

Basic Student Data and Outcomes Assessment in International Education
Mell Bolen, Brown University

This paper proposes that by changing the ways that international educators collect program information, we can begin to create basic data sets that could feed into more sophisticated outcomes assessment processes. Currently many institutions and study abroad offices gather student data in many forms but not necessarily in cross-institution comparable and consistent ways. This demographic and self-assessment data from students need not add time consuming new processes for international offices as much of it can be done by simply editing our application forms to allow the data to be used for assessment. We can also join data collection efforts that many institutions already have in place, such as senior surveys or alumni surveys. This requires intelligent discussion with experts in outcomes assessment and planning in implementing new collection instruments but time spent this way would provide benefits in improving program quality and effectiveness and in justifying international education project funding.

Data Collection for Outcomes Assessment: Background

For study abroad, outcomes assessment should be able to answer two fundamental questions: “What should program participants know, be able to do and value based on their experiences abroad?” and “What do programs contribute to this growth?” In other words, outcomes assessment should be both about the assessment of an individual student’s learning and a program’s ability to foster certain results. This student assessment or self-assessment aspect allows program staff to utilize key moments in time to capture data that is given back to students to enhance their learning and also used for outcomes assessment of the program. Such moments include pre-departure orientation, the end of on-site orientation, the end of the program evaluation and any other Resident Director - student advising meetings that might take place on site. The student learning assessment process helps support relationship building and buy-in from students and professors because it gives feedback directly to students. Several authors cite this buy in as important to successful assessment¹.

The first aspect of outcomes assessment involves deciding the goals, objectives or competencies the institution or program wishes to assess. Until we define what competencies we hope our programs foster, we cannot define meaningful ways to measure them. This is an area we must debate and define in a national forum if we are to create a meaningful research plan for American education abroad. The Institute for the International Education of Students Model Assessment Practice (IES MAP) provides an interesting breakdown for the student learning pieces in Section II: Student Learning: Assessment and the Development of Intercultural Competency². However, for study abroad I would argue that the transnational competencies as outlined by Hawkins and Cummings provide a good foundation in more summarized form, although they are heavily business focused³. The authors’ competencies include:

1. The ability to imagine, analyze, and creatively address the potential of other local economies and cultures
2. A knowledge of commercial, technical, and cultural developments in these other locales
3. An awareness of who key leaders of these locales are (and the ability to engage them in useful dialogue)
4. An understanding of local customs and negotiating strategies
5. Skills in business, law, public affairs, or technology
6. a facility in English, at least one other major language, and computers

Basic Student Data and Outcomes Assessment in International Education
Mell Bolen, Brown University

I would modify competency number five to skills in a specific discipline area without defining which areas these might be. In addition to the above, which I would label basic competencies, I would include the complex skills:

1. The ability to understand where one's own values interfere with an ability to accept others' actions or values
2. The ability to consciously 'code switch' into a perspective that is not one's own

In order to develop assessment tools for these competencies I would group them into broad areas that are relevant for international education assessment.

1. Cultural learning, including cultural general and location specific knowledge
 - a. Cultural general: The ability to creatively imagine another's perspective, to code switch into this perspective and to know where one's own values interrupt such code switching
 - b. Location specific: An awareness of who key leaders are and an understanding of customs, negotiating strategies and developments
2. Language competencies make up a separate category of cultural knowledge, both general (computers) and specific (English plus another language).
3. Academic growth in general and in discipline specific knowledge would fall into a third category and covers competency number five.
4. Personal development underpins all of the competencies. Personal development especially surfaces in understanding one's own values, in being able to be creative, and in analyzing other cultures in a useful and understanding manner.

Each of these objectives needs its own set of complex instruments tested for reliability and validity. These possibilities are discussed in companion Forum papers to this one⁴.

Data Collection for Outcomes Assessment: Demographic Data

Each category above contains needs for a baseline of demographic and experiential data on the students in order to separate out effects of personal background from the effects of study abroad programs. Standard demographic measures are also needed to make comparisons between this group and control groups of students not going abroad. These factors include standard items such as age, race, religion, ethnicity, semester level, socioeconomic status, home city and country, and educational level. Most campuses have this data in student information systems and study abroad offices can generally link to this system to get this data.

Religion, ethnicity and socioeconomic status might seem controversial but have been added because they form either important baseline data in outcomes assessment or because they have particular relevance for study abroad. In Brown University's diversity study we found that student's experiences often had more subtle antecedents than the broad category of race.⁵ Ethnicity often played as much a part in their adaptation as did nationality or gender. By ethnicity I mean the specific cultural group that the student comes from if known. This could be Irish-American, Ethiopian-American, Hmong or Inuit. If a specific ethnicity plays little part in a student's life then Euro-American, African-American or other general categories can sometimes be useful simply in knowing how a student relates (or does not) to ethnicity. Not only students'

Basic Student Data and Outcomes Assessment in International Education
Mell Bolen, Brown University

own feelings about their ethnic identities, but other societies' attitudes towards specific ethnic groups often plays a role in students' experiences, sometimes in ways students don't expect.

Religion plays a part in student's experiences when it becomes salient overseas, often when the host country has a predominant religion. Both because this category becomes more relevant later in the experience and because students may be reluctant to give such information before a relationship with a program has been established, I recommend asking this in a final program evaluation. Usually when presented in such a way that a student knows it will aid future participants, they answer this question without resistance.

Socioeconomic status consistently has been shown to alter outcomes in educational settings of all kinds and study abroad is probably no exception. Until we research this question however, we won't know for sure. Study abroad programs also need to know if they adequately support an economically diverse group of students. Usually such data is available without asking students through student information systems' data on parent(s) professions or from financial aid data.

All this data can be easily incorporated into standard advising forms, application forms, program evaluations and other assessment instruments already in use. As the National Postsecondary Education Cooperative (NPEC) Working Group on Student Outcomes Data found, it is cheaper to extract data from existing methods of data collection than to run separate assessment projects. Therefore collection can be made into a normal part of working with our students if we plan intelligently and think of our forms as not only serving one purpose. Often simply with a rewording of a question it becomes possible to use it as an assessment measure as well as aiding in decisions about students or programs.

For such a method to be useful nationally it involves not only adapting forms, but also standardization in collecting data. We as a profession should adopt a standard way of categorizing data that either follows the national practices of most higher education statistics when these exist or becomes agreed upon by the profession for international education specific items. This necessitates knowledge of these standard formats and agreement to use them among program providers. National higher education formats include such standard data as racial categories, ethnicity categories, ways of calculating socioeconomic status, and educational level. Many of these can be copied from the National Center for Educational Statistics surveys at <http://www.nces.ed.gov/>, such as the IPEDS (Integrated Postsecondary Education Data System), the National Household Education Survey for adults or the Beginning Postsecondary Student Longitudinal Study. Without this standardization we cannot easily feed such data into a larger national research project or even a program or institution wide assessment process.

Standardization also involves using a standard student identifier nationally. In a US context this would logically be a social security number. In this way data can be linked into larger state and federal systems and allows ease in longitudinal and other research studies. For example by 1995, over three quarters of states required some kind of state wide assessment of post-secondary education and linking to this data requires use of social security numbers⁶. Twelve states began to combine higher education statistics with data from state unemployment insurance records, military employment, postal service employment records and civil service employment records to track employment outcomes for institutional programs⁷. They tied this data together via the social security number and found that both the accuracy of the information and the consolidation of research efforts improved. Of course, confidentiality is very important in using a social security number but most institutions have methods in place to protect such data that international education offices already utilize.

Basic Student Data and Outcomes Assessment in International Education
Mell Bolen, Brown University

Starting these efforts in today's technological climate does not have to be as difficult as it might have been prior to the wide spread use of the internet. The www can be used to disseminate not only actual test instruments but also the statistical programs to allow the analysis of the extracted data. Again from the NPEC Working Group report, some states running linked studies actually developed an internet library of SAS (statistical analysis software) programs to allow institutions to download and use these to analyze their own data. An international education organization could develop such a library as well, saving educators from having to develop expertise in designing such programs. Using the www web to complete the forms also means not having to spend time reentering data since it can be transmitted directly into databases from the web. Instruments could be maintained on the www at the home institution which allow for continuous testing of students overseas even if they are not on a home institution program. Such a site can be set to give students instant feedback since results can compute immediately and automatically. This allows program administrators to assess the success of a program while it is still running and possibly in time to intervene to improve student outcomes. It also gives students information about their progress in time for them to alter behaviors and improve if needed.

Data Collection in Outcomes Assessment: Modifying Standard Forms

All three methods of standardization, in student identifier, in data format, and in data analysis should be applied when developing forms relevant to assess the four areas of cross-cultural competence. In the case of cultural learning, most program applications already incorporate country specific learning questions into program applications. It becomes more a matter of editing questions so that they are useful, quantifiable and comparable. These could include such questions as:

- Please list the course names of all courses you have taken about your host country.
- Do you know people from this country that you currently interact with on a regular basis? How often and in what way do you interact? _ times per month; (circle one) in-person, via email/internet, via regular mail, other:
- Have you been to this country before? If so when and for how many weeks were you there?

For a more sophisticated measure, an instrument asking basic questions about the country could be administered to applicants as part of their pre-departure orientation. This instrument could request the same basic information for all countries, entering the appropriate country name as needed, and it could establish a baseline of knowledge or lack thereof. It can also act as a spur to students to learn more before they go. A post-test could be administered to compare changes in knowledge after the experience.

Cultural general knowledge can also be measured with questions in the program application but to truly be useful, should include analyzing essay questions on program applications. Such questions could include asking students to describe any previous cross-cultural experiences they have had which might prepare them for the experience abroad. During the experience, we need specific instruments to measure knowledge and competence. Three instruments already exist that could provide a basis to develop such an instrument. Dr. Nathan

Basic Student Data and Outcomes Assessment in International Education
Mell Bolen, Brown University

Corbitt developed a global awareness instrument called Global Awareness Profile (GAPtest).⁸ Another possible instrument for orientation programs and to allow students to assess their cross-cultural effectiveness is Meyers & Kelley's Cross-Cultural Adaptability Inventory (CCAI).⁹ Milton Bennett's developmental theory of intercultural sensitivity has an accompanying instrument the Intercultural Development Inventory (IDI) and although training is needed to administer it the IDI could also be used¹⁰.

For language competency, previous experience in using and learning other languages can change a student's preparation to learn a new language¹¹. Most program applications ask students to provide information on their language preparation in a specific language but by slightly altering these questions we can collect much broader information. This information could include the following:

- Do you speak a language other than English at home? If yes, which language(s)?
- Have you studied a language other than English in school? If yes, please list the language(s) studied, the number of terms for each, and indicate how many terms are pre-college and how many college level.
- Please describe any outside the classroom experiences with the language you will be using on your program or another language besides English.

During the time abroad, students should be asked to answer a few language related experiential questions as well as answering modified versions of these upon return. These questions would involve asking students how much they interact with native speakers and native language mediums. These questions carry the additional benefit of being applicable for English language sites for cultural learning experiences as well. These questions could include:

- How many hours last week did you spend talking with local people? Please describe the topic, length and intensity of one of your most extended conversations.
- How many hours last week did you listen to local news broadcasts (radio or TV)?
- How many times in the last week did you read a local newspaper or magazine? Which one(s)?

If students know they will be asked about news listening and reading, maybe they will be encouraged to do this. These self-reports, of course, should accompany more sophisticated tests of language learning such as oral proficiency tests and written tests of competency.

In terms of demographic data, general academic learning can best be assessed by measurements other than direct instruments administered to students. As crude measurements, GPA or grade analyses would be the easiest measures to extract for outcomes assessment. These could be analyzed for pre-study abroad grades, grades abroad and post-experience grades. Also a variation on the method called Primary Trait Analysis could be used to assess various components of learning. This method separates the grades into elements of learning in specific areas and can be done at different levels from an individual course grade to an entire educational

Basic Student Data and Outcomes Assessment in International Education
Mell Bolen, Brown University

career.¹² For study abroad, I could envision breaking down the grades into averages in courses about the specific country to give an overall country learning score. Courses not used in the major could be separated out to give a general education score. Discipline specific learning can be assessed via grades in the major. Each of these can be done based on the three sets of grades (pre-experience, study abroad, post-experience) to see if changes occur.

Discipline specific learning can also be assessed by evaluations from the major advisors. For this latter, it would depend on the system a campus uses to assess growth in discipline knowledge and would be very difficult to standardize across institutions. Most campuses do some kind of assessment for graduation with a degree in that field and this may be transferable. For international education programs that have a discipline specific focus it might also be possible to administer pre- and post- experience tests¹³ or have the resident advisor complete an assessment of progress. When using an advisor's personal evaluation however, the reliability can decrease because of discrepancies in the way a rater ranks gain from student to student. All results obtained through student testing, should again allow for feedback directly to students.

Many factors affect the personal development and growth of students. Three of these factors that have been identified in various educational studies as significant are student involvement, saliency to the student, and the actual experiences in the destination locales. All three can be combined into a program evaluation form, can be accomplished through on-line self-assessment tools, or can be assessed by program advisor evaluations of students. For a very robust study, preferably all three methods would be combined. The combination provides better feedback to students on their skills development as well.

Students' involvement in their education has been shown to improve performance, personal growth and the likelihood to stay in school.¹⁴ Involvement includes active participation through talking to faculty both inside and outside of class, talking and socializing with peers, and using the resources an institution offers for outside class involvement such as lectures, art or music programs and other events. All these categories lend themselves to study abroad program evaluation. By asking these questions in terms of student involvement however, the form emphasizes student responsibility in learning and helps educators tease out when outcomes arise because a program needs improvement or when particular students did not take advantage of what the program offers. For instance changing a program evaluation question from:

Did the program provide you opportunities to interact with local people?
to

How often did you interact with local people in a given week? Briefly describe one typical interaction as an example including who initiated the interaction.

This changes the emphasis to the student's own behavior and in the example allows a judgment to be made about the intensity of the interaction, whether it resulted from program activities and the type of cultural interactions taking place. Such answers also give both quantitative and qualitative data to analyze in an assessment process. Much more sophisticated questions better tested for reliability and validity could be modeled after respected studies in student involvement such as Pascarella and Terenzini's research or Pace's College Student Experiences Questionnaire.¹⁵

The concept of saliency influences students' expectations, what they notice and what they consider important and thus how they construct and interpret their experiences. It

Basic Student Data and Outcomes Assessment in International Education
Mell Bolen, Brown University

comes from research on identity development psychology, and particularly relevant to study abroad, the research of William E. Cross.¹⁶ Cross began in the 1970's to explore the question of why in a racist society African-Americans did not give equal and high priority to their racial identity in the identity development process. While he carefully states that his theory only encompasses the process of developing an Afrocentric identity, his process and concepts seem translatable into numerous circumstances, including those of study abroad. Cross' theory entails several stages of identity development. There is a pre-encounter stage where a person has established certain facets of their identity as important to how s/he lives her/his life. These facets include a wide variety of potential elements from religion, political affiliation, athlete, race, ethnicity, student or professional status, etc. The person then has an encounter which causes the person to give greater saliency to an aspect of identity he/she previously did not hold central to a view of themselves. This institutes a process of change which can resolve by rejecting, accepting or adjusting the salience of the identity element. These facets allow individuals to make decisions about how, with whom and in what intensity they want to interact with certain types of people.

Study abroad acts as an encounter designed specifically to challenge students' beliefs about themselves. Encountering people with different world views and with particular views of Americans often puts students into positions where elements of their identity become more important or more questioned than they expected. In Cross' terms, this means they have to reorder the salience of identity elements and incorporate or reject these elements. For example, a Mexican-American heritage seeker goes to Mexico thinking that her ethnicity will allow her to fit in very well but finds that there are many things in the Mexican view of life with which she disagrees. At the same time she discovers that Mexicans make certain class assumptions about her origins because her family left Mexico to go to the United States. Both of these were unexpected ways her ethnicity affected her experience in Mexico and led her to see her American and class identities as more salient than she previously thought.

So how does this relate to demographic data on study abroad forms? In order to tease out factors that affect study abroad outcomes, I think it is important not only to know what the identity characteristics are but how salient these characteristics are for the student. For instance, if we see a student who ranked athletics as important to their self-concept in a pre-departure form, it would not be surprising if this student constructed a life abroad that centered around playing a sport, developing friendships with local athletes, and attending sporting events. Knowing this helps in advising students and in assessing the experiences. A pre- and post- test question allows us to examine patterns in this identity development. For instance, I would not be surprised to discover that students would not rank their national identity as Americans highly before going but after an experience in another society would rank this higher in importance and understand its implications better. Brown University's Diversity survey uses a format that allows a student to rank identity elements that s/he felt were important to the experience. With some editing such a format could easily be added to program applications and evaluations to elicit saliency data. The current format looks like this:

1. What factors do you think influenced the way you were treated in your host country? Please rank all appropriate responses in order of their importance to your experience (1 being most important).

___ physical appearance
___ ethnicity/heritage
___ sexual orientation
___ gender

Basic Student Data and Outcomes Assessment in International Education
Mell Bolen, Brown University

___ religion
___ status as a minority/majority in the host culture
___ identity as an American (or other nationality _____)
___ language
___ other (please explain) _____

Please discuss in detail the top three factors and provide examples if you can.

Program evaluations almost all ask about actual experiences in the host country so the focus on this area should be more in making questions comparable and useful for assessment purposes. One useful tool is a Likert scale identified as Never, Occasionally, Often and Very Often accompanying a specific activity question. For instance, asking “Did you participate in cultural events organized by the program?” with such a scale for responses allows for quantification of answers and comparison across programs. We also should make sure questions cover a range of experiences that provide keys to cross-cultural competency development. All of these should be grounded in relevant theories of student development and research identified areas of personal growth in educational experiences. For more detail in each area of intercultural competence, please see the companion papers to this one.

This paper hopefully sparked ideas international educators can incorporate into the basic ways we collect data to make it more readily convertible into outcomes assessment processes. Such data needs to be based on agreed upon intercultural competencies so that we know what we are trying to measure. Once we have the competencies, then we need standardization in the kinds of basic data we collect, the methods we use to collect it and the ways we identify participants’ records. All of this requires a national conversation about what we want to measure, the ways we organize our data collection, and the ways we need to collaborate to pool such data into meaningful research studies. This paper merely serves as a tool to spark others’ reactions, ideas, and strategies for pursuing such standardization. We hope to hear from as many international educators and experts in various relevant fields as possible. This www site provides a place for your feedback and we look forward to hearing your ideas.

¹ Palomba, Catherine A. and Banta, Trudy W. (1999) *Assessment Essentials: Planning, Implementing, and Improving Assessment in Higher Education*; Jossey-Bass Publishers, San Francisco

Erwin, T. Dary (1991) *Assessing Student Learning and Development*; Jossey-Bass Publishers, San Francisco

Schuh, John H. and Lee Upcraft & Associates (2001) *Assessment Practice in Student Affairs: An Applications Manual*; Jossey-Bass Publishers, San Francisco

² Katz, Stanley N. et al (1999) *The IES MAP for Study Abroad: Charting a Course for Quality*; Chicago, IL; pp. 20-21

³ Hawkins, John N. and Cummings, William K. (2000) *Transnational Competence: Rethinking the U.S.-Japan Educational Relationship*; State University of New York Press, pp. 7-9

⁴ When known enter references for these papers –www or paper version

⁵ Office of International Programs (2001) *Diversity Issues in Study Abroad*; Brown University, Providence, RI

⁶ National Postsecondary Education Cooperative (April 1997) “Enhancing the Quality and Use of Student Outcomes Data”; Report of the Working Group on Student Outcomes from a Data Perspective; National Center for Education Statistics; Department of Education, Washington DC, p. 2

⁷ *ibid*, p. 11

⁸ Available from the Office of International Education, University of Wisconsin- Oshkosh, 800 Algoma Boulevard, Oshkosh, WI 54901; email: oie@uwosh.edu

⁹ Kelley, Colleen and Meyers, Judith (1995) *Cross-Cultural Adaptability Inventory (CCAI) Manual*; Reid London House, Chicago

Basic Student Data and Outcomes Assessment in International Education
Mell Bolen, Brown University

¹⁰ Bennett, M.J. (1986) "Towards Ethnorelativism: A developmental model of intercultural sensitivity"; In Paige, R.M. ed; *Cross-Cultural Orientation: New Conceptualizations and applications*; University Press of America, New York; Hammer, M.R. and Bennett, M.J. (1998) *The Intercultural Development Inventory (IDI) Manual*; Intercultural Communication Institute, Portland OR

¹¹ For a discussion of this point see: Brecht, Richard D.; Davidson, Dan E. and Ginsberg, Ralph B. (1995) "Predictors of Foreign Language Gain during Study Abroad" in Freed, Barbara (ed); *Second Language Acquisition in a Study Abroad Context*; John Benjamins Publishing, Amsterdam/Philadelphia; pp. 37-66

¹² For a more detailed explanation of this method see Southern Illinois University Edwardsville's award winning assessment program at <http://www.siu.edu/~deder/assess/cats/pta.html>.

¹³ See <http://www2.acs.ncsu.edu/UPA/assmt/resource.htm#area> for resource links in discipline specific assessment instruments (December 13, 2003); also the Educational Testing service offers tests called Major Field Tests in many disciplines

¹⁴ For a more extended discussion of such studies see Froh, Robert C and Hawkes, Mark (1996) "Assessing Student Involvement in Learning"; *Teaching on Solid Ground: Using Scholarship to Improve Practice*; Jossey-Bass Publishers, San Francisco; pp. 125-146

¹⁵ Pascarella, E. & Terenzini, P. (1991) *How College affects students: Findings and insights from 20 years of research*; Jossey-Bass Publishers, San Francisco; Pace, C. (1983) *College student experiences: A questionnaire* (2nd edition); Higher Education Research Institute; University of California, Los Angeles

¹⁶ Cross, William E. (1978) "The Thomas and Cross models on psychological nigrescence: A literature review" *Journal of Black Psychology*; V 4, 1; pp. 13-31

(1983) "The Ecology of Human Development for Black and White Children: Implications for predicting racial preference patterns"; *Critical Perspectives of Third world America*; V 1, 1; pp. 177-189

(1991) *Shades of Black: Diversity in African-American Identity*; Temple University Press, Philadelphia