

1. NEED FOR THE PROJECT

Nearly 200,000 U.S. college students now study abroad each year, and that number has been growing steadily over the past decade. The November 2005 report to the U.S. Congress from the Commission on the Abraham Lincoln Study Abroad Fellowship Program recommends strategies to send one million students abroad annually by 2017. The U.S. Senate approved a bipartisan resolution declaring 2006 to be the “Year of Study Abroad.” Clearly, this is a momentous time in the field of international education, as study abroad assumes an increasingly important role in higher education.

Proficiency in foreign languages, enhanced understanding of host cultures, more authentic area studies knowledge, and improved international expertise are among the learning outcomes that we associate with academic programs abroad. Yet we have limited empirical evidence about the impact of the study abroad experience on the learning process. We cannot speak with much certainty or scientific rigor about the academic value that study abroad contributes to a student’s education. We have plentiful anecdotal information about “life-changing experiences,” and few in the international education profession doubt the intrinsic value of study abroad programming. This, however, is insufficient to satisfy critics and skeptics of education abroad, neither is it an adequate knowledge base upon which to justify hundreds of millions of dollars of new and continuing federal investment.

The University System of Georgia requests funding from the U.S. Department of Education’s International Research and Studies program to support a systematic initiative to document learning outcomes accruing from participation in study abroad. The **Gorgia Learning Outcomes of Students Studying Abroad Research Initiative (GLOSSARI) was launched in Fall 2000 as a concerted investigative process to address the many unanswered questions about the**

value and impact of study abroad. Using limited internal resources, we have made some notable progress in identifying certain learning domains that show clear correlation with study abroad participation. These findings were recently published in a special assessment issue of *Frontiers: The Interdisciplinary Journal of Study Abroad* (X, Fall 2004, 65-82). In order to attain the broader reach of our multi-year, multi-phase study (described in Section 7: Plan of Operation), we require external funding to accelerate the project and produce comprehensive, rather than piecemeal, results. We believe that now is a critically important time to move forward aggressively with this assessment effort.

The GLOSSARI project is intended to address concerns of multiple constituencies through a series of structured investigations that pose basic questions about the academic consequences of studies abroad. International education, despite the relative improvement of its standing within the higher education environment over the past two decades, remains subject to careful and frequently well-deserved scrutiny from many quarters. As the field matures, it bears the responsibility to provide data, facts, and analyses that document the value of its endeavors to those both within and beyond the international and higher education communities. GLOSSARI seeks to contribute to this discussion by asking questions that are relevant to many different parties.

- ◆ To governing boards, legislative funding partners, and higher education leaders, it focuses on performance measurements of paramount importance to their decisions, such as retention rates, graduation rates, and licensure pass rates.
- ◆ To faculty and academic deans, it attempts to determine whether students learn specific course knowledge more or less effectively in a foreign environment (this is

particularly important in disciplines that have been traditionally less enthusiastic about sending their students abroad).

- ◆ To international and area studies specialists, it examines the most effective ways that students can achieve content knowledge and cultural literacy during their programs abroad.
- ◆ To students and their parents inclined toward study abroad, it attempts to demonstrate in measurable ways the value added to a college education.
- ◆ To those by nature or circumstance more resistant to studying abroad (minority students, non-traditional students, etc.)—perhaps the most at-risk populations our profession should be aggressively cultivating—GLOSSARI seeks to offer tangible proof of return on the investments of time, money, and energy required.

As the project investigates these and other fundamental hypotheses, it is committed to providing sufficient scope, scale, and scientific rigor to produce valid, verifiable, and replicable results.

This proposal addresses several specific areas of research interest identified in Section 605. These include (#2) studies assessing the outcomes and effectiveness of programs (including study abroad programs) supported by Title VI; (#4) comparative studies of the effectiveness of strategies to provide international capabilities at institutions of higher education; and (#5) research on more effective methods of providing instruction and achieving competency in foreign languages, area studies, and other international fields.

There is a nascent but active assessment movement in the education abroad field today. A strong cadre of practitioners and scholars around the country is conducting studies in a variety of situations to shed light on the affective, social, and cultural learning that occurs when U.S. students live abroad. A representative listing of these studies is provided in Appendix A. The

USDE International Research and Studies program has funded two recent and important projects in this area (by Paige and Cohen and by Vande Berg, Balkcum, et al.). All of these works are complementary in seeking to provide empirical documentation of the effects that study abroad exerts on student participants. None, however, has yet amassed the volume of research subjects nor the breadth of inquiry that can provide a definitive foundation for future investigation. The GLOSSARI project offers an unprecedented capacity and ambitious research design to establish benchmarks of international education that will help fuel the next generation of assessment studies in the field of education abroad.

2. USEFULNESS OF EXPECTED RESULTS

The international education profession is hungry for solid, reliable, and verifiable documentation about the impact of study abroad on student learning outcomes. There is a huge demand for a comprehensive research project such as we propose here. We all seek more definitive answers to the challenges of constructing effective study abroad programs, and we all welcome research that helps articulate the factors and consequences of successful operations. Many experts have called for expanding learning outcomes assessment to broad-based evaluation of study abroad programs. Yet to date, assessments focusing on cognitive, academic outcomes of international education have been relatively rare. Current research in the field is quite promising in terms of isolating certain variables and outcomes, but there is clearly a need for a large-scale, multi-faceted, longitudinal project that will help set standards for a broader research agenda. The GLOSSARI project provides this needed foundation.

Because of the broad range of experiments, research instruments, and techniques that we will employ, our research methods are replicable in many different settings. We expect our

findings to be tested rigorously by colleagues in the field, and we will share our progress regularly through presentations, publications, and web postings. A substantial part of our evaluation plan (Section 10) envisions a coordinated, independent replication of research results to determine their validity across varied populations.

One special advantage of the GLOSSARI project is that it will assess students from a variety of public institutional settings. The University System of Georgia includes community colleges, four-year and master's level comprehensive institutions, historically black colleges and universities (HBCUs), specialized technological schools, and major research institutions. This diversity of institutional types will allow comparisons within and across sectors, increasing the relevance and utility of our results for institutions around the country.

3. DEVELOPMENT OF NEW KNOWLEDGE

This project will develop significant new knowledge about international education programs that will contribute to the purposes of Title VI, Part A, of the Higher Education Act. Under the provisions of Title VI, the U.S. Department of Education makes major investments in the field at both the undergraduate and graduate levels. Perhaps more importantly, Title VI programs play a dominant role in guiding the field of international education, broadly encompassing foreign languages, area studies, studies abroad, and international studies. The systematic examination of how and what students learn in different knowledge domains and in different academic settings is fundamental to any consideration of the effectiveness of Title VI programs, and more broadly it informs our understanding of the learning process in other fields.

Substantial research has already been conducted in the area of second language acquisition and study abroad. Foreign language study is one academic discipline in which the

spirit of learning outcomes assessment has been actively applied to study abroad. Language educators have long been interested in identifying aspects of foreign language study conducted in the target language host environment that produce results superior to those from home-country language study. The supposition, quite naturally, has been that students who interact frequently with native speakers in authentic situations will be advantaged over those whose language learning is limited to the classroom. Although some studies have indeed yielded findings consistent with that view, other studies have concluded that study abroad can actually undermine grammatical accuracy in the target language (for example, students immersed in home-stay situations sometimes achieve lesser gains in language proficiency than do students who reside in international program residence halls).

Given this existing body of solid research, the GLOSSARI project does not focus directly on questions of knowledge gain in foreign languages. Instead, it looks at improved learning outcomes in other content fields and in a broad range of domains. These findings will be particularly useful in identifying improved methods and strategies for teaching area studies and other interdisciplinary subjects that may, like foreign languages, be both positively and adversely affected by study in the host country.

4. FORMULATION OF THE PROBLEMS AND KNOWLEDGE OF RELATED RESEARCH

This project tests the following hypothesis: Students who participate on study abroad programs achieve higher learning outcomes than those who do not. In testing this hypothesis through an extended series of research activities, we intend to answer a number of questions, including:

- What measures of academic achievement are positively affected by study abroad?

- What measures of social achievement are positively affected by study abroad?
- What measures of cultural achievement are positively affected by study abroad?
- What factors in program design affect these achievements?

Particularly as the volume of U.S. students going abroad increases over the coming years, it is vitally important to understand what elements of study abroad programming are most directly linked to improved learning outcomes. For example, does a thorough pre-departure orientation have a positive effect on the educational experience abroad, regardless of the length or type of program on which the student participates? Do levels of immersion in the host country influence academic outcomes, or only cultural ones (or both, or neither)?

We have proposed that hypotheses associated with study abroad learning outcomes be considered in terms of a three-by-three matrix defined by the following two dimensions:

1. Effects of Studying Abroad (Dependent Variables)	
a.	academic achievement
b.	cognitive and affective development
c.	impact on life choices
2. Contextual Moderator Variables (Independent Variables or Covariates)	
a.	individual differences in sojourners
b.	program design features
c.	host country characteristics.

This yields a matrix that serves to organize existing knowledge and identify areas where additional research is needed. Central hypotheses, representative research in each area, and some pertinent issues are discussed below.

Classification of Hypotheses Regarding Study Abroad Learning Outcomes

		1: Effects		
		a. achievement	b. development	c. life choices
2: Moderators	a. individual differences	I	IV	VII
	b. program features	II	V	VIII
	c. host culture	III	VI	IX

1a. *Assessing academic achievement*

Central hypothesis: Students studying abroad reach higher levels of academic achievement than they would have achieved at the home institution.

Matrix Cell I: Individual differences

- ◆ Gender and previous language background affect language learning abroad (Ginsberg, 1992; Rivers, 1998);
- ◆ Willingness to make social connections with host nationals outside the classroom (social extroversion) affects language learning abroad (Kinging & Farrell, 2004; Mendelson, 2004).

Matrix Cell II: Program design features

- ◆ Home stays promote language learning abroad more so than dormitory housing (Rivers, 1998; Veguez, 1984; Yager, 1998);
- ◆ Intensive domestic language learning environments can yield similar language learning results as studying abroad (Freed, et al., 2004);
- ◆ Duration of program is positively correlated with learning outcomes (Engle & Engle, 2004);
- ◆ Structured experiential opportunities yield larger learning gains than does unstructured free time (Vande Berg, et al., 2004).

Matrix Cell III: Host culture attributes

- ◆ Language attitudes and responses of host families affect student language learning outcomes (Wilkinson, 2002).

Typical Variables and Research Designs: The type of student academic achievement most often addressed is foreign language learning. Examples of instruments and designs employed include:

- ◆ Standardized oral or written language proficiency tests, often administered pre- and post-program (Engle & Engle, 2004; Milleret, 1990);
- ◆ Self-assessment tools such as post-program questionnaires and pre- and post-program surveys, post-program focus groups, and journal entries (Ingraham & Peterson, 2004);
- ◆ Faculty case study reports (Ingraham & Peterson, 2004);
- ◆ Conversation analysis of student interaction with host family or other native speakers, ethnographic research (Wilkinson, 2002);
- ◆ Hypothetical scenarios in which students select the appropriate linguistic response (Kinging & Farrell, 2004; Vande Berg, Balkcum, Scheid, & Whalen, 2004);
- ◆ Comparison with students in the domestic classroom (Segalowitz, et al., 2004)

Issues of current research on matrix cells I-III: Relatively little has been done to assess academic outcomes of study abroad other than in the field of language, although some promising studies are in progress. Most study abroad programs do not have a language component, and a number of scholars have insisted that the effectiveness of other program components on academic achievement must be subject to empirical verification.

1b. *Assessing cognitive and affective development*

Central hypothesis: Studying abroad accelerates student development along some continua of cognitive and/or affective development (e.g. individual autonomy, cognitive flexibility, sociability, cultural identity development, ethnorelativism development, inter-group tolerance, global-mindedness).

Matrix Cell IV: Individual differences

- ◆ Students' individual motives for study abroad (improve career prospects, study subject matter not offered in home institution, join friends also going) affect cognitive and affective learning outcomes (Kitsantas, 2004);
- ◆ Individual traits of sensation-seeking and need for achievement affect learning outcomes of studying abroad (Schroth & McCormack, 2000);
- ◆ Foreign language proficiency outcomes vary by predeparture level of language proficiency (Vande Berg, 2001);
- ◆ Affective and cognitive learning outcomes may vary by student race and ethnicity (Martin, Bradford, & Rohrlisch, 1995);
- ◆ Intercultural communication competence knowledge outcomes vary by academic major (Sutton & Rubin, 2004).

Matrix Cell V: Program design features

- ◆ Affective and cognitive outcomes of studying abroad are in direct proportion to program duration (Dwyer, 2004a; Medina-Lopez-Portillo, 2004);
- ◆ Higher levels of cultural immersion facilitated by study abroad programs promote affective learning outcomes of studying abroad (Sell, 1983).

Matrix Cell VI: Host culture attributes

- ◆ When host nation cultures violate students' pre-departure expectations, cognitive and affective learning may be detrimentally affected (Martin, Bradford, & Rohrlisch, 1995).

Typical variables and research designs: Cognitive and affective outcomes of study abroad are most frequently assessed using quantitative measures designed to tap specific skill sets such as intercultural competence or affective outcomes such as self-efficacy or world-mindedness.

Examples of instruments and designs employed include:

- ◆ Survey instrument measures of attitudes toward essential elements of cultural awareness (Carlson & Widaman, 1998; Chieffo & Griffith, 2004; Lathrop, 1999; Nash, 1976; Paige, et al., 2002; Ryan & Twibell, 2000; Sutton & Rubin, 2004);
- ◆ Individual interviews of participants before and after (Dolby, 2004; Tonkin & Quiroga, 2004);
- ◆ Student journals and reflection papers, background questionnaires (Gray, Murdock, & Stebbins, 2002; Kiskinen & Tossavainen, 2004; Lindsey, 2005);
- ◆ Free association and semantic differential scales regarding stereotypes of other cultures (Drews & Meyer, 1996);
- ◆ Comparison with control groups of students who did not go abroad (Carlson & Wildaman, 1988; Sutton & Rubin, 2004).

Issues of current research in matrix cells IV-VI: At an institutional level, this benefit of study abroad is often addressed in exit questionnaires that ask participants to evaluate the broad impact the experience has had on their goals and personal traits. Such student opinion data may be useful for recruiting students and solidifying institutional support, but “satisfaction” surveys may not reflect actual growth experienced, especially in the long term—i.e., they are not true measures of learning outcomes. This is a particular concern in the area of cross-cultural communication competence, an area rarely measured outside of self-reported development.

1c. *Assessing impact on life choices*

Central hypothesis: Studying abroad contributes to students’ subsequent choice of characteristic career paths, lifestyles, and/or residence patterns.

Matrix Cell VII: Individual differences

- ◆ There has been limited investigation of this area. Research priorities should test hypotheses regarding effects of individual difference variables

such as dogmatism vs. tolerance for ambiguity or academic major on susceptibility of subsequent life style choices to studying abroad.

Matrix Cell VIII: Program design features

- ◆ Duration of program affects impact of studying abroad on subsequent life choices (Dwyer, 2004a);
- ◆ Housing and resultant degree of cultural immersion affects impact of studying abroad on subsequent life choices (Dwyer, 2004b);
- ◆ Participation in internship affects impact of study abroad experience on subsequent life choices (Dwyer, 2004c).

Matrix Cell IX: Host culture attributes

- ◆ No extant studies located. Priorities for future research could test hypotheses regarding effects of host culture attributes (such as high vs. low context, economic status, ethnic identity, or size of emigrè community) on susceptibility of subsequent lifestyle choices to studying abroad.

Typical variables and research designs: The primary instrument for assessing this potential benefit of study abroad is alumni surveys, often conducted by organizations like the Institute for the International Education of Students, that have a ready roster of alumni and with many more years of data available than in most university programs. Instruments used include:

- ◆ Measures with Likert-type items asking to rate impact of study abroad experience on specific life variables (Akande, & Slawson, 2000; Dwyer, 2004a);
- ◆ Comparison of study abroad participants with otherwise matched sample of non-study abroad alumni (Gray, et al., 2002).

Issues in current research in matrix cells VII-IX: It is difficult to obtain a control group for longitudinal surveys, and nearly impossible to assure that a control group is truly comparable with the experimental one. Furthermore, this potential outcome of study abroad has been little studied with respect to moderating dimensions of individual differences and host culture attributes. To conduct a strong investigation of future impact, we have designed a prospective “case-control” study, starting off with a large sample size in anticipation of sample erosion over time.

Because they are elective and often financially self-supporting entities operating in a highly competitive milieu, study abroad programs have always been highly accountable to their “customers” (parents as well as students), to university administrators, and to the faculty who sanction and often teach in them. But like the colleges and universities which sponsor them, study abroad programs have traditionally relied on institutional indicators of effectiveness such as number of credit hours generated and records of student health and safety. In addition, many study abroad administrators compile opinion survey data collected from student participants. Such questionnaires often ask students to rate their satisfaction with various aspects of the program (e.g., “I was able to enroll in the classes I needed” or “My home-stay family was friendly and helpful” or “I would recommend this program to other students at my college”).

Some exit questionnaires also ask participants to evaluate the broad impact that the experience has had on their goals and personal traits (e.g., “How has this program affected your intention to get involved in improving the environment?” or “I am more confident of my leadership ability as a result of studying abroad”). Such feedback can be quite valuable to administrators in their efforts for continuous quality improvement, as well as in recruiting students and in solidifying institutional support. Nonetheless, student opinion data and self-assessments of personal growth do not speak directly to issues of academic benefit. When program evaluators have asked students to provide self-estimates of academic achievement engendered by study abroad, the resulting analyses do share some characteristics of learning outcomes assessment, since they do inquire about perceived student learning. Nevertheless—to the degree that those self-estimates refer to vague generalizations about knowledge gain (e.g., “I learned a great deal in my classes abroad” or, “My personal study habits improved as a result of studying abroad”) rather than inquiring about discrete items from some content domain—these

self-assessments support generic values of study abroad, rather than more tangible demonstrations of improved learning outcomes.

Another kind of outcome assessment that has frequently been applied to study abroad pertains to attitudinal and dispositional changes participants experience as a result of their international sojourns. This research is of theoretical as well as practical importance, since it bears on broad issues such as individual response to stress and effects of inter-group contact. Social and psychological variables of interest include individual autonomy or self-efficacy, cognitive flexibility, sociability, interethnic tolerance, and world-mindedness. It is difficult to generalize across this work because of the variety of psychological instruments used and the differing patterns of findings. Taken as a whole, this body of research suggests that studying abroad has a salubrious effect on many psycho-social outcomes, though not all. Extensive cultural immersion is believed to exert a greater impact than “island” study abroad programs. The persistence of any of these psychological effects over long periods of time remains far from certain, however. Additionally, it is an open question whether certain on-campus or U.S.-based multicultural training experiences might bring about attitudinal and dispositional changes commensurate with those obtained from overseas study.

The potential psycho-social outcomes of studying abroad--self-efficacy, world-mindedness, and the like—are certainly among the most desirable attainments that a student may acquire during a college education. They differ from the more specific definition of learning outcomes used in this and other studies, in that they are not direct reflections of academic achievement per se. They are personal attributes and attitudes that may be attainable by any number of cross-cultural life experiences. The application of learning outcomes assessment to

study abroad means asking questions specifically about how the curricular content knowledge and cognitive understandings of participants have (or have not) improved.

5. SPECIFICITY OF STATEMENT OF PROCEDURES

The research for this project is heavily quantitative. We have the unparalleled advantage of a massive data base of study abroad participants, containing extensive information about their study abroad program experiences. We also have the unique ability to crosswalk information from the study abroad database with other University System of Georgia databases about these students.

The research for this project also involves the use of multiple assessment instruments. Unlike the IES MAP study or the Paige and Cohen investigations, for example, which rely exclusively on the Intercultural Development Inventory (Hammer and Bennet, 2001), we are using several different assessment tools among our survey populations. We will continue to employ the initial instrument developed at the beginning of the GLOSSARI study (Intercultural Learning Outcomes, modified from a previous survey by Fantini). We will also use other assessment tools from the list below. This approach serves two purposes: first, to verify student learning outcomes through multiple measures, and second, to examine the comparability of various instruments and the extent to which they assess similar or different outcomes. One of the current challenges in the field is the selection of the most appropriate survey instruments. We believe that the use of a broad variety of instruments best serves the needs of the assessment community, particularly in these early stages of study abroad outcomes research. It will, however, be helpful to have a comparative understanding of how these tools complement each other.

Selected Instruments Used in Assessing Attitudinal Outcomes of Study Abroad
<p>◆ Associative Group Analysis (Szalay & Kelly, 1982). A free association task in which participants are given a sheet of paper with the name of a nationality followed by several blank lines for their associations. Drews and Meyer (1996) paired this with a semantic differential task in which students also received a page for each nationality with 12 rating dimensions, each with a 7-point scale anchored with bipolar adjectives.</p>
<p>◆ Attributional Confidence Scale (Gudykunst & Nishida, 1986). Participants indicate from 0 to 100% how confidence they are in their ability to predict the behaviors and thoughts of individuals from another culture. Higher scores indicate greater attributional confidence. Sample items: “How confident are you in your general ability to predict how ____ will behave?” and “How well can you predict ____’s feelings?”.</p>
<p>◆ Cross-Cultural Adaptability Inventory (CCAI) (Kelley & Meyers, 1995). A scale developed to quantify dimensions considered to be associated with effectiveness in cross-cultural situations. The inventory is comprised of 50 questions representing four subscales: Emotional resilience, flexibility/openness, perceptual acuity, and personal autonomy. Participants answer questions on a scale from 1 (definitely not true) to 5 (definitely true).</p>
<p>◆ Expected/Experienced Difficulty in Study Abroad (Martin, Bradford, & Rohrllich, 1995) Students indicate on a five-point scale (1 = no difficulty and 5 = great difficulty) how much difficulty they anticipate/experienced in 13 different areas with respect to study abroad.</p>
<p>◆ Intercultural Development Inventory (IDI) (Hammer & Bennet, 2001). A 50-item instrument designed to determine the relative intercultural sensitivity of individuals. It provides results in numeric and descriptive forms both for actual and self-perceived scores. It is based on the Development Model of Intercultural Sensitivity (Bennett, 1993) that posits six clear stages of development from ethnocentricity to ethnorelativism. Each stage is indicative of a particular worldview configuration, and the overall score on the IDI can be used to plot his/her stage of development as defined by the DMIS.</p>
<p>◆ Intercultural Learning Outcomes (ILO) (Sutton & Rubin, 2004). An instrument created to be specific to learning outcomes derived from studying abroad, but which would be sufficiently generic to work across a wide variety of disciplines. The 34-item survey samples items from seven content domains: (1) functional knowledge, (2) knowledge of global interdependence, (3) knowledge of cultural relativism, (4) verbal acumen, (5) knowledge of world geography, (6) interpersonal accommodation, and (7) cultural sensitivity.</p>
<p>◆ Intercultural Sensitivity Inventory (ICSI) (Bhawuk & Brislin, 1992). An intercultural sensitivity scale focusing specifically on sensitivity of respondents to issues related to individualism and collectivism. The instrument includes 46 items.</p>
<p>◆ Study Abroad Goals Scale (Kitsantas, 2004; Opper, Teichler & Carlson, 1990). Students indicate on a 5-point rating scale from 1 (not at all important) to 5 (very important) how important a particular goal is for participating in study abroad. Sample items are: “Desire to develop my own perspective of the host country of the study abroad program”; “Desire to enhance my understanding of the host country.” Goals are grouped into three categories: cross-cultural competence, subject interest and competence, and social gathering.</p>

Additional detailed information about the structure of project procedures is contained in Section 7: Plan of Operation.

6. ADEQUACY OF METHODOLOGY AND SCOPE OF PROJECT

The GLOSSARI project is the most ambitious and comprehensive attempt to measure the impact of study abroad yet designed. This stems from the unique ability of the University System of Georgia to collect and analyze information about study abroad participants—as well as control groups of non-participants—in unprecedented scale and scope.

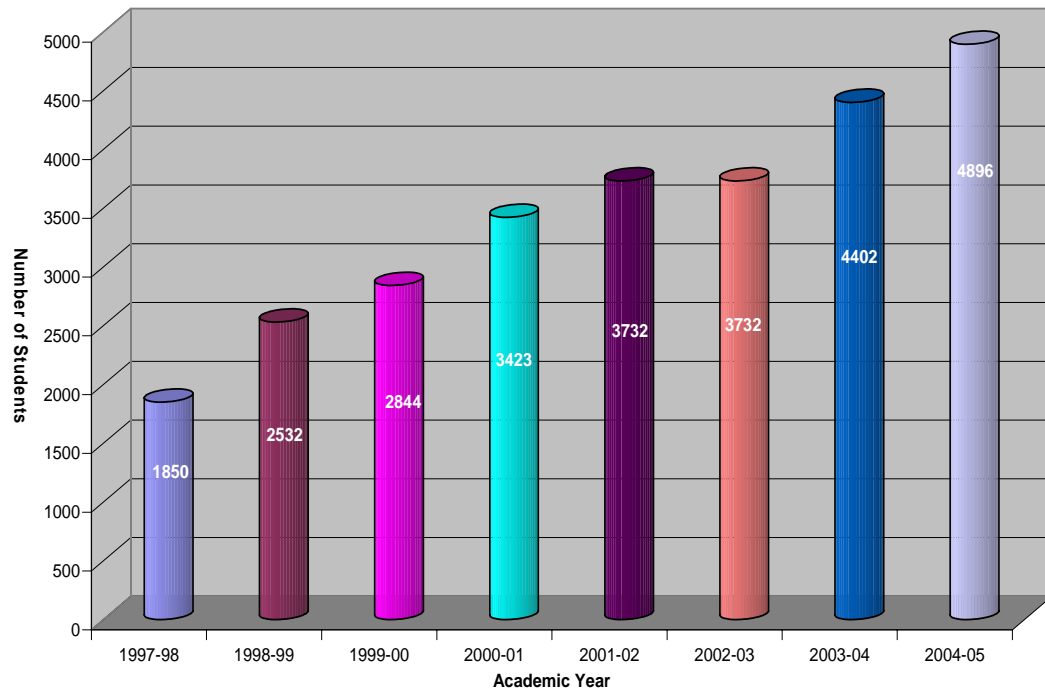
The University System of Georgia is comprised of thirty-five public institutions, currently enrolling approximately 218,000 undergraduate and 35,000 graduate and professional students. Campuses range from small, rural two-year colleges to large, cosmopolitan doctoral research-intensive universities. Eighty-nine per cent of USG students are Georgia residents, more than one-third of entering freshmen are first-generation college-goers, thirty-five per cent are other than Caucasian, fifty-eight per cent are women. Regents' policy requires two high school Carnegie units of foreign language coursework for admission, and the average SAT score of entering freshmen at USG campuses ranges from 802 to 1325. A single Board of Regents governs all 35 institutions.

Georgia is among a select group of states with a system-wide international education office. A governance structure led by a presidentially appointed System Council on International Education and supplemented by a System committee on study abroad, world regional councils, and disciplinary consortia help facilitate coordination of overseas study. The University System of Georgia's inter-institutional catalog of study abroad programs (www.usg.edu/oie/catalog) annually lists more than 325 international study opportunities for its students. These span the gamut from ten-day island programs in London to year-long exchange programs in Thailand.

This diversity of student bodies, institutional missions, and study abroad programming makes the University System of Georgia an ideal host for developing a model learning outcomes assessment initiative. It has the infrastructure, authority, and commitment to support such an on-going effort.

The University System of Georgia is also noteworthy for the high priority that its Board of Regents has placed on study abroad. As early as 1995, the Regents' strategic plan called for doubling the numbers of Georgia students who studied abroad by 2001. Having achieved that goal, the Board's new strategic plan again calls for a major increase in study abroad participation—to 25% of undergraduate degrees awarded by 2007 (approximately 6,200 students). As part of its documentation for annual reports to the Regents, since 2002 the System Office of International Education has collected detailed information about each student (by name and identification number) and their study abroad experience (country of study, duration, etc.). This extensive data collection effort—*now numbering nearly 5,000 individual records per year*—provides a rich, self-standing resource for analysis of study abroad patterns and characteristics. It can also be linked to other System databases to extract additional data about study abroad participants. In addition to supporting analysis of student demographic data, an important function of this design is its ability to access pre- and post-participation academic performance measures and behaviors.

USG Study Abroad Participation AY 1998- AY 2005



7. PLAN OF OPERATION

As noted in Section 1, the University System of Georgia's GLOSSARI project has identified assessment objectives that relate directly to the purposes of Title VI of the Higher Education Act. Its research design encompasses six components.

Phase I compares study abroad participants and non-participants on both self-reported and independently assessed learning outcomes. We envision two steps in this phase. Step 1 is the replication of our initial assessment of self-reported knowledge using a scientifically selected control group. We conducted this first effort at devising a generic study abroad learning outcomes assessment instrument (Intercultural Learning Outcomes, or ILO) in 2001-2002. The project benefited from System-wide access to student participants from across diverse institutions and varied study abroad programs. Nonetheless, it has been vulnerable to several

methodological critiques. Its primary weakness lies in the fact that the comparison group was essentially a convenience sample and not well-matched to the characteristics of the study-abroad sample. It also utilized a post-test only design, and therefore was unable to estimate actual degree of growth along the seven learning outcome dimensions that could be attributable to studying abroad.

Consequently, Phase I/Step 1 will replicate and refine the comparison of study abroad participant and non-participant self-reported learning outcomes. The Intercultural Learning Outcomes survey (along with accompanying demographic and cross-cultural/experiential questions) will be administered pre-test and post-test to cohorts of study abroad participants. The target sample of study abroad participants for this replication study will be 500. To capitalize upon the diversity offered by the University System of Georgia, participants will be enrolled in a minimum of thirty different programs housed at a minimum of ten different institutions.

At the same time, the identical instruments will be administered to 500 students who did not participate on a study abroad program. This comparison group sample will be selected so that it is weighted to represent the same institutions in the same proportions as study abroad participants and to reflect comparable demographics. In addition, the lag between pre-tests and post-tests will approximate those of the study abroad groups.

Step 2 assesses individual learning outcomes among participants and non-participants through knowledge and skill examinations that are independent of program type, location, or curricular content.

Phase II compares pre-departure and post-departure self-reported learning outcomes. We envision two steps in this phase. Step 1 administers the ILO to study abroad participants at

uniform points in time prior to their departure and near the end of their program abroad. Step 2 administers multiple assessment instruments to the same groups as another test on the validity of findings and the accuracy and comparability of various instruments.

The Intercultural Learning Outcomes inventory is one of the few study abroad learning outcomes measures that is (a) focused on cognitive understanding rather than attitudes or skills and (b) generic enough to be suitable for administration across a wide variety of programs and disciplines. However, like most such instruments, it has never undergone a process of concurrent validation with other related measures. The Intercultural Development Instrument is perhaps the most commonly administered standardized instrument used to evaluate study abroad program outcomes, but there are a number of other assessment surveys that have been used to examine learning outcomes from study abroad. We propose to conduct a validation study of the ILO and other instruments in conjunction with the Phase I data collection for the proposed project. A sample of 100 study abroad participants and 100 comparison group members (i.e., never studied abroad) will be selected for additional pre-test/post-test administration of the IDI and other measures. For purposes of validating the GLOSSARI self report of learning outcomes, we hypothesize that the GLOSSARI inventory will be moderately correlated with IDI, but that the correlation will be stronger at pre-test than at post. We hypothesize further an interaction between study abroad experience and test score such that standardized GLOSSARI scores will rise more steeply for those who have participated in study abroad than those who have not, whereas IDI scores will remain relatively flatter across time for both groups.

The original 2001 GLOSSARI instrument will also be compared to a revised version specifically modified to better reflect generic learning outcomes (i.e., across programs and disciplines) that may accrue in particular from short-term study abroad programs, defined as

those of less than thirty days duration. To modify the instrument, two focus groups will be conducted. The first focus group will be comprised of individuals who have directed both short-term and longer-term study abroad programs within the 35 institutions of the University System of Georgia. The second focus group will be comprised in equal measure of individuals who have directed only long-term programs and of individuals who have directed only short-term programs. The task of both focus groups will be to examine the ILO items in light of likely outcomes that distinguish programs of varying length. The focus groups will be invited to nominate items to be excluded, and new items to be included. A form most suited to assessing cognitive learning outcomes of short-term programs will subsequently be developed.

A separate group of approximately 100 study abroad participants will be administered both versions of the learning outcomes measure (counterbalancing for order of administration). This subsample will be selected to represent students enrolled in programs of varying length. At least half will be from short-duration programs. The instruments will be administered at pre-test and post-test. Our hypothesis is that the newly devised short-term program evaluation instrument will yield significantly higher gain scores for students attending short-term programs than for students attending longer programs. Scores on the newly developed version will not correlate with duration of program. In contrast, scores on the current version of the GLOSSARI instrument will exhibit a moderate positive correlation with program durations, that is, will reflect only that longer programs yield stronger learning outcomes.

Phase III compares study abroad participants and non-participants on course-specific examinations. Study abroad learning outcomes research has a well developed history of discipline-specific achievement data in the area of foreign language learning (e.g., Freed, 1995). Beyond the realm of foreign language, however, relatively little is known about the impact of

studying abroad on academic achievement. For example, do students who study Greek tragedy in Athens, Greece, necessarily come away with a better grasp or appreciation of the subject matter than do students who take the same class in Athens, Georgia? Do students who take a class in ecology in Savannah, Georgia, miss out on learning outcomes they might have achieved had they taken that class in the savannahs of Tanzania?

Phase III of the proposed project is designed to address the need for careful comparison in discipline-specific learning on home campuses versus abroad. Three kinds of documentation concerning learning outcomes will be considered. First, we will collect student performance data on summative (final) course exams in a variety of formats (e.g., essay responses as well as multiple choice tests). Second, we will collect a sampling of learning artifacts such as student essays, lab reports, reading journals, artwork, etc.. Finally, we will collect a sample of formative student performance artifacts produced in response to “classroom assessment techniques” (CATs; see Angelo & Cross, 1993). Some common CATs include cognitive maps, one-minute papers, and analytic memos. While CATs are not usually graded in a formal sense, they are still subject to evaluation and are often used to evaluate class learning in the aggregate.

Collecting comparable student performance data across study abroad and domestic teaching contexts is challenging for a number of reasons. First, as many instructors will attest, a course taught abroad is not the same as a course taught on campus, even if the two classes share the same course number. One naturally alters many aspects of curriculum and evaluation to adapt to the opportunities available in the two teaching situations. Therefore, the project team will recruit instructors who will administer at least some of the same exam questions, assignments, or CATs in classes they teach both at home and abroad. Second, it is not easy to collect student artifacts even on domestic campuses. Instructors turn back student essays or

cognitive maps with comments scrawled across the bottom and without retaining copies.

Finally, instructors who know that the educational value of their classes—whether taught abroad or on campus—will be judged on the basis of their students’ work products understandably are leery of participating in evaluation research of this type. We have determined that these logistical problems in conducting research in support of the Phase III goals are not insurmountable.

It is anticipated that twenty paired classes (taught once abroad and once on campus during the same academic year) will be examined. These classes will be deliberately selected to span a wide swath of disciplines and institutions. They will include approximately equal numbers of humanities, social sciences, physical or biological sciences, and pre-professional classes from at least five varied institutions. We expect to obtain data sets from 300 students studying abroad and 300 of their counterparts enrolled in parallel courses on campus.

Phase IV provides an analysis and comparison of study abroad participants and non-participants on academic performance measures, such as graduation rates and licensing examination outcomes. This is a substantial quantitative exercise that integrates the annual database information of study abroad participants with other University System of Georgia databases containing additional academic and demographic information about these students. We will conduct this analysis for approximately 2500 students each year, beginning with the 2002-2003 cohort.

Phase V correlates identified learning outcomes with program design features (e.g., orientation, length of stay, location, post-return debriefing, percent of unstructured time in the host nation, etc.). Some recent notable efforts have attempted to relate study abroad program design features with student learning outcomes so as to provide evidence-based recommendations for program development. For example, Dwyer (2004) examined the

contentious issue of program duration. Engle and Engle (2003) present a taxonomy of study abroad programs that take into account a number of frequently considered program features in addition to duration: housing and other indices of degree of immersion, host nation language, and nationality of instructors.

This part of the GLOSSARI study will utilize self-reported learning outcomes collected in Phase I. The seven dimensions of study abroad learning outcomes identified there will serve as criteria in regression equations. Predictors (either continuous scales or categorical “dummy” variables) will include at least the following: (a) program duration, (b) Anglophone status of host nation, (c) degree of immersion in housing, (d) degree of immersion in instructional time, (e) amount of unstructured time which might promote immersion, (f) nationality of instructors, (g) nationality of other students; (h) depth of predeparture orientation, (i) depth of post-return debriefing. These predictor variables will be ascertained from surveys conducted with program directors.

Using the regression equation parameters revealed by this additional analysis of the Phase I data, an example of a program optimally designed to maximize each of the seven learning outcomes—that is, up to seven exemplar programs corresponding to the seven dimensions of learning outcomes on the ILO instrument--will be identified from among the University System of Georgia study abroad programs. In collaboration with the program directors, case studies will be developed on each exemplar.

Phase VI compares study abroad alumni and non-participant cohorts on self-reported learning outcomes, career paths, and other factors two-to-five years after graduation. It is often observed that the impact of studying abroad is far more profound and diffuse than merely affecting performance in the classes one takes overseas, indeed more profound and more diffuse

than effects on overall university grade point average. What one learns from studying abroad is often linked to life decisions one makes, such as career choice or choice of residence. Alumni surveys are the primary tools for examining these long-term and profound effects on life adaptation. See for example, Norris and Dwyer's (2005) report of an IES survey of its alumni, utilizing the Model Assessment Program survey instrument.

A typical alumni study will compare students who did participate in study abroad with those who did not, some years post undergraduate education. Career choice is a common outcome that is examined. However such alumni studies generally do not include measures of learning outcomes to be considered in juxtaposition with life choices. As a result, most existing alumni studies cannot establish that learning outcomes of studying abroad are responsible for the long-term life choices of alumni. It is quite possible that study abroad alumni started out with more cosmopolitan outlooks than non-participants, and they simply maintained those outlooks over time.

This part of the GLOSSARI study aims to remedy that gap in the research literature on the life courses of study abroad alumni. Exploiting the diversity of student bodies feeding into University System of Georgia study abroad programs, approximately 250 alumni who studied abroad five to six years previously will be contacted. The names of these alumni are maintained on the USG study abroad database. A sample of 250 non-study abroad alumni matched on year of graduation and institution attended will also be identified. Using university alumni records, these former students will be contacted by email or by post. Each will fill out a version of the GLOSSARI self-report of learning outcomes. In addition, each will complete a survey regarding post-graduate education and training, career trajectory, degree of cross-cultural contact, and residence. This design will permit not only comparison of study abroad alumni with non-alumni,

but also an assessment of the role of persistent learning outcomes on the life choices and adjustments of alumni. We hypothesize that level of measured learning outcomes will be higher among those who studied abroad than those who did not, and that the seven dimensions of learning outcomes will predict career, residence, and friendship patterns for the study abroad alumni, but not for those who never studied abroad.

Management of the entire GLOSSARI project is vested in the University System of Georgia's Office of International Education. Staff in that office have extensive experience managing large-scale research projects and program operations. Information about the office and its broad range of activities and initiatives is available at www.usg.edu/oie.

8. QUALITY OF PERSONNEL

Richard C. Sutton and Donald L. Rubin are the principal investigator and project director, respectively, for this initiative. Sutton is Director of International Programs and Senior Advisor for Academic Affairs of the University System of Georgia—a position he has held since 1998. Rubin holds a joint appointment as Professor of Speech Communications and Professor of Language and Literacy Education at the University of Georgia

Sutton and Rubin have collaborated extensively on study abroad assessment research since the GLOSSARI project was launched five years ago. The results of their initial findings have been presented at the Assessment Forum of the American Association of Higher Education, NAFSA: Association of International Educators, and the Forum on Education Abroad, among other venues. Their seminal article “The GLOSSARI Project: Initial Findings from a System-wide Research Initiative on Study Abroad Learning Outcomes” was published last year in the special edition of *Frontiers: The Interdisciplinary Journal of Study Abroad* (X, Fall 2004, 65-

82). Rubin specializes in advanced quantitative analysis of human behavior; Sutton's expertise in international education and higher education inform the GLOSSARI research agenda.

Abbreviated *curricula vitae* are included in Appendix B and C.

Our project calls for the hiring of two staff employees and two graduate research assistants. In all of its employment policies and practices the University System of Georgia maintains a steadfast commitment of equal opportunity and particularly encourages applications for employment from groups that have been traditionally underrepresented.

9. BUDGET AND COST-EFFECTIVENESS

This is a major initiative that serves a pressing national need: to document the value of education abroad to a broad range of concerned constituencies across the country. The University System of Georgia began this project several years ago, and it has devoted its own financial resources to design the original project and to launch the initial studies. We have clearly been committed to this effort, and we will continue to support it in the years ahead.

We have requested a \$597,633 investment of federal funds in order to accelerate the GLOSSARI project and provide the nation with a full series of results from the six phases of the investigation. Without federal funds, findings from each phase would trickle out sequentially over at least the next decade. We believe that there is now a much more urgent need to provide comprehensive results more quickly. From that perspective, we believe that the requested investment is reasonable and cost-effective. The detailed budget and budget narrative are attached to this proposal.

The International Research and Studies Program does not require matching funds, and we were advised not to obscure our direct request for federal dollars with detailed articulation of the

USG's substantial investment in this project, and in international education generally. The System's commitment to its international operations, however, annually exceeds \$50 million.

10. EVALUATION PLAN

This project is an evaluation of the effectiveness and impact of study abroad programs. The "evaluation plan" is consequently embedded in every facet of the plan of operation (Section 7). The research results are quantitative and verifiable.

We do, however, strongly believe in the importance of independent verification of our research methods, procedures, and findings. We also want to have an external evaluation of our project design and management. To achieve these, we have included three separate approaches.

First, in the second and third years of the project we will hire external evaluators to conduct a summary assessment of our achievements to date. These consultants will represent two schools of thought: one will be drawn from the study abroad assessment community and will look particularly at how our project can be improved and strengthened; the other will be drawn from outside the study abroad assessment community and will be charged particularly with analyzing the weaknesses and omissions of our project design and execution. We have used this joint review approach with other grant projects and have found that it yields a balanced and constructive prescription for improvement.

Second, we have requested funds in our Year 3 budget to conduct replication studies outside of the University System of Georgia. These replications, of course, would not be on the same large scale as the research conducted in Georgia. Smaller but scientifically correlated samplings from public university systems in other states (e.g., North Carolina, Wisconsin,

California) would serve to validate, modify, or discount GLOSSARI findings. We intend to focus these replication studies on Phases I, II, and IV.

Third, the University System of Georgia and the State of Georgia provide regular financial and management audits of all programs. We will request that a minimum of three financial audits and one management audit occur during the grant period.

11. ADEQUACY OF RESOURCES

We believe that the resources requested and committed to this project are appropriate and adequate to accomplish its objectives. U.S. Department of Education funds will be used for the costs of staffing and operations directly associated with the project. The University System of Georgia is providing additional resources—including office space, equipment, technology and other support services, etc.—to ensure that federal resources are used in the most effective way.