

Gender Inequality as Cultural Diversity

Lessons From a Field School Program in Fiji

Sharyn Jones*, Loretta A. Cormier, and Lisa R. Baker

University of Alabama at Birmingham

Abstract

We describe an anthropological and interdisciplinary field school, primarily involving female undergraduates. Our field program was conducted in 2009 and 2010 on a remote island in Fijian archipelago, in the context of a patriarchal society where gender avoidance is practiced. We had two broad objectives for this program: to conduct research on the understanding of cultural and marine biological resources; and to evaluate the effectiveness of the field experience in promoting anthropological and scientific learning principles. We summarize qualitative and quantitative outcomes of the educational evaluation of the student learning experience. We also discuss educational aims and the unique gender-associated challenges of conducting this program in a patriarchal cultural setting.

Key Words: Field school, educational evaluation, gender, Fiji, interdisciplinary research

The authors of this paper believe that deeply engaging students in anthropological research is an increasingly important endeavor. A broad worldview that is afforded by the anthropological perspective can support informed citizens who live in an increasingly diverse multicultural world. In this modern and interconnected context, all people benefit from the ability to navigate beyond narrowly defined cultural ideologies about gender, identity, and religious affiliation, for example. Applying cultural relativism, the anthropological axiom that people's beliefs and behaviors should be understood in terms of their own culture, is critical in the modern world. We argue that gaining an appreciation of cultural diversity may be most effectively achieved through experiential learning. In a hands-on field experience, knowledge is constructed through immersion and overcoming challenges that occur in new contexts (Bruggemann 1987; Davies and Spencer 2010; Gmelch 1997; Ward 1999). Knowledge development is strongly tied to personal relationships and engagement with new ways of living and thinking in a foreign setting or culture. Fundamentally, this is also the experience of anthropology, the study of human cultures using the methods of ethnography and in particular, participant observation. Participant observation involves cultural emersion with the goal of gaining an understanding of the local lifeways and behaviors. An ethnographic study differs from the reflections and writings of a traveler in that the anthropologist is committed to thoroughly understanding the local culture and the

* Corresponding Author; Department of Anthropology, University of Alabama at Birmingham, Heritage Hall, Rm. # 315, Birmingham, AL 35294-3350. Email: sharynj@uab.edu

functions and meanings of human behaviors in their specific context. Ethnographic writings are informed by anthropological methods and theory, which are inherently comparative; that is, anthropologists examine their firsthand accounts of humans with reference to the culture as a whole and to other cultures. While the study of gender relations was not one of the central goals of our present ethnographic research program, in this field context we found ourselves in an environment where an understanding of gender relations was critical to our work and our ability to function in the field.

Our paper reflects on two years of an anthropological field school on a small isolated island in Fiji. This field school program provides an example of interdisciplinary collaboration in pedagogy and research. We set out a series of anthropological learning principles that formed the core of knowledge, which each student was expected to obtain over the course of our nine-week program each year. In addition to the field research component of our project, this program was designed to evaluate learning outcomes to inform pedagogy. The program faculty, as well as the students, encountered some unique challenges in the field however, that raise questions about cultural relativity and gender roles.

The aims of this paper include: 1) to discuss the project goals and the pedagogy of the student-scholar model (where undergraduate students are incorporated into faculty research) in light of this interesting field context of a patriarchal society where gender avoidance is practiced, and: 2), to discuss our educational evaluation of the field school and the learning outcomes with an emphasis on how these outcomes and an understanding of gender inequality may guide future research and experiential learning.

Background

The fieldwork and the people involved in this project represent a multidisciplinary collaboration among anthropologists (archaeology, ethnography, linguistics) historical ecologists, and educators (science education). In general terms, the academic aspect of the field research focused on the understanding and conservation of cultural resources and marine biological diversity through participant observation and archaeology. We established a study site in the Fiji Islands in 2009 based on the lead authors long-term research in that region. During two summers (2009-2010) eighteen undergraduate students (nine each summer) engaged in this interdisciplinary research-based field school. We aimed to document and understand day-to-day life, kinship, gender roles, foodways, and local ecology. Ultimately, data derived from our project will contribute to a model of long-term changes in marine biological communities, emphasizing interactions between humans and the environment. Our project was based on a small island with an area of less than 12 square miles (18.4 km²) that is surrounded by an ecologically rich fringing reef system. The island has a population of 350-400 people who produce most of the food they consume locally, thus this is an excellent setting for our project.

Our educational program is based on the underlying philosophy that undergraduates have the potential to make meaningful contributions to science, but one that is often underestimated. If students are given the opportunity to engage in research and they are mentored in the scientific method and the communication of research to professional audiences, they are fully capable of making significant contributions. This program also attempted to recruit highly qualified, but underrepresented populations of students. We took nine students to Fiji with us each summer who were selected from hundreds of applicants all over the world. In 2009 all of the student participants were female and ranged in age from 20-28; in 2010, one of the students was a male and the students ranged in age from 21-30. We did not make attempts to recruit a majority female group, but most of the applicants were female and the most highly qualified applicants were female.

The learning principles for the program were modeled on MATRIX, a National Science Foundation funded anthropology curriculum enhancement program designed to make anthropological teaching relevant for the 21st century (MATRIX 2003). We selected the MATRIX model because these goals matched ours generally and specifically. Since MATRIX was originally designed for archaeology, we

modified the principles slightly to make them more broadly suitable to all four sub-disciplines of American anthropology (cultural anthropology, linguistic anthropology, biological anthropology, and archaeology) as our interdisciplinary Fiji program included training and/or experiences in these four fields. MATRIX employs seven principles which focus on knowledge, skills, and values that are applicable to general anthropological pedagogy: 1) promoting stewardship of anthropological resources; 2) recognizing diverse interests in these records; 3) understanding the social relevance of anthropology; 4) making a commitment to professional ethics and values; 5) developing effectiveness in written and oral communication; 6) learning basic archaeological and ethnographic skills, and: 7) developing real world problem solving skills. Importantly, MATRIX was developed specifically to address the educational needs of anthropology students and to make them more marketable to potential employers after they graduate, which are also key goals of our Fiji program. Eleven specialists in educational anthropology created MATRIX and currently thirty anthropology programs have contributed teaching modules to the MATRIX interactive website.

A priority of our program was to provide continuity between the summer fieldwork experience and the rest of each student's education. The faculty served as "scholar-teachers," where students were mentored continually throughout the field school and actively participated in the process of scientific inquiry. At the end of the field season, each student gave formal presentations on their summer research projects to both academic and public audiences; this model has benefited students in terms of achievement, retention, as well as making students more attractive to future employers (Boyer 1998, Boyer 1990; Hu et al. 2008; USDE 2008). An explicit focus on critical thinking is a fundamental part of the field school, which numerous studies have described as being inadequately fostered in university classrooms (e.g., Boyer 1998, 1990; Chaffee 1988, 2004; Facione et al. 1995; Hu et al. 2008; USDE 2006).

The field school was guided by the following objectives: 1) to introduce undergraduates to the ways that ecological, historical, economic and cultural phenomena are connected; 2) to train students in research strategies that will identify and explore those connections; 3) to facilitate the in-depth involvement of students in original research that will contribute to the scientific understanding of historical ecology (human-environmental interactions), biodiversity, and anthropology; and 4) to effectively measure the success of the project in achieving its goals, implementing curriculum, and facilitating learning.

The first year of the field program focused on archaeology, where students spent most of their days excavating pre-European contact archeological sites. Students gained experience conducting archaeological surveys, mapping, and excavations. However, during both summers, our group lived in the village and stayed with an extended family that the lead author has long worked with as primary informants. On Saturdays, the group was involved in a variety of activities, including, excavations, reviewing field notes, cleaning, sorting, and cataloging artifacts, fishing, doing laundry, and spending time with the villagers. Each Sunday we participated in village activities such as church services, family gatherings, meals and meal preparations.

The second year, students spent their time engaged in participant observation in the village. Research activities included conducting interviews, time allocation studies, and kinship studies. They collected and analyzing ethnographic data on foodways, agricultural and fishing practices, ritual, and body image. During both Years 1 and 2 students conducted by team-based collaborative and individual research projects. Upon returning to the US students worked on a variety of tasks, including: lab analysis of artifacts, and creating films, podcasts, a website, and outreach materials for local K-12 schools. They also prepared written, digital, and oral presentations and activities for academic and public audiences. Through the program students acquired an understanding of archaeological and ethnographic field skills; key anthropological concepts (e.g., cultural relativism, participant observation); a foreign culture and daily life in a subsistence based economy; cultural diversity; the way humans interact with their environment, and; how and why ethics are an important part of working with people.

Gender Relations in Fiji

In Fijian society, women are expected to be quite and meek in public. Traditionally and in the village setting women defer to men and to male authority (Jones 2009; Thompson 1940; Toren 1999). For example, within a household an unmarried woman is subject to her younger brother's demands, even if he is a child. Fijians practice male-female avoidance, where women and men rarely speak in public and attempt to avoid each other as a sign of respect; this is especially true of unmarried men and women. Gender segregation is evident in most aspects of daily life, from division of labor to food symbolism (Sahlins 1962). A women's place is said to be in the home and in the kitchen. Women rarely leave the village to go into the bush or forest, except on short trips to collect food or firewood. Women and children eat after the men of the house have finished their meal, and women traditionally consume the leftovers (Jones 2009). Men are served the most prestigious foods, and some foods are marked for male consumption. The head of the fish, for example is highly sought after, being reserved for the male head of the household or for the chief in a broader social setting.

In direct contrast to traditional gender roles in Fiji, our female field school students were treated as pseudo-males in some contexts, occupying a "third gender" role. They were given priority at meals, including access to fish heads and other high-status foods. They were allowed to partake in activities normally restricted to males, such as the *kava* ceremony (the ritual consumption of the mild narcotic *Piper methysticum*; *kava* ceremonies are generally restricted to men). In undertaking archaeological excavations, the female students broke several cultural rules in place for Fijian women: working outside the village (at our archaeological sites), digging in the ground (excavations), and working alongside unmarried young men. The American female students occupied traditional Fijian male roles and in many ways they were treated like men. For our male student in 2010, the social situation in terms of the Fijian expectations for his behavior was much the same as that for an unmarried Fijian man. What the female students found particularly difficult was the preferential treatment that the male student received. At meals and during *kava* ceremonies he was served first and always greeted with a great deal of enthusiasm when we attended village gatherings, while our hosts avoided speaking to the female students directly, as a sign of respect. Although the students were aware that this behavior was not a personal slight, it is difficult for those who have been acculturated in a western environment not to feel uncomfortable when being simultaneously ignored and stared at.

Interestingly, the female students were also looked at as potential wives for young men in the village. The Fijian women we lived and worked with often spoke of the students marrying Fijian boys, even offering their opinions as to the best matches. The occurrence of a large number of exotic unmarried women also meant an increased presence of the young men of the village, each hoping to impress one of the students by hanging around the house we lived in and bringing gifts of food and other treats. On many nights our group was serenaded to sleep by groups of young men who stayed up into the early morning singing and informally drinking *kava* in a group. This dichotomy of pseudo-male and potential wife status proved difficult for our students to navigate. As well, they experienced dissonance in attempting to be participant observers and occupy the subservient female role while also engaging in the role of a research fellow and anthropologist.

Educational Evaluation

Evaluation Design

The evaluation employed a mixed-methods design to determine the effectiveness of the field program in promoting the seven anthropological learning principles. Evaluation instruments for each year were basically the same, but the 2009 instruments were modified to reflect the 2010 ethnographic content rather than archaeological content. The second change in 2010 was the addition of the Culture Shock Adaptation Inventory II (CSAI II) as a supplemental measure of cultural adaptation. The CSAI II is a 51 item self-report instrument exhibiting high reliability in measuring the presence or absence of a range of culture shock and adjustment symptoms experienced in a cross-cultural situation. A review

of potential instruments was conducted prior to beginning the evaluation. The CSAI was selected based upon the reported reliability (.92) (Juffer, 1985) and the capability of the instrument to be adapted to reflect the experience in Fiji. The CSAI II was adapted by the instrument author to reflect language related to fieldwork in Fiji and the revised version was utilized in 2010. The addition of a standardized instrument on cultural adaptation was included after discussion with the project faculty about how to better capture the concept of student adaptation to Fijian life. Additionally, in the first year of the project the program directors noticed that one of the major problems that students encountered in terms of their abilities to conduct research on a day-to-day basis, was the difficulty in adapting to the social environment in Fiji was overcoming culture shock and the associated symptoms (such as dramatic changes in physical and emotional wellbeing, anxiety, not getting along with others, hostility toward the host culture, and social withdrawal/self isolation).

Methods

Students enrolled in the field school were required to complete several tasks prior to and after returning from Fiji. One week prior to leaving for Fiji, students were asked to complete an online survey gathering information about their self-assessment of pre-experience skills in anthropological fieldwork, archaeology, participant observation, and analysis and interpretation of data (Skill sets) using a 5-point Likert scale ranging from 1 (very poor) to 5 (excellent). Students were asked to rate their confidence level in 13 competencies of ethnography on a 10-point Likert scale ranging from 1 (not confident at all) to 10 (extremely confident). Students completed 7 open-ended questions about the learning outcomes for the field school. The online survey was administered through Survey Monkey and answers were submitted using student-developed "code" names to ensure anonymity in responses. Code names were used only for the purpose of matching pre and post-surveys. Students were also emailed a link to a remote survey site where they could complete the CSAI II. Responses to the CSAI were collected by the author of the instrument (Dr. Kris Juffer) and submitted to the project evaluator. The same procedures were followed one week after students returned to Fiji at which time students were again sent a link via email to complete an identical survey via Survey Monkey.

In addition to the online surveys, all of the students who went to Fiji participated in pre and post field school focus group sessions that took place one week prior to departure and 2 weeks post return. The purpose of the pre departure focus group was to provide an opportunity for the students to reflect on their expectations for the field research, their level of preparedness, and to discuss the students' sense of openness about their upcoming experiences. The post field focus groups were aimed at exploring what the students felt they had learned, what could be improved in terms of the overall experience, how well prepared they actually were for the field research, and to get each student to articulate and critically evaluate the impacts that this program had on them, in order to facilitate self-understanding and academic and professional growth. The pre-focus group was moderated by the project evaluator with responses being collected by a note-taker. The post focus group was moderated by the evaluator, however students were also asked to submit their comments in written format to supplement the discussion.

Data analysis

Quantitative data collected through the surveys was analyzed by descriptive and inferential statistics (paired samples t-tests) utilizing SPSS 16.0. Answers for the learning outcomes were blinded by student and time of completion (pre or post) and graded by the project faculty. Qualitative data obtained from the focus groups was summarized and coded by themes.

Participants

Nine students participated in the field school each summer. In 2010, of those 9 students, three had participated in the previous year. In 2009 all of the participants were female and most were upper classmen; 66.7% were Seniors (n=6), 22.2% were Juniors (n=2) and one was a Sophomore. In sum, the

demographic breakdown is as follows: 44% of the students were from schools with no research opportunities of this nature; 50% were first generation college students; 33% were ethnic minorities; and, 94% are women. Only one of the participants each year stated that they had not previously travelled outside of the United States. The students ranged in age from 20-30.

Survey Results

The evaluation of the skill sets was divided in to 4 different content areas including *Steps of Anthropological Fieldwork*, *Excavation*, *Analysis* and *Data* (Table 1). Mean scores were higher for all indicators of *Steps of Fieldwork*, including survey skills, mapping skills, compass skills, and survey skills at post-test than pre-test, although the scores were not statistically significant at the .05 level. The pre-test means for the indicators ranged from a low of 2.44 (mapping skills) to 2.89 (survey skills). These means indicate a pre-test rating of “average” to “poor.” Post-test means on the same indicators range from a low of 2.67 (map skills) to 3.22 (survey skills), suggesting an increase to “average” to “good.” The second skill set content area included four indicators of *Excavation*, which included laying out a grid, digging, recording and screening. Mean scores were higher for all indicators of *Excavation* at post-test and pre-test means for this skill set were slightly higher than those for *Steps of Fieldwork*, ranging from 2.89 (digging skills) to 3.33 (recording and screening). The category of “digging skills” demonstrated the greatest gain in mean from pre-test (2.89) to post-test (3.67) and was statistically significant ($t(8) = -2.530, p = .035$). The *Analysis* content area included two indicators; field analysis of data and critical thinking. Of the indicators that demonstrated gain from pre-test to post-test, these two indicators had the highest pre-test scores. The pre-test mean for field analysis of data was 3.33 and the mean for critical thinking was 3.78, indicating a pre-test skill assessment of “average” to “good.” Even though the pre-test scores were high, the post-test scores indicated improvement in both field analysis of data ($M = 4.0, SD = .500$) and critical thinking ($M = 3.89, SD = .928$) with the difference for field analysis being statistically significant at the .05 level ($t(8) = -2.828, p = .022$). The final content area of *Data* contained only one indicator, interpretation of data. The Interpretation of data indicator was the only indicator that demonstrated a decrease in post-test scores ($M = 3.78, SD = .833$) from pre-test scores ($M = 3.89, SD = 1.764$) although the decrease was slight and not statistically significant.

Table 1: Self-rating of Skill Sets

| Item | Pre-test (N=9) | | Post- test (N=9) | | T-score | Sig. level |
|---|----------------|-------|------------------|-------|---------|------------|
| | M | SD | M | SD | | |
| <i>Steps of Archaeological Field Work</i> | | | | | | |
| Survey Skills | 2.89 | 1.167 | 3.22 | .972 | -1.155 | .282 |
| Maps Skills | 2.44 | .726 | 2.67 | .866 | -.610 | .559 |
| Compass Skills | 2.78 | .972 | 3.00 | 1.118 | -.610 | .559 |
| Ground-truth Skills | 2.78 | .972 | 3.00 | 1.00 | -.686 | .512 |
| <i>Excavation</i> | | | | | | |
| Laying out a grid | 3.11 | 1.167 | 3.44 | .726 | -1.414 | .195 |
| Digging | 2.89 | 1.054 | 3.33 | 1.00 | -2.530 | .035* |
| Recording | 3.33 | .707 | 3.67 | .866 | -1.00 | .347 |
| Screening | 3.33 | 1.118 | 3.56 | 1.014 | -1.00 | .347 |
| <i>Analysis</i> | | | | | | |
| Field analysis of data | 3.33 | .866 | 4.00 | .500 | -2.828 | .022* |
| Critical thinking | 3.78 | 1.093 | 3.89 | .928 | -.555 | .594 |
| <i>Data</i> | | | | | | |
| Interpretation of data | 3.89 | 1.764 | 3.78 | .833 | .217 | .834 |

*significant at $p < .05$

Table 2: Confidence in Competency Areas

| Item | Pre-test | | Post-test | | T-score | Sig. Level |
|--|----------|-------|-----------|-------|---------|------------|
| | M | SD | M | SD | | |
| Define Ethnography as a science | 7.56 | 1.878 | 7.78 | 1.481 | -.373 | .719 |
| Describe biological diversity and importance | 6.33 | 2.598 | 7.22 | 2.489 | -1.955 | .086* |
| Describe Cultural Diversity and importance | 8.22 | 1.641 | 8.22 | 1.394 | .000 | 1.00 |
| Demonstrate an understanding of traditional ecological knowledge | 5.89 | 2.667 | 7.11 | 2.759 | -1.244 | .249 |
| Explain the concept of stewardship in an ethnographic research project | 7.00 | 2.179 | 8.22 | 1.481 | -2.052 | .074* |
| Describe the social relevance of archeology, ethnography, and historical ecology as they relate to each other | 7.56 | 2.186 | 7.78 | 1.481 | -.326 | .753 |
| Identify and provide examples of the importance of cultural relativism | 8.11 | 1.900 | 8.67 | 1.323 | -.783 | .456 |
| Describe how you would make a commitment to prof. anthropological ethics | 8.00 | 1.871 | 8.44 | 1.878 | -1.079 | .312 |
| Demonstrate basic ethnographic skills such as the use of the scientific method, participant observation and interpretation of data | 7.67 | 1.414 | 8.56 | 1.424 | -1.955 | .086* |
| Describe a situation in which you would need to make a difficult decision to comply with ethical standards | 7.56 | 1.667 | 8.33 | 1.803 | -1.941 | .088* |
| Demonstrate ability to use anthropological skills in research | 7.78 | 1.481 | 8.56 | 1.236 | -1.421 | .193 |
| Demonstrate ability to use effective oral communication | 7.11 | 2.028 | 8.33 | 1.323 | -1.473 | .179 |
| Provide evidence to present potential solutions through research | 6.78 | 2.048 | 7.89 | 1.537 | -1.512 | .169 |

*significant at $p < .1$

Limitations

The survey portion of the evaluation is not without limitations, and certain cautions should be made when interpreting the results. It is important to note that all of the skills and competencies evaluated demonstrated an increase in post-test scores, as opposed to pre-test scores, except for one skill. Two of the eleven skills were statistically significant at the .05-level. The same is true for the thirteen competencies. Even though none of the increases in the post-test means for the competencies were significant at the .05 level, four of the competencies were significant at the .10 level. Although statistical

significance was not achieved for the majority of items, all but one of the items demonstrated an increase in means, which may be clinically or academically significant. In addition, other factors may have influenced the results. The evaluation had a small sample size, with 33% of the sample having participated in the field school the previous year. The fact that many of the pre-test scores were high may also indicate that students entered the program with a solid skill and competency base, therefore an investigator may not expect to see a dramatic statistical increase. It is also possible that the field school was beneficial in solidifying or strengthening an existing skill and competency set, which may yield less variance between pre and post scores.

CSAI Results

The Culture Shock Adaptation Inventory (CSAI) evaluated the student participants on 51 items related to culture shock adaptation, delineated by the constructs of physical well-being, emotional well-being, getting along with others, and control over the environment (Table 3). Responses were evaluated using a 4-point Likert scale anchored from "Strongly Agree" to "Strongly Disagree," with some items being reverse scored. Low scores indicate high cultural adjusted and higher scores indicate less cultural adjustment, or greater culture shock. It is hypothesized that a decrease in pre and post test total scores would indicate a change to a greater level of cultural adaptation or adjustment. The individual items were also explored for differences in order to assess areas for future preparation of students.

Table 3: Culture Shock Adaptation Inventory (Items presented in post-test language)

| Item | Pre-test | | Post-test | | T-score | Significance Level |
|---|----------|-------|-----------|------|---------|--------------------|
| | M | SD | M | SD | | |
| Making friends with local people was hard | 2.00 | .866 | 1.33 | .500 | 2.828 | .022 |
| Felt like I could trust people in Fiji | 2.33 | .500 | 1.89 | .782 | 2.530 | .035 |
| I was able to go out on streets in Fiji and handle almost any ordinary situation that came up | 2.78 | .833 | 1.89 | .601 | 2.874 | .021 |
| I often felt nervous in a crowd of Fijians | 2.89 | .928 | 2.22 | .972 | 2.309 | .050 |
| I was hesitant to talk to Fijians | 2.44 | 1.130 | 1.78 | .833 | 2.828 | .022 |
| I was overwhelmed by how different everything is in Fiji | 3.00 | .866 | 1.78 | .667 | 3.051 | .016 |
| I felt like I accomplished what I came to Fiji to accomplish | 3.56 | .527 | 1.89 | .601 | 5.774 | .000 |
| I felt more comfortable with Americans than Fijians | 2.33 | .707 | 1.89 | .333 | 2.530 | .035 |

*significant at $p \leq .05$

As hypothesized, the total scores decreased from a pre-test mean of 114.1 to a post-test mean of 98.3 (N=9). This change was statistically significant at the .05 level ($t(8) = 2.925, p = .019$), indicating an increase in cultural adaptation with decreased culture shock after the experience. In an individual items analysis, of the 51 items, eight demonstrated a statistically significant difference from pre to post test at the .05 level. Those items are *Making friends with local people*, ($t(8) = 2.828, p = .022$), *Trusting people in Fiji*, ($t(8) = 2.530, p = .035$), *Ability to go out on the streets and handle situations that arise*, ($t(8) = 2.874, p = .021$), *Feeling nervous in a crowd of Fijians*, ($t(8) = 2.309, p = .050$), *Being hesitant to talk to Fijians*, ($t(8) =$

2.828, $p = .022$), *Being overwhelmed by how different everything is in Fiji*, ($t(8) = 3.051$, $p = .016$), *Feeling like I accomplished everything I wanted to accomplish*, ($t(8) = 5.774$, $p = .000$), and *Feeling more comfortable with Americans than Fijians*, ($t(8) = 2.530$, $p = .035$).

Even with the small sample size, items on the CSAI, as well as total scores, indicated less culture shock and greater cultural adaptation on the part of the students after returning from Fiji. This was true even though some students had participated in the field experience the prior year, so one would hypothesize that their pre and post test scores would be more closely related as a result of their previous experience. However all the students demonstrated a change in scores. Many of the individual items that indicated significance (pre-trip) were items that loosely related to personal safety, which according to individual scores, were not actually significant issues when students were in the field.

Focus Group Results

The focus groups were designed to supplement information obtained through the quantitative survey and to provide students with a forum to reflect on their experiences. The focus group included the first seven questions for the pre-group and the addition of questions 8-10 for the post group. A summary of the answers and representative quotes are provided below:

Describe the single most important thing you hoped to learn from this experience.

Students are participating in this experience in order to gain a deeper understanding of anthropology and to be immersed and experience a culture different from their own. They were looking forward to a hands-on experience and being able to step out of their comfort zone. They were expecting the environment to be challenging. Upon returning the students remarked that they felt they had accomplished their primary goals. The majority of students reported gaining a better understanding of other cultures (primarily Fijian) and they gained an increased sense of confidence in their ability to conduct fieldwork and experience another culture. Some students also reported a sense of obtaining a better understanding of their own culture as a result.

[I hoped to] "gain confidence in my ability to conduct research – I learned that I do have the ability." (pre-group)

"I hoped to understand the way Fijians perceive reality – I learned the most about my own culture's paradigm."

Do you feel like you are/were adequately prepared for the field experience? Is there any area in which you feel you could have been better prepared?

Prior to the experience students felt that they were physically prepared for the lifestyle changes but that it was difficult to prepare for the unknown. Some students commented that they wished they knew more about Fijian culture. They discussed previous experiences travelling abroad that they felt prepared them for the trip.

Upon returning the students reported mixed feelings about their level of preparedness. Some students reported feeling prepared academically for the fieldwork, but less prepared for the actual field demands. Some students reported being not prepared for "re-entry" and commented on reverse culture shock. Several students reported that they did not feel prepared, but they did not think that preparation was possible – they just needed to experience the process.

[It was] "Difficult to deal with reverse culture shock."

"I did not feel prepared for the research – but I don't think you can prepare adequately before fieldwork."

"I do not think I was adequately prepared, but don't think an undergrad can prepare – [you] just need to go and take the risk."

Describe what you feel to be your level of cultural preparedness coming out of the field experience as opposed to your level of preparedness going in to the experience.

Many students were initially concerned about food issues. There were vegetarians who were concerned about having to eat meat in Fiji. Several students were concerned with having food related illnesses while in Fiji. Some students also discussed their concern over interactions with the Fijians in terms of being a “novelty” in the country.

Upon returning, most students reported having a better understanding of cultural preparedness and they felt that they were better prepared after the experience to adapt to different cultures. The three students who attended the field school both years reported feeling more prepared for the second year and more prepared for future work. Students commented on the difficulty transitioning to their own culture in the USA.

“I feel like I am more prepared to spend time in the community – I have a better understanding of life in the village, as opposed to collecting data from the outside.”

“I felt like I made great strides in learning how to handle myself – and I became better able to disappear.”

“I felt prepared before I left, but realized when I arrived [in Fiji] that there was more to it than I previously thought.”

How comfortable do you feel conducting scientific and/or anthropological research?

The first time students (those who did not travel to Fiji two years in a row) reported feeling nervous about conducting research prior to entering the field while students who had previous field experience in Fiji were more confident at the beginning of the field season. Upon returning, most students reported feeling more comfortable with research than when they entered the field. Some students reported feeling very comfortable with their research abilities.

“There will always be a level of uneasiness [conducting research], but this experience helped me gain more skills.”

“I feel more comfortable and confident than I ever felt before – [I am] more aware of my limitations.”

What are your thoughts about the influence your presence alone had on the community that you studied?

Prior to the field school, students believed their presence would influence the community, especially in terms of being “examples” of Westerners. Some students felt that they would be a drain on the resources of the community (e.g., in terms of water and food) and some wondered what the long-term influences would be. Upon returning, all the students reported that they felt their presence did influence the community. Some students felt that the influence was positive (for example, in economic ways). Some students felt that their presence biased the data collected and that the community responded to our interviews in ways that might not have expressed their true opinions and beliefs.

“Our presence was reflected in the data – people sometimes tried to give us the answers that they thought we wanted and [the Fijians] altered their lives in order to accommodate us.”

“I hope my presence had a positive influence and I provided them with evidence that all Americans are not simply tourists.”

“There were several days on [the island] where I wanted to cry because I saw our presence causing harm, not intentional, but it came from our lack of our cultural understanding – we need to spread Fijian cultural knowledge back home to have a positive impact [on our own culture].”

The faculty members often speak about the anthropologist's ability to “erase yourself” when studying another culture. What does that mean?

Students shared a concept of the ability to “erase yourself” prior to leaving for Fiji. They discussed

being neutral and “invisible” when in Fiji, to reduce impact on Fijian culture as well as bias. Some students stated that they knew they needed to “blend in” as much as possible, but they were concerned about their ability to do that. At the post-test focus groups the students reported that they felt they had a better understanding of what it meant to blend in, however they also felt that it was more complicated than they initially thought. Some students reported that it was impossible because the Fijians were so aware of the student presence.

“It is impossible – ideas, beliefs and behaviors have been shaped by years of life experiences that you can’t erase – an outsiders perspective is all you can hope for.”

“It is more complicated than it sounds.”

Describe your greatest concern going in to the experience and describe your feelings about the concern at this point.

Student responses were mixed about their concerns. Concerns ranged from being away from family, to not knowing how to behave in a different culture, to concerns about group dynamics and not being able to “connect” with the Fijians. All students reported that they were able to handle their concerns during the experience.

What was the most important thing you learned throughout this experience?

Student comments on this question were divided in to two categories. Some students commented on topics directly related to conducting research, such as the importance of ethics, the importance of stewardship, and balancing of observation and interviews. The other comments were categorized by a larger view of the interconnectedness of peoples in terms of relating to the Fijians.

“I came away with the sense of everything in this world being vastly infinite while also being one and connected.”

“Even though people are different we all share something.”

“The same story is being played out all over the world – love, sharing, greed, self-seeking.”

“To laugh – Fijians laugh at everything.”

Is there anything you would change to improve this experience if you could?

This question received the most consistent responses. Several students made comments related to specifics, such as spending more time on the island, and having more cultural training prior to leaving. The majority of the students commented that they would not change anything about the experience, and some added comments such as those listed below:

“No – if you changed it – it [the experience] would not be Realistic but Idealistic.”

“No – the inexperience (not a typo!) was essential.”

Final thoughts: Is there anything else you would like us to know about this experience?

Student feedback on this topic was overwhelmingly positive about the experience. Some comments are listed below:

“I really enjoyed the experience and I value everything I learned and experienced.”

“Now that I am back, I understand how an experience like that can make a person re-think their life and wonder what should change.”

“The Professors provided great guidance and companionship.”

“I am grateful for the opportunity.”

"This experience should be mandatory!"

"It was an awesome experience – I wouldn't trade it for the world."

"I was very grateful to have the opportunity – without the stipend it would not have been possible – I am very excited about the process of becoming an Anthropologist."

"I am very thankful for the PI's taking me to the field, thankful to NSF, thankful for gracious informants."

Evaluation and Interpretations

Impressions

Throughout the discussions between the program evaluator and the students, it was evident that the students were enthusiastic about the field research experience and many of them spoke of it as an opportunity that they felt was unique, and was not frequently available to undergraduates. Prior to departure the students appeared cautiously optimistic about the experience. They recognized that prior training and information was valuable, however, preparedness alone does not replace experience. When the program evaluator met with the students again upon their return, it was extremely obvious that the group had bonded on a significant level, and that they had a very positive experience overall. They spoke of enduring hardships that were not evident in their daily lives but they also spoke of their self-pride in overcoming those hardships and conquering self-doubt. The students overwhelmingly portrayed the uniqueness of the opportunity and the significance of the experience in shaping their future as researchers, scientists, and anthropologists.

Strengths

According to the project evaluator, one of the greatest strengths of this program is the commitment from the faculty involved. The objectives are clear and measurable, yet adaptable to reflect the needs and experiences of the students. The project faculty have a long-standing relationship with the Fijians that has resulted in a positive and safe learning experience for the students. Their commitment to the preservation of the Fijian culture is also evident in the research ethics-based preparation of students for the field experience in which they are so closely tied with the Fijian community. Students gain experiences in a culture context that is much different from their own, and students are provided with a rich environment to conduct anthropological and interdisciplinary research. This research includes methods that are initially learned conceptually in the classroom, but these are then fully integrated through the fieldwork experience. The field school provides an example of the application of classroom learning to a true hands-on research setting. Undoubtedly, experiential learning provides a richness that is often unavailable inside the classroom.

Lessons Learned

Based on data from the evaluation, there are a few areas of the program that should be further developed or enhanced. The students indicated that they wished they had more education on the Fiji culture prior to attending the field school. Although some of this should be initiated by the student, the faculty are working to explore some ways to further develop this component. Five days of workshops were conducted prior to the field experience by both faculty and students (who attended the field program the first year) in order to prepare students with background on Fijian culture, history, ethics, and field methods. However, the program might benefit if the workshops were longer, extending into a second week.

The second area of enhancement relates to home-culture re-entry. Several students commented that they had difficulty returning to their home culture because of the personal paradigm shift that occurred during the field experience. It may be helpful to students to incorporate an informal discussion session where students could talk about some of the difficulties they encounter upon their return to the USA with their peers and the project faculty.

Third, while the educational analysis suggests that our learning goals were generally met, the most significant challenges faced in conducting the field school were not specifically measurable through the evaluation methods. Most students mastered the archaeological skill set and some degree of the ethnographic work without difficulty. The most significant problems involved the social environment in Fiji, including culture shock, determining appropriate and ethical interactions with Fijians, understanding the student role as participant observers in the culture, and the complexities of gender relations for a female-dominated field school in a non-Western patriarchal culture.

Unexpected Difficulties and Concluding Thoughts

Students experienced difficulties as a result of differences between gender relations in a traditional patriarchal Fijian setting and the United States. Although we attempted to prepare students for these differences in class room-based workshops prior to our departure, discussing appropriate behavior and actually engaging in it was a challenging transition for most of the students. The Fijian patriarchal perspective creates some serious disadvantages of teaching science to a group of young American women. Specifically, a field school taught in a foreign cultural context such as this creates particular difficulties in navigating culturally appropriate gender roles when they differ significantly from one's own. If our group was going to display truly appropriate behavior from the Fijian perspective, we needed to sit quietly and defer to the men at all times, avoid asking questions, and stay close to the kitchen and residential area. Obviously this type of behavior would have inhibited our scientific endeavors and made it impossible to achieve our project goals. Most students recognized that their position in the village was complicated and context dependent. We had many discussions about this, both as a group and in one-on-one mentoring sessions, during our time on the island. As a result the challenges provided an opportunity for questioning, reflection, and personal growth; culture shock experiences often serve as advantageous for anthropologists and students as they learn to become professionals (Bruggemann 1987; Gmelch 1997; Ward 1999). Moreover, our presence on the island resulted in changes for our group as well as for the Fijians we lived and worked with. Young Fijian men are expected to uphold traditional roles, yet they are increasingly exposed to global ideas about gender relations and gender equality. On the other hand, the American female students were attempting to balance the prestige of an academically competitive fellowship with the daily reality of their complex gender status in a patriarchal society that places great emphasis on male-female avoidance and gender segregation.

In sum, learning outcomes from pre-and post-tests suggest knowledge gains academically and in terms of cultural understanding. After both years of the program students described their experiences as “transformative” and “life changing.” All of the students felt proud of their accomplishments and explained that they gained maturity and a sense of independence. Indeed, we agree with Ward who argued that, “No quantitative tools exist for measuring the benefits to students who participate in such a program” (Ward 1999: 233). In the first year of the program, the project faculty did not anticipate the degree to which students would encounter behavioral dilemmas associated with the Fijian social environment and gender relations. We were also unprepared for the strong and serious Fijian interest in our students as potential marriage partners. In the second year we attempted to improve screening and recruiting techniques for selecting students, in order to choose individuals who were better able to socially adapt to Fijian society. In particular, we looked for the characteristics of adaptability, tolerance, and an open-minded attitude. Not surprisingly, these are the same traits that are helpful for anthropological fieldwork in general (Gmelch and Gmelch 1999; Ward 1999). Another improvement from the first to second year included the presence of students who had already been to Fiji and who understood the social environment; these veterans helped to mentor the students who were in Fiji for the first time. The second year also included more in-depth pre-field training on Fijian gender relations. We were able to draw on our rich experiences to illustrate what might occur and to better prepare for

the field. One of the most salient lessons for all of us, both students and faculty is that appreciating cultural diversity may involve gender inequity in this context.

Acknowledgements

This research project was made possible by a grant from the National Science Foundation (NSF-REU Grant # SES-085136). The authors gratefully acknowledge the late Na Gone Turage Na Tui Lau, Tui Nayau Ka Sau ni Vanua ko Lau, The Right Honourable Ratu Sir Kamisese Mara, and his family for allowing our team to work on Nayau. We thank the Fiji Museum for their important assistance. We are especially grateful to the people of Nayau for facilitating our research and providing us with a wealth of local knowledge.

References Cited

- Boyer, E. 1990. *Scholarship Reconsidered: Priorities for the Professoriate*. San Francisco: Carnegie Foundation for the Advancement of Teaching.
- Boyer, E. (Boyer Commission on Educating Undergraduates in the Research University). 1998. *Reinventing Undergraduate Education: a blueprint for America's Research Universities*. New York: State University of New York at Stony Brook for the Carnegie Foundation for the Advancement of Teaching. <http://dspace.sunyconnect.suny.edu/bitstream/1951/26012/1/Reinventing%20Undergraduate%20Education%20%28Boyer%20Report%20I%29.pdf> [accessed December 11, 2010].
- Bruggemann, William. 1987. *Hope Within History*. Atlanta: John Knox Press.
- Chaffee, John. 1988. *Teaching Critical Thinking across the Curriculum*. Paper presented at the Annual Conference of the National Association for Developmental Education (12th, Orlando, FL, March 10-12, 1988). http://eric.ed.gov:80/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/1f/a0/ad.pdf [accessed December 23, 2010].
- Chaffee, John. 2004. *Critical Thinking, Thoughtful Writing: A Rhetoric with Readings*. 3rd edition. Florence, KY: Cengage Learning Inc.
- Chall, Jeanne S. 2000. *The Academic Achievement Challenge: What Really Works in the Classroom?* New York: Guilford Publications.
- Davies, James and Dimitrina Spencer (eds.). 2010. *Emotions in the Field: The Psychology and Anthropology of Fieldwork Experience*. Stanford, CA: Stanford University Press.
- Facione, PA, N. C. Sánchez, Facione, and J. Gainen. 1995. The Disposition Toward Critical Thinking. *Journal of General Education*. 44(1):1-25.
- Gmelch, George. 1997. Crossing cultures: Student travel and personal development. *International Journal of Intercultural Relations*, 21(4): 475-490.
- Gmelch, George and Sharon Bohn Gmelch. 1999 An ethnographic Field School: What students do and learn. *Anthropology and Education Quarterly* 30(2):220-227.
- Hu, Shouping, Kathyrine Scheuch, Robert Schwartz, Joy Gaston Gayles, and Shaoqing Li, eds. 2008. Reinventing Undergraduate Education: Engaging Students in Research and Creative Activities. Special issue, *ASHE Higher Education Report*. 33(4):1-103. <http://www3.interscience.wiley.com/cgi-bin/fulltext/117902226/PDFSTART> [accessed January 15, 2011].
- Jones, Sharyn. 2009. *Food and Gender in Fiji: Ethnoarchaeological Explorations*. Lexington Books, Lanham.
- Juffer, Kristin. 1985. *Researching Culture Shock: The Culture Shock Adaptation Inventory (CSAI)*. Paper presented to International Studies Association, Washington, D.C. (March 8, 1985).
- MATRIX: Making Archaeology Teaching Relevant in the XXI Century*. 2003.

<http://www.indiana.edu/~arch/saa/matrix/homepage.html> [accessed June 3, 2011].

Sahlins, Marshall D. 1962. *Moala: Culture and Nature on a Fijian Island*. University of Michigan Press, Ann Arbor.

Thompson, Laura M. 1940. *Southern Lau, Fiji: An Ethnography*. B. P. Bishop Museum Bulletin 162. Bishop Museum Press, Honolulu.

United States Department of Education. 2006. *A Test of Leadership: Charting the Future of U.S. Higher Education*. <http://www2.ed.gov/about/bdscomm/list/hiedfuture/reports/final-report.pdf> [accessed June 3, 2011].

Ward, Martha C. 1999. Managing Student Culture and Culture Shock: A Case from European Tirol. *Anthropology and Education Quarterly* 30(2):228-237.