning experience? Do the outcomes observed transfer to new academic and other contexts post-sojourn? How is self-efficacy affected by the sojourn? These are deeper questions requiring a multifaceted research program that is currently in development.

References

- Arreola, R. (2000). Developing a Comprehensive Faculty Evaluation System. (2nd ed.) Boston: Anker Publishers.
- Besterfield-Sacre, M., L.J. Shuman, H. Wolfe, C.J. Atman, J. McGourty, R.L. Miller, B.M. Olds, and G.M. Rogers, (2000). Defining the Outcomes: A Framework for EC 2000. IEEE Transactions on Education 43 (2), 100-110.
- Brown, A.L. and A.S. Palinscar, (1989). Guided Cooperative Learning and Individual Knowledge Acquisition. In L.B. Resnick (Ed.) Knowing, Learning, and Instruction: Essays in Honor of Robert Glaser, Hillsdale, N.J. : L. Erlbaum Associates.
- Brown, J.S., A. Collins, and P. Duguid, (1989). Situated Cognition and the Culture of Learning, Educational Researcher. Jan-Feb, 32-42.
- Bruer, J.T., (1993) Schools for Thought: A Science of Learning in the Classroom, Cambridge, MA: MIT Press.
- Davis, T. M., (2003). Open Doors 2001/2002: Report on International Educational Exchange, Institute of International Education, New York, N.Y. retrieved March 1, 2004, from the World Wide Web: <http://www.opendoorsweb.org/>
- Davis, P.W. and N.A. Mello, (2003, January). A World-Class Education, Last Word, ASEE Prism, 68.
- Dewey, J., (1974). John Dewey on Education: Selected Writings. R.D. Archambault (Ed.). Chicago: University of Chicago Press.
- DiBiasio, D., N.A. Mello, and D. Woods, (April, 2000). Multidisciplinary Teamwork: Academic Practices and Assessment of Student Outcomes. Paper presented at Best Assessment Processes III Conference, Rose-Hulman University, Terre Haute, IN.
- DiBiasio, D. (2001, June) Outcomes Assessment of an International Engineering Experience. Conference Proceedings of Annual American Society of Engineering Educators meeting, Albuquerque, N.M.
- Harriss, J., (2002, September 6). Turning the Tide, Smithsonian, 33, 6.
- Herrington, J. and Oliver, R. (2000). An Instructional Design Framework for Authentic Learning Environments, Educ. Tech. Res. and Dev., v. 48(3), 23-48.
- Kaufmann, D.B., R.M. Felder, and H. Fuller, (2000). Accounting for Individual Effort in Cooperative Learning Teams. Journal of Engineering Education, 89(2), 133-140.
- Lave, J. & Wenger, E. (1991). Situated Learning: Legitimate Peripheral Participation. Cambridge: Cambridge University Press.
- Loacker, G. (Ed.) (2000). Self Assessment at Alverno College, Milwaukee, WI: Alverno College Institute.
- McClelland, D. C. (1998, September). Identifying Competencies with Behavioral-Event Interviews, Psychological Science, 9(5), 331.

- Mello, N.A. (2001, summer) Risk Management and How WPI Meets the Guidelines of NAFSA, SAFETI Consortium, http://www.usc.edu/dept/education/globaled/safeti/v2n1_mello.html
- Mentkowski , M. Associates. (2000). Learning That Lasts, Integrating Learning, Development, and Performance in College and Beyond, Milwaukee, WI : Alverno College Publications.
- Rogoff, B. & Lave, J. (Eds.) (1984). *Everyday Cognition: Its Development in Social Context*. Cambridge, MA: Harvard University Press.
- Woods, D. R. (1994). Problem-Based Learning: How to Gain the Most in PBL, Waterdown, Ontario: D.R. Woods Publishing.
- Zwingle, E., (1991, August). Italy's Endangered Art. National Geographic Magazine, 196, 2.
- . (2002, May 12, 13 and 19). Venice Under Siege. National Geographic Out There. National Geographic Channel.

Assessing the Impact of a Strategies-Based Curriculum on Language and Culture Learning Abroad

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Authors's Note: The authors would like to extend a special thanks to research assistants Holly Emert and Joe Hoff for their assistance with the data analysis and for their comments that helped to improve this article, and to Takuya Yoshida (Nagoya University) for his work on the factor analysis.

I n t r o d u c t i o n

R a t i o n a l e f o r t h e S t u d y

During the past 20 years, the internationalization of higher education has become a major feature of educational reform throughout the world and study abroad has been identified as a major component of internationalization. Today, over one million tertiary level students are studying in countries other than their passport nations; over 160,000 students from the U.S. were studying abroad in 2002-2003 (International Institute of Education, 2004). Study abroad is clearly a global educational phenomenon, a “growth industry” in higher education, and contributes to broader internationalization efforts in colleges and universities. In an era of ever-greater accountability and cost-benefit analysis, hard evidence is being demanded to demonstrate that investments in various forms of education, including study abroad, are worthy ones that are realizing their learning objectives. In the case of study abroad, the learning objectives most commonly mentioned are intercultural competence, second language acquisition, and learning in the disciplines. Yet, the research evidence is incomplete and, in the case of second language learning, somewhat contradictory (Freed, 1995).

What the research literature suggests is that despite the seemingly enormous potential for the study abroad environment to produce gains in language acquisition and intercultural competence, students who study abroad often do not take full advantage of the language or culture learning experiences afforded them. Based on her literature review, Pelligrino (1998) concludes that students' perceptions of language learning while abroad, combined with cross-cultural issues, can limit their learning inside and outside of the classroom. For example, they tend to view classroom learning as much less important than learning from interactions with hosts (Miller & Ginsberg, 1995), and thus may not take full advantage of it. Second, the students assume that they will learn language from mere exposure to native speakers – the “language myth” (Wilkinson, 1997), a perception that can lead them to be rather casual about language learning. Third, they still view language academically, that is, as a static linguistic system with rules and one way of communicating, hence are not alert to learning the subtle nuances and variations of language use that could be gained from everyday exposure (Miller & Ginsberg, 1995). As a result, students are very often not properly equipped to make the most of their time spent in a study abroad program.

This situation is not surprising considering that students who go on study abroad programs frequently leave without any formal preparation for language and culture learning in the field and without materials specifically intended to assist them. While there are books that focus on second-language learning strategies (e.g., Cohen, 1990; Kutash, 1990; Brown, 1991; Rubin and Thompson, 1994), these works are academic in nature and do not provide study abroad students or professionals working with these students user-friendly and practical tools to make use of the wealth of research on language strategies. In addition, a sizable literature on intercultural orientation, training, and education, some of the best-known works being Brislin and Yoshida (1994), Cushner and Brislin (1997), Kohls (2001), Landis, Bennett, and Bennett (2003), Landis and Bhagat (1996), Mumford and Fowler (1995, 1999), Paige (1993), Singelis (1998), and Storti (1998, 2001). However, there does not yet appear to be in place a comparable support program for university students going abroad that offers specific language and culture learning strategies in one package and provides inventories to orient them to the use of such strategies.

It should also be noted that while a great deal has been written about study abroad (Chao, 2001; Comp, 2004), there has been a consistent call for more rigorous research which would employ, for example, longitudinal and experimental designs, valid and reliable instruments, multiple research (quantitative and qualitative) approaches, and larger samples (Sell, 1983; Stimpfl and Engberg, 1997). This study was designed to address most of these research issues.