Doing More than Learning: What do Students Contribute During a Study Abroad Experience?

George H. (Jody) Tompson
University of Tampa

Robert Beekman
University of Tampa

Holly B. Tompson
Florida Southern College

Phillip T. Kolbe
University of Texas at El Paso

Scholars have written widely about the impact that study abroad has on students. For example, we have examined the extent to which students experience growth in intercultural sensitivity, language skills, and acuity in political systems. However, we know far less about what students give as opposed to what they receive during study abroad. This paper reports the results of a study that was conducted during a recent study abroad program. The results indicate that students have a small but positive economic impact on the local communities where they visit.

INTRODUCTION AND LITERATURE REVIEW

In any educational endeavor, stakeholders are curious about the results. Faculty, administrators, parents, and students all want to be sure that educational programs are effective at meeting their stated objectives. Recently, university accrediting agencies (e.g. AACSB) have started to emphasize “assurance of learning” to encourage universities to set clear learning objectives, and then measure the extent to which the students are learning what they are expected to learn.

Study abroad programs are also subject to questions about whether they accomplish their goals. In response, scholars have written often and widely about the impact that study abroad has on students who participate in study abroad programs. In 2004, Frontiers published a special issue of “fifteen assessment studies” (Vande Berg, 2004, p. xiv) dedicated to evaluating the learning outcomes of study abroad. Since then, the research has grown commensurate with the growth in study abroad popularity. Bender, Wright, & Lopatto (2009) examined the extent to which a study abroad experience influences students’ intercultural competence and knowledge. They concluded that study abroad “positions students to understand the world differently” (p. 319). In a similar study, Braskamp, Braskamp, and Merrill (2009) focused on the global learning and development of students who had participated in a study abroad
program. They used a pre-test and post-test instrument to measure change in students over a one-semester experience. The instrument focused on six domains of learning, and students reported significant improvements on five of the domains. The authors concluded “students changed their self-assessments of their knowledge of cultural traditions, sense of self, and relations with others over a period of a semester abroad” (p. 111). This is positive news – it reassures us that study abroad programs elicit the kind of growth that we want. Williams (2005) focused on how study abroad improved students’ intercultural communications skills. Williams compared students who studied abroad to student who stayed on their home campus. Using a pre-test and post-test, she discovered that exposure to various cultures was associated with greater improvement in communication skills among the student abroad group than the stay-at-home group.

These three studies had similar goals and methods. They examined whether study abroad was associated with changes in student outcomes. There are literally hundreds of other studies that measure other student outcomes that result from study abroad. Examples of other important outcomes that have been studied are language acquisition (Freed, 1995), intercultural sensitivity (Anderson, et al, 2006), development of values (Lindsey, 2005), and future career paths (Norris and Gillespie, 2009).

The upshot of this research is clear and compelling: when students participate in study abroad, they grow, learn, develop, and change. They receive benefits that have important value. But what do they give? While spending months abroad, these students certainly have some impact on other stakeholders, but research attention has rarely focused on this question. The absence of research on this issue was summarized by a student reflecting on her study abroad experience.

“My classmates and I spent four of the most amazing, eye-opening months of our lives living, working, and studying alongside the Minangkabau people of Western Sumatra. While we benefitted greatly from the exchange, I wondered about the village after we left. Did the community also gain from the experience?” (Sumka, 1999).

This question posed by Sumka seems like an obvious one, but has been rarely addressed by scholars and administrators who plan, coordinate, and implement the programs for study abroad. When the impact of study abroad has been examined, “impact” has been almost exclusively measured as the effect that experiences have on the students. What about the communities, economies, families, and natural environment of the places where students visit? According to Wood, et al (2011, p. 1) “the general literature on study abroad gives little attention to the effects on communities of international programs.” Schroeder, et al (2009, p. 141) concluded that measuring the impact of study abroad on the local communities has been “virtually ignored”. We are beginning to gather evidence that our students are receiving important benefits from study abroad. But at the same time, we know very little about the impact they are having on the places they visit. We may assume the impact is positive or neutral, but we don’t really know. Our ignorance is unfortunate in its own right, but appears even worse given the recommendation by the Forum on Education Abroad. In its Code of Ethics for Education Abroad, the Forum advises universities that send students abroad to demonstrate “awareness of the program’s impact on the local community” (2008, p. 3). For the most part, there are probably not many universities that are aware of the impact that their students have on the local community during study abroad programs.

The purpose of this paper is to examine one aspect of the impact that study abroad students have on the local communities they visit. Specifically, we wanted to make an estimate of the economic impact that students have on the places they visit during their study abroad.

**ECONOMIC IMPACT STUDIES**

It is fairly straightforward to describe the methodology for estimating economic impacts. In practice, however, researchers face significant data limitations and difficulties. Further, the unique characteristics of both tourism spending and also developing country economies present significant challenges to those seeking to estimate economic impacts in either of those situations.
A standard approach to economic impact estimation begins by quantifying some initial economic event, and then estimating three levels of economic “effects” that result from the original event. These changes in economic activity are categorized by economists as:

- **Direct Expenditure**: The initial shock to the economic system. In our case the monies spent by Semester at Sea participants in the various ports they visit.
- **Indirect Expenditures**: The economic activity that results from successive rounds of re-spending of the direct expenditures. For example, while a restaurateur may receive direct expenditures from cruise ship tourists, she will need to re-spend a portion of that revenue to purchase food supplies and to purchase catering equipment. Those businesses will also re-spend revenue to purchase supplies. The increase in overall economic activity of these inter-business transactions is an indirect effect of the initial direct expenditure.
- **Induced Expenditures**: The increase in household spending resulting from the higher personal income earned (directly or indirectly) from the direct expenditures. For example, hotel workers or tour guides who would otherwise have not been employed are able to purchase additional goods and services for their households.

Indirect and induced expenditures are sometimes grouped together as secondary expenditures, or alternatively as the secondary spending effects of a direct expenditure. It is a tedious but clear-cut task to estimate the direct expenditures of a tourism event (e.g. a visit by a SAS ship). While conceptually most will agree that the secondary expenditures are positive, it is more difficult to estimate the magnitude of those impacts. Calculating the secondary expenditures involves estimating an expenditure “multiplier” that represents the multiplicative secondary impact of a given type of direct expenditure. Estimating multiplier effects is especially challenging for both tourism activities and for events in developing economies. The estimation difficulties center on a lack of data, the unique characteristics of tourism spending, and leakages of monies out of the study area. Consequently, most estimates of an event’s secondary impact are made by using multipliers that have been previously estimated by regional economists or local governments. If those multipliers have not been previously estimated, then calculating secondary effects is nearly impossible.

The dearth of economic multiplier data in developing countries should come as no surprise given typically minimal internal infrastructure to track expenditures. Additionally a significant percentage of economic activity in developing countries occurs in the informal (barter, black market, unrecorded) sector. Even if multiplier data does exist, as might be the case in a more developed country, it is far less likely that multipliers specific to the cruise tourism (or even tourism in general) exist for a specific port market. For estimates of secondary expenditures to be meaningful the multipliers need to reflect the extent to which those specific kinds of re-spending patterns will recycle within the study area. Cruise tourism spending is unique from most other economic activity in a study area in that it represents spending on goods and services outside the average daily life (think zip lining and hired translators). Events in developing countries and in the tourism industry are also more likely to suffer ”leakages” out of the study area. While some of the wages paid to tourism workers is likely to remain and recycle within the local economy, a significant portion is likely to be spent on goods and services provided from sources outside the region. The leakages are more likely in developing economies because the limited ability of such markets to satisfy the demands of tourists with internal local supply (e.g. fine wines, cheeses, and bed linens). These leaked funds will not contribute to further rounds of secondary effects, resulting in a lower multiplier. While we understand that leakages are likely to be more pronounced in developing country ports of call, there is little data available as to the extent of this effect.

**RESEARCH METHODS**

We proposed an economic impact study to the Institute for Shipboard Education, which is the organization that manages the Semester at Sea (SAS) program. Each fall and spring semester, SAS provides a study abroad program for about 700 university students on board its ship, the *MV Explorer*. 

During the semester, the ship sails around the world, stopping at 9 – 13 countries along its route. Students enroll for 15 hours of academic credit, and classes are taught while the ship is at sea. When the ship docks in port cities, students are led on field trips to the cultural, economic, and historical attractions in the region. Students are required to attend at least two field trips in each course for which they are enrolled. Additionally, many students organize their own excursions independent of SAS-sanctioned field trips. All costs associated with travel in port countries are above the cost of tuition. By drawing a sample from students in Semester at Sea, we could compare spending habits across many different countries.

There are several reasons why it will be useful for ISE and SAS to know the economic impact of the MV Explorer. First, demonstrating a large economic impact might be useful as leverage in negotiating fees with port agents or local governments. If ISE can show that Semester at Sea participants spend a lot of money per day in cities where the ship berths, then it might be easier to negotiate for lower fees, a better port location, lower taxes, etc. Local and regional governments are accustomed to hearing this logic from companies that are planning expansions. Tax abatements and other incentives frequently given to manufacturing firms have also been granted to hotels, marinas and other tourism businesses based on demonstrated economic impacts in the local area. Second, the “shipboard drive” could use this student spending data to encourage donations. For example, SAS could promote the shipboard drive with a slogan such as “Donate one day of your spending to ISE – spend it on someone else instead of yourself!” Perhaps if students knew that they spent $50 per day on themselves, they might be willing to forgo one day of consumption and donate that amount to people in the local community instead. Third, SAS has always focused its voyages on exposing students to developing countries. Students are encouraged to learn the customs and culture of these counties, but to also participate in service projects organized by the Field Office. Many American students don’t realize how wealthy they are, compared to the rest of the world. The experience of traveling in developing countries helps them understand their wealth. Measuring and documenting how much they spend will also help them understand how fortunate they are. Fourth, many developing countries are emphasizing tourism as a means for economic growth. The emphasis seems to be working. According to the World Tourism Organization, international tourist arrivals grew by 43% from 2001 to 2005 in developing countries. In developed countries, the growth was only 31%. While Semester at Sea does not consider tourism as part of its mission, it would be good to know that the MV Explorer is having a positive impact on the tourism sectors of many countries.

We randomly selected 100 students and two faculty members on the spring 2010 voyage to participate in the study. Students were asked to record all the expenses they incurred while away from the ship, but not the payments that they made to the Field Office. Only the research team was allowed access to the subjects’ expense logs. Individual data were not disclosed to ISE, parents, faculty, or other students. After the voyage ended, we worked with the Field Office to collect data regarding the expenses the subjects incurred while they participated in any pre-paid trip that ISE arranged. All subjects were promised anonymity. In exchange for completing his or her expense logs, each subject was given $50 into their shipboard account. By the end of the voyage, 73 students and 2 faculty members had completed their expense logs, so we have a sample size of 75 subjects.

The subjects’ expense logs were created as a 5”x 8” booklet. The logs were small enough to easily fit into a backpack or purse, and were made with heavy cardstock covers. In an effort to reduce recall bias, subjects were instructed to take the logs on all their excursions and record their expenses as they occurred. Before arriving at each port students were reminded by email to record all expenses during their excursions. Pages in the log were pre-printed with expenses tracking sheets for each port city. We wanted to have details about the kinds of purchases subjects were making, so we asked them to classify each expense into one of seven categories: 1) restaurants & pubs, 2) travel, 3) entertainment & recreation, 4) lodging, 5) grocery, 6) gifts & souvenirs, and 7) other. See Appendix 1 for an example of a page from the expense log.

In addition to the self-report data we collected from the expense logs, we also collected data from the SAS Field Office, which was responsible for planning and coordinating the field trips that constitute most of the excursions students took while the ship was in port. The field trips were pre-paid before the ship departed the U.S. so they represented money that was eventually paid to local service providers. Through
extensive conversations with the Field Office, we were able to parse the field trip expenses into the same categories that appeared in the subjects’ expense log. This step was required because the students were charged a single fee for each field trip they attended, and the component costs of the trip were not disclosed to the students. For instance, if the Field Office provided a trip to the War Museum in Ho Chi Minh for $100 per student, the fee would be used to pay for a private bus from the ship to the venue, a box lunch during the field trip, and a ticket to the exhibit. By working with the Field Office, we determined which field trips our subjects chose, and we estimated how to allocate the total field trip costs into their component costs. Data from the expense logs and from the Field Office were entered into an Excel spreadsheet. We combined the self-report data from the students’ expense logs and the Field Office data to calculate the total spending by subject, by port, and by expense category.

RESULTS

Table 1 shows the average direct spending per person in the nine ports. The last row shows the average direct total expenditures for the voyage. The average person spent $6,660 during activities away from the ship. The third column shows the average spending per person per day. The data show that subjects spent about $89 per day in Ghana on the low end and $215 per day in South Africa. Overall, the average subject spent about $148 for each of the 45 port days away from the ship. Approximately 668 students, faculty, and staff sailed on the voyage. If we assume that our sample is a good representation of the ship’s population, then the total spending by the members of the voyage was about $4.5 million. The crew on the ship (approximately 200) is not included in the total spending estimate.

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>AVERAGE DIRECT SPENDING PER PORT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average spending per person ($)</td>
</tr>
<tr>
<td>Hawaii</td>
<td>515</td>
</tr>
<tr>
<td>Japan</td>
<td>740</td>
</tr>
<tr>
<td>China</td>
<td>1,157</td>
</tr>
<tr>
<td>Vietnam</td>
<td>690</td>
</tr>
<tr>
<td>India</td>
<td>1,023</td>
</tr>
<tr>
<td>Mauritius</td>
<td>207</td>
</tr>
<tr>
<td>South Africa</td>
<td>1,075</td>
</tr>
<tr>
<td>Ghana</td>
<td>356</td>
</tr>
<tr>
<td>Brazil</td>
<td>897</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6,660</strong></td>
</tr>
</tbody>
</table>

In addition to comparing how students allocated their spending across different countries, we wanted to know some detail about their spending habits. The results shown in the following tables give a breakdown of how the students spent money in each country. Tables 2 allows for some comparisons of the average spending habits between expense categories. For example, the average expenditure was $215 per day in South Africa (Table 1). Of that total, how did the average student spend her money? According to our data set, the largest category (34%) was allocated to travel. One of the most popular activities in South Africa is taking a safari, which can require travel by plane from Cape Town.
The results in Table 2 show the details of how students spent money in the nine countries they visited. In seven of the nine ports, travel was the largest expense. In two ports, Hawaii and Ghana, entertainment & recreation was the highest category and travel was second highest. Spending on restaurants and lodging tended to be the third most popular category. Another way to understand patterns in the data is illustrated in Figure 1, where total expenditures across all countries are shown in a pie chart. It shows that over the whole semester, students spent 34% of their extra or discretionary money on travelling within the counties they visited. The travel category included fares for airlines, taxis, and buses. Travel accounted for the largest component of all the expenses, and was almost twice as large as spending on restaurants, which was the next biggest category (18%). Entertainment & recreation accounted for 15% of spending, which was virtually equal to lodging, which claimed 14% of students’ spending.

**FIGURE 1**

**COMPOSITION OF TOTAL EXPENDITURES**
DISCUSSION

According to these data, the voyagers on the MV Explorer spent about $148 per day in each port-of-call during the spring 2010 voyage. The 668 students, faculty, staff, and lifelong learners spent 45 days in port cities and their collective spending was just over $4.5 million. Past research indicates that crew members tend to spend about 70% as much as passengers on cruise ships (ACS, 2009). If we use that estimate, spending by the crew on board the MV Explorer (n = approximately 200) would add about $900,000 to the total spending by people on board the ship. Including the crew raises the total spending to about $5.4 million.

Other researchers have estimated the spending of cruise passengers who visited the following areas:
- Bar Harbor, MA = $106 per person/day (Gabe, et al, 2003)
- Port Vila, Vanuatu = $87 per person / day (Douglas & Douglas, 2004)
- Costa Rica = $55/day (CESD, 2006)
- Uruguay = $61 / day (Brida, Bukstein, & Tealde, 2011)

Given the socioeconomic profile of the typical Semester at Sea student, our estimate of $148 per day seems consistent with other estimates of tourist spending. The $5.4 million is our estimate of direct spending. To estimate the total economic impact would require that we estimate the economic multipliers for cruise tourism in each region that the ship visited. In most developing countries, tourism multipliers have not been estimated so an estimate of total economic impact is outside the scope of this project. For any project, tourism multipliers are extremely difficult to measure because of the variety of sectors involved in a given tourism venture. In fact the SAS expenditures arguably differ in composition from those of other tourists and even from other cruise-based tourists. As such, even if there were a full complement of existing multipliers for all of the ports of call the ship visited, specific to tourism related spending, we could still not be confident that the resulting total impact estimates would be accurate for our purposes. What we can conclude, however, is that the total economic impact of SAS expenditures is in excess of the $5.4 million direct spending we estimated in this study. Some portion of every dollar that students spent did stay in the local economy, and some portion of the money that stayed was spent again. We can confidently assert that there is a positive multiplicative impact occurring in these local economies.

Another way to consider the results is by examining the category spending in a country. From Table 2, we can estimate that about $45,000 ($17 x 4 days x 668 people on board) was spent in the restaurants and pubs in Ghana. Or we can estimate that about $56,000 was spent on hotels and lodging in Vietnam. Within these tables, we have one measure of what students contributed to the communities where they spent their study abroad semester. These results are interesting, but they must be interpreted in the context of how influential or important they are to the local community. The money that was spent ($56,000) in hotels in Vietnam seems like a nice windfall for the local economy. However, the ship docked in Ho Chi Minh City, which is large city with a population of at least 9 million people and hundreds of hotels. In this context, the $56,000 spent on lodging by the students, faculty, and staff of SAS is a very small contribution to the local community. When we look at total spending by SAS in Vietnam, the estimate is $460,000 ($690 per person x 668). By any standard, this is a good and positive contribution to the local economy. According to the Vietnam National Administration of Tourism, the average tourist spends about $1024 during a visit to Vietnam. So the average expenditure made by the study abroad students was about two-thirds the size of the typical tourist’s expenditures.

Figure 1 indicates that subjects in this study allocated about one-third of their spending to travel. At first glance, this result might seem a little odd. After all, these were students who were traveling around the world on a ship. When they arrived in port cities may of the students spent even more money to travel away from the port cities to other places. It may be that this sample had an insatiable appetite to travel (or spend money), but it can also be explained by the location of the ports relative to the major tourist attractions. For instance, in India, the ship docked in Chennai, a city in the southeastern part of the country. An excursion to see the Taj Mahal required a plane trip from Chennai to Agra (a distance of
CONCLUSION

The results of this study indicate a small but positive economic contribution that study abroad students on SAS make to the communities they visit. The average SAS student spent $148 per day while traveling for 45 days off the ship, totaling $6,660. Extrapolating to the entire ship’s community, we estimate that the total expenditures were about $5.4 million. We can safely conclude that students on Semester at Sea do more than learn from their study abroad experience. They also contribute to the local economies where they eat, sleep, recreate, shop, and study. Our study provides a small glimpse into the contributions that students make, but it sets a precedent for future research that can identify other ways that students are doing more than learning during their study abroad experiences.

LIMITATIONS

The purpose of this research was to examine what students contribute during study abroad instead of studying what they learn or receive. The study meets our purpose, but has some limitations too. First, the sample is small. We started with 102 volunteers who agreed to participate in the study. By the end of the voyage, 75 had fully completed their expense logs. The response rate is excellent (73%) but a sample of only 75 might not be large enough to be representative of the population of students on the ship. Because of the high response rate, we did not test for non-response bias but we acknowledge that a larger sample would give us a better estimate of students’ spending habits.

Second, our sample is restricted to Semester at Sea students, and might not be representative of all students who study abroad. Our interest is studying the contributions that students make to the places they study. Ideally, we would have a broad range of students in our sample who were studying in many different countries, from different programs, associated with different universities from different countries. For several reasons we chose a sample from SAS to answer our research question. Data from other study abroad programs might be more difficult or expensive to collect, but would probably allow for conclusions that are more generalizable to the population of study abroad students.

Third, the measure of our dependent variable is rather narrow. We are interested in understanding what students give or contribute to the places they study. Spending or economic impact is only one of the many contributions that students can make to the places they study. When visiting developing countries, there are dozens of options for students to contribute the local communities. For example, Semester at Sea provides students the opportunity to visit schools and orphanages. During the visits, students interact with the children and spend time learning about how the organizations serve the children. The SAS students also donate supplies, money, and materials to the programs they visit. Other students donate time and labor to service projects during the voyage. They have helped build schools and low-income housing. Contributions like these are not measured in our study but they are certainly important examples of how students give and build in the places they study.

DIRECTIONS FOR FUTURE RESEARCH

Future research could improve the conclusions of our study in several ways. We can ask several questions that suggest avenues for future inquiry. First, is this result generalizable to other study abroad programs? Any study abroad program is typically more expensive than staying on one’s home campus, which may indicate that students who can afford study abroad programs are probably able to afford spending $148 per day (or more) while they visit other countries. Future research could examine the spending habits of students on other study abroad programs, but conventional wisdom suggests that those
students would also have the means and the interest in spending money above and beyond the cost of tuition while studying abroad.

A more important and more difficult question about economic impact should also be examined. Our data show that students create revenue for the local communities. But what costs do the local communities incur in exchange for earning that revenue? Some of the costs are financial. Those costs could be measured in an effort to estimate whether the net effect of study abroad makes a positive or negative impact on the local community. Most researchers, faculty, administrators, and host governments assume the net effect is positive, and they encourage the tourism sector in developing countries to grow. Almost without exception, the tourism bureaus, boards, and departments of developing countries hope for growth in tourist visits, especially wealthy tourists from the west. However, there are non-financial costs to tourism and study abroad that are easy to imagine but difficult to measure. Schroeder, et al. (2009, p. 142) posed a series of questions that highlight many of these costs.

- “Do student visits contribute to economies of dependency on outsiders, orienting those economies to pleasing wealthy foreigners rather than to local needs?”
- “Is there a ‘season’ for foreign visitors to come to the area, such that student visits contribute to a ‘boom and bust’ cycle in the local economy? Is there any way to mitigate this effect?”
- “Do students’ patterns of consumption (both during and before the visit) contribute to problems in the community? The ‘demonstration effect’ of students bringing high-end travel gear, lots of clothes, spending money easily on restaurants, giving gifts, etc. may create resentment.”

Although the costs inferred by these questions probably can’t be measured, their existence can be made explicit in the minds of study abroad students. As scholars and educators, our role in study abroad must be to help students think critically about themselves and what they are learning. But we must also help them think about more than themselves — they should acknowledge the impact they are having on the communities they visit. Only then can they attenuate the negative impacts they are having and increase their positive contributions in the places they travel. Eventually, our research on study abroad could focus much more heavily on what our students give in addition to what they receive.

REFERENCES


APPENDIX

APPENDIX 1
DATA COLLECTION MATRIX IN THE EXPENSE LOG

Port #1: Hilo / Honolulu, Hawaii USA

<table>
<thead>
<tr>
<th></th>
<th>Restaurants &amp; pubs</th>
<th>Travel</th>
<th>Entertainment &amp; Recreation</th>
<th>Lodging</th>
<th>Grocery</th>
<th>Gifts &amp; Souvenirs</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan 26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan 27</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan 28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>