

Sociology Annual Report for Assessment of Outcomes 2011-2012

1. ***Describe changes that have been implemented towards improving students' attainment of outcomes that resulted from outcome assessments carried out in 2010-2011. These may include but are not limited to changes to content, materials, instruction, pedagogy etc.***

We did not implement any changes this year toward the improvement of student attainment of outcomes as none of the assessments conducted in 2010-11 provided such data (see 2010-2011 report). Hence, we focused our efforts this year created a tool to assess attainment of outcomes in the areas of:

- Critical thinking and problem solving
 - Cultural awareness
 - Communication
 - Community and Environmental Responsibility,
- in an effort to have data that would assess for learning and lead us to make changes for program improvement in the core outcome areas.

The remainder of this report is dedicated to discussing our tool (a pre-post test) and ***initial findings***. Please note that ongoing analysis is being conducted including the crucial recommendations that emerge from our key assessment activity from this past year. Unfortunately, the assessment report due date and the time it takes to conduct analyses that will truly be useful to our SAC do not align. **Admittedly, this report largely includes findings and is weak on recommendations.** Again, our assessment sub-committee has already and will continue to dedicate considerable time creating “next steps” that turn our extensive data analysis into meaningful recommendations that will ultimately lead to program changes. We also acknowledge that our assessment activity for this year was an indirect assessment. However, the justification for such an approach is outlined later in this report. Indirect assessment can be a good starting place for creating direct assessments.

Special note for the readers of this report:

We hope you will see that this process has provided meaningful data in our quest to engage in assessment that leads to the improvement of student attainment of outcomes. We realize that portions of this report are not as exciting as others. **Please pay special attention to the items in bold, italics, and underlined throughout the report as they point to key findings.** Also keep in mind that this is a summary of our initial findings. We welcome and need recommendations for using our results to inform other assessments including direct assessment.

For each outcome assessed this year:

2. Describe the assessment design (tool and processes) used. Include relevant information about:

- ***The nature of the assessment (e.g., written work, project, portfolio, exam, survey, performance etc.) and if it is direct (assesses evidence mastery of outcomes) or indirect (student's perception of mastery). Please give rationale for indirect assessments (direct assessments are preferable).***

We used one tool (a pre-post test) to assess four outcomes. The sociology SAC has been concerned with collecting high quality and useful data that is both reliable and valid. While we have worked to hasten our progress in formal assessment activities, creation and execution of the survey has taken nearly 1 ½ years. As noted in a recent volume of the Teaching Sociology journal: "Sociologists may be especially sensitive to these time pressures, for their training and orientation alert them to the differences between high quality, valid, and reliable data and what passes as adequate reporting of data on student learning to satisfy a dean or provost" (Chin, Senter, and Spalter-Roth 2011:123). Hence, we created survey instrument to collect meaningful data to understand effectiveness of the sociology program and to identify areas of learning and teaching that need improvement. **While this is an indirect assessment, we are confident the analysis of the results will provide us meaningful data to plan "next steps" that include direct assessment.** Most importantly, though, we wanted to know if sociology makes a difference in four outcome areas.

Indirect assessment can measure overall trends in student achievement, but is more commonly used at the program or institutional level to measure the "value-added" of particular courses, course sequences, or institutional interventions (i.e. developmental education). Outcomes in areas such as cultural awareness, critical thinking, communication, and community and environmental responsibility are highly theoretical and less often operationalized. Terenzini et al. (1995) point out that the literature has provided little indication that individual courses may shape critical thinking for example, but that particular sequences or combinations of courses may indeed affect critical thinking. **This study does attempt to measure the effects of one or more courses in sociology on the four outcome areas in particular.**

Based on the literature around greater accountability, assessment, the value of particular types of courses affecting growth in outcome areas, and student background characteristics, the following hypotheses were created:

H1 Students with less sociology will experience greater gains in their changes on the cultural awareness index.

H2 Students with less sociology will experience greater gains in their changes on the critical thinking index.

H3 Students with less sociology will experience greater gains in their changes on the communication index.

H4 Students with less sociology will experience greater gains in their changes on the community and environmental responsibility index.

The primary research question of our study was: **What are the effects of completion of sociology courses on the development of cultural awareness, critical thinking, and communication skills as well as student sense of community and environmental responsibility?**

- ***The student sample assessed (including sample size relative to the targeted student population for the assessment activity) process and rationale for selection of the student sample. Why was this group of students and/or courses chosen?***

Population

Considerable attention has been given to the effects of student background characteristics on college student success (Tinto 1975, 1982, 1988; Pascarella and Terenzini 1998; Astin 1993). The work of Tinto (1975, 1988, 1982), Astin (1993), and Pascarella and Terenzini (1998) are commonly used as the theoretical underpinnings for research on community college persistence in the student services literature. Tinto (1975, 1988, 1982) emphasizes student academic and social integration, Astin (1993) highlights the importance of student

engagement with peers and faculty, and Pascarella and Terrenzini (1998) point to the importance academic and social integration, but emphasize institutional characteristics (location, size, etc.) as well. However, little attention has been given to how student background characteristics affect student course-taking patterns (Terrenzini et al. 1995). In an early and isolated attempt, in their study of cognitive gains in critical thinking, Terrenzini et al. (1995) found student background characteristics did explain at least some of the variation in first-year gains in critical thinking. **This study seeks to consider the background characteristics of age, race, and gender on growth in institutional outcome areas. It has been evidenced across the literature that student background characteristics matter in student persistence. Why have we not considered these characteristics as they relate to attainment of core outcomes?**

During winter 2012 quarter, the sociology program at PCC administered a pre and post-test for students in all sociology courses. The survey included items measuring four of the six core outcome areas including: cultural awareness, critical thinking, communication, and community and environmental responsibility. The survey collected general demographic information including age, race, and gender and prompted for student intended major and educational goal at PCC. In addition, students were asked to indicate previous sociology courses taken.

There were 1,546 students enrolled in sociology courses at PCC during the winter 2012 quarter. We attempted to survey all students. By selecting the second term of the quarter, we sought to capture students that may have taken prior sociology courses (in the fall, for example) as well as students enrolled in their first sociology course. The pre-test was opened during the second week of the term and remained opened through the fifth week of the term. The initial response to the survey was 828 students (54%). The post test was opened during the tenth week and final of the term. Of the 828 initial respondents, 670 (43%) completed the post test. Instructors provided an incentive of extra credit for completing the survey. Students were required to input a unique code that matched the pre and post-tests for each respondent. Students responding to the pre-test after the third week of classes were excluded from the sample. **In total, 455 (29%) students completed the pre and post-test within the cut-off timeframe and provided their unique code to match the responses.** See Table 1 for overall descriptive statistics of the sample.

- ***Any rubrics, checklists, surveys or other tools that were used to evaluate the student work. (Please include with your report). Where appropriate, identify benchmarks.***

Each of the four outcome areas consisted of four to eight questions created to measure a range of competencies associated with each outcome. Some items were replicated from a psychology department survey that had previously been conducted at PCC. Other items were created to match the language PCC uses to define the competencies. All items measuring the competencies used a 5-point Likert scale (1= Strongly disagree, 2= Disagree, 3= Neither agree nor disagree, 4= Agree, 5= Strongly agree).

There were seven items that were used to create the cultural awareness index: 'I recognize that people are not all the same; that many difference cultural groups exist within a society.;; 'I frequently question my own cultural perspectives'; 'When interacting with a person I consider their cultural background'; 'I am knowledgeable about the contributions of women to furthering social just and equality'; 'I am knowledgeable about the contributions of racial/ethnic minorities to the USA'; 'I accept that my values and norms are not necessarily right and that people from other cultures have their own values and norms that are just as legitimate.'; and 'When thinking about culture, I consider ways it relates to power in our society.' These items had a pre-test Cronbach's Alpha of .688 and a post-test Cronbach's Alpha of .736.

There were eight items that were used to create the cultural awareness index: 'I understand what unearned privilege (based on race and/or gender) is.'; 'I tend to ask questions about why things are the way they are.'; 'I give serious consideration to viewpoints that differ from my own.'; 'I know how to evaluate the credibility of information sources'; 'When I am presented with new information (ideas, research, statements, etc.), I am initially skeptical.'; 'I am familiar with research methods used by sociologists'; 'I know how to evaluate statistics (graphs, tables, narrative) in the mass media.'; 'I questions parts of my life that seem

natural/inevitable.'; 'I know how to build logical arguments.' These items had a pre-test Cronbach's Alpha of .650 and a post-test Cronbach's Alpha of .734.

There were six items that were used to create the communication index: 'I have effective oral communication skills.'; 'I think about how my communications will affect others.'; 'I am able to use descriptive statistics (mean, median, mode, standard deviation, etc.) to communicate information.'; 'I am able to have civil discussions with others who disagree with my ideas.'; 'When listening to another person, I try to understand their viewpoint even when it differs from mine.'; 'I know how to use appropriate charts and graphs to communicate information.' These items had a pre-test Cronbach's Alpha of .396 and a post-test Cronbach's Alpha of .769.

There were four items used to create the community and environmental responsibility index: 'I understand that my actions have consequences on society.'; 'I am concerned about environmental issues in our world'; 'I stay informed about issues in the area where I live (neighborhood, city, etc.).'; 'A healthy economy requires a healthy environment and community relationships.'; 'I take actions to improve the environment, e.g., recycling, reducing consumption, purchasing local and/or organic products, etc.' These items had a pre-test Cronbach's Alpha of .671 and a post-test Cronbach's Alpha of .709.

Dependent Variable

The dependent variable was index change in each of the four outcome areas. The four dependent variables are as follows:

1) the change, if any, in cultural awareness index score from the pre to post-test;
2) the change, if any, in the critical thinking index score from the pre to post-test;
3) the change, if any, in the communication index score from the pre to post-test; and
4) the change, if any, in the community and environmental responsibility index score from the pre to post test. This variable was used in analyses in two forms: as a scale variable, and as re-coded ordinal variable. In the re-coded ordinal form, the scale variable was re-coded as follows: -1 (a negative change in pre-post score), 0 (no change in the pre-post score), and 1 (a positive change in the pre-post score).

Independent Variables

The independent variable of interest was "past weeks of sociology". This variable was initially coded as a scale variable called "number of past sociology courses taken". A new variable was computed as a scale variable representing "number of weeks of prior sociology." The "number of weeks of prior sociology" was computed by multiplying each past course by 10 (to represent 10-week quarters). Then the number of weeks the student had completed during the winter 2012 quarter prior to taking the pre-test were added to the total. Hence, if a student indicated having taken two prior sociology courses and took the pre-test at the end of the second week of the term, they would have completed 22 weeks of past sociology ($2*10 + 2$).

The demographic variables of interest were age, gender, and race. Age was an ordinal variable ranging from 1 to 7 with 1 being 19 years of age or younger and 7 being 50 years of age or older). Gender was originally a 3-response item (male, female, or transgender). This variable was re-coded into a dichotomous variable (1=male, 0=female). The five transgender participants were not included in the sample.

A "not white or Hispanic white" variable was computed from the item "Do you consider yourself to be Hispanic/Latino?" and race item "Select one or more of the following: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Pacific Islander, White." If a participant indicated that they were white and at least one or more other racial category (or white and of Hispanic/Latino descent) they were coded as "1." If they indicated any combination of one or more racial categories other than or including white they were also coded as "1". If a participant indicated they were white and selected no other race categories and if they did not respond "yes" to the Hispanic/Latino item, they were coded as "0" or "exclusively white."

- **How you analyzed results, including steps taken to ensure that results are reliable (consistent from one evaluator to another).**

So far, as explained in detail in the next section, least squares regression was performed to analyze the effects of past weeks of sociology, age, gender, and race on the index change for each of the four outcome areas. and ordered logistic regression was used In order to evaluate the effects of the pre-test scores as a predictor of the post-test score, OLS regression was conducted using the scale post-test score as a dependent variable and all other independent variables including a variable for the pre-test score. This lagged model was provided to determine the effects of pre-test scores when controlling for the other independent variables. Finally, ordered logistic regression was performed to estimate the effects of the independent variables at three levels of the dependent variable.

3. Provide information about the results (i.e., what did you learn about how well students are meeting the outcomes)?

- **If scored (e.g., if a rubric or other scaled tool is used), please report the data, and relate to any appropriate benchmarks.**

There were no benchmarks per se in this study. However, we hypothesized that students would make gains in their index scores in each of the outcome areas between the pre-test and the post-test.

- **Results should be broken down in a way that is meaningful and useful for making improvements to teaching/learning. Please show those specific results.**

Sparing the readers of this document the pages of tables and verbiage that explains the results of our analysis, only key findings are highlighted. The tables and additional text is available upon request.

Cultural Awareness Results

An ordinary least squares analysis of cultural awareness index score change was conducted. OLS regression assumes a linear relationship (that is, as X increases, Y increases or decreases). In our case, results indicated that **an increase in the cultural awareness change score is associated with a student having completed fewer weeks of sociology.** For every one point increase in the index change score, age decreases by a factor of $-.149$ (S.E.=.086, $p<.10$). Being other than exclusively white is also associated with an decrease in the index change score ($b=-.618$, S.E.=.344, $p<.10$). This means that having less sociology means students are more likely to experience greater gains in change scores. This model (model four) accounted for 2.3% of the variation in the cultural awareness index change score (adjusted $R^2=.023$). What this means is that **Hypothesis 1 Students with less sociology will experience greater gains in their changes on the cultural awareness index is supported. Further, it seems that younger students and white students experience greater gains in the cultural awareness change index than older students and students that are not exclusively white.**

Another part of our analysis included asking the question *Is how students respond to the survey at the end of the term related to how they responded to the survey at the beginning of the term?* This helps us answer the question Does enrollment in sociology courses make any difference? This is also OLS regression, but is concerned a lag analysis meaning that a time element (weeks between pre-test and post-test) is considered. Lagged modeling allows for examination of the “post-condition” after controlling for the “pre-condition” and other independent variables. **One of our models indicated that for every one point increase in the cultural awareness pre-test index score is associated with an increase of .361 in the cultural awareness post-test score** (S.E=.043, $p<.001$). This model accounted for 14% of the variation in cultural awareness index post-test index score (adjusted $R^2=.14$). **This analysis does not support H1 Students with less sociology**

will experience greater gains in their changes on the cultural awareness index. Although, as in the first OLS analysis, it seems that younger students experience greater gains in the cultural awareness change index. However, this analysis indicates that being male is also associated with a lower level on the cultural awareness change scale and the OLS regression did not.

Ordered logistic regression was used to estimate the effects of past sociology weeks, race, age, and gender on cultural aware index score change at three levels (loss, no change, and gain). This type of analysis allows us to not just test whether or not a change in the pre-post test scores has any significance, but it allows us to consider whether a change that is a loss or a gain (or no change at all) tells a different story. This is a far more robust analysis. **Both being other than exclusively white and being male are significant and both are negative. The independent variable of interest, past sociology weeks, was not significant. In this case, students that are other than exclusively white are 34.6% less likely to report a higher value on the cultural awareness change scale** ($b=-.242$, $S.E.=.212$, $odds\ ratio=.654$, $p<.01$). The case is similar for men. **Men are 34.1% less likely to report a higher level on the cultural awareness change scale** ($b=-.346$, $S.E.=.206$, $odds\ ratio=.659$, $p<.10$). **This analysis does not support H1 Students with less sociology will experience greater gains in their changes on the cultural awareness index.** Again, as in the first OLS analysis, **it seems that younger students experience greater gains in the cultural awareness change index. However, this analysis indicates that being male is also associated with a lower level on the cultural awareness change scale and the OLS regression did not.**

Critical Thinking and Problem Solving

**Please see Cultural Awareness results for a description of each of the statistical procedures performed. The same procedures were performed for all outcomes.*

An OLS analysis of critical thinking index score change was conducted. On model indicates that every one point increase in the critical thinking change index score is associated with a decrease in the number of -.058 weeks of sociology ($S.E.=.021$, $p<.01$). **In other words, an increase in the critical thinking change score is associated with a student having completed fewer weeks of sociology.** Models two through four accounted for 1.3%, 1.6%, and 1.4% of the variation in the critical thinking change scores. **This analysis supports H2 Students with less sociology will experience greater gains in their changes on the critical thinking index.**

An OLS analysis for the critical thinking post-test index score which included a lag variable for the pre-test score was conducted. The constants for pre-test score remained nearly unchanged ($b= .585$, $.584$, $.583$, $.583$, $S.E.= .038$, $.039$) with adjusted R-squares indicating that **pre-test score explains around one-third of the variation in the post-test score.**

Ordered logistic regression was used to estimate the effects of past sociology weeks, race, age, and gender on critical thinking index score change at three levels (loss, no change, and gain). Of these variables, only past sociology weeks was significant in these models (not race, age, or gender). **In this case, every one week increase in past sociology weeks reduces the odds of reporting a higher change score by 2.2%. This analysis supports H2 Students with less sociology will experience greater gains in their changes on the critical thinking index.**

Communication

**Please see Cultural Awareness results for a description of each of the statistical procedures performed. The same procedures were performed for all outcomes.*

An OLS analysis of communication index score was conducted. One model indicates that every one point increase in the communication change index score is associated with a decrease in the number of -.042 weeks of sociology ($S.E.=.017$, $p<.01$). **In other words, an increase in the communication change score is associated with a student having completed fewer weeks of sociology.** Model 1 accounted for 1.1% of the variation in communication index change scores (adjusted $R^2=.011$). In another model, which included age in addition to past weeks of sociology, only past weeks of sociology was significant ($S.E.=.018$, $p<.01$, adjusted $R^2=.009$). In models three and four, past sociology weeks remains significant ($p<.01$) and being male emerges as significant ($b=.073$, $S.E.= .272$, $p<.10$ in both models). Models three and four accounted for 1.2% and 1% of the variation in change score respectively (adjusted $R^2= .012$ and $.010$). Being male is associated with a

decrease in the index change score (models three and four $b=-.449$, $S.E.=.272$, $p<.10$). Model three accounted for 1.2% of the variation in change scores and model four accounted for 1% of the variation in the change score. **This analysis supports H3 *Students with less sociology will experience greater gains in their changes on the communication index.* Further, it seems that younger students and white students experience greater gains in the communication change index than older students. Being male, on the other hand, is negatively associated with index change score.**

An OLS analysis for the communication post-test index score which included a lag variable for the pre-test score is was conducted. One model indicates that every one point increase in the communication pre-test index score is associated with an increase of .579 in the cultural awareness post-test score ($S.E=.037$, $p<.001$). Model 1 accounted for 36.2% of the variation in communication index post-test index score (adjusted $R^2=.362$). In models two through four, which included past sociology weeks, age, gender, and being other than exclusively white, the pre-test score remains significant at the .001 level, but none of the other independent variables are significant. In fact, the constant for the communication pre-test score remains relatively unchanged ($b= .585, .584, .586, .586$, $S.E.= .037$). **This means that how students responded to the pre-test is related to how they answer in the pre-test for communication. This explained about 37% of the variation in the change score. For the social sciences, explaining more than a third of the variation this is quite high.**

Ordered logistic regression was used to estimate the effects of past sociology weeks, race, age, and gender on critical thinking index score change at three levels (loss, no change, and gain). Only past sociology weeks was significant in these models (race, age, and gender didn't make a significant difference). **In this case, every one week increase in past sociology weeks reduces the odds of reporting a higher communication change score by 2.6%. This analysis supports H3 *Students with less sociology will experience greater gains in their changes on the communication index.***

Community and Environmental Responsibility

**Please see Cultural Awareness results for a description of each of the statistical procedures performed. The same procedures were performed for all outcomes.*

An OLS analysis of community and environmental responsibility was conducted. **None of the independent variables were significant including the past sociology weeks, the variable of interest. This analysis does not support H4 *Students with less sociology will experience greater gains in their changes on the community and environmental responsibility index.***

An OLS analysis for the community and environmental responsibility post-test index score which included a lag variable for the pre-test score. One model indicates that every one point increase in the community and environmental responsibility pre-test index score is associated with an increase of .589 in the community and environmental responsibility post-test score ($S.E=.037$, $p<.001$). The other models also had adjusted R-squares of .368, .369, .368, and .366 reflecting little variation as other variables were added to the models (again explaining more than a third of the variation). **This means that how students responded to the pre-test is related to how they answer in the pre-test for community and environmental responsibility.**

Ordered logistic regression was used to estimate the effects of past sociology weeks, race, age, and gender on community and environmental responsibility index score change at three levels (loss, no change, and gain). **None of the independent variables including past sociology weeks (the variable of interest) was significant. This analysis does not support H4 *Students with less sociology will experience greater gains in their changes on the community and environmental responsibility index.***

Responses to 4 and 5 combined.

4. Identify any changes that should, as a result of this assessment, be implemented to help improve students' attainment of outcomes. (These may include, but are not limited to, changes in curriculum, content, materials, instruction, pedagogy etc).

- 5. Reflect on the effectiveness of this assessment tool and assessment process. Please describe any changes to assessment methodology that would lead to more meaningful results if this assessment were to be repeated (or adapted to another outcome). Is there a different kind of assessment tool or process that the SAC would like to use for this outcome in the future? If the assessment tool and processes does not need to be revised, please indicate this.**

This study represented an attempt to make empirical the abstractions of core institutional outcomes and fulfill the requirements to continually assess programs in an effort to improve student learning. Specifically, the study sought to answer the question, *What are the effects of completion of sociology courses on the development of cultural awareness, critical thinking, and communication skills as well as student sense of community and environmental responsibility?*

Looking across our analysis, it seems that there is at least some evidence that past sociology weeks is associated with change in index scores in the areas of cultural awareness, critical thinking, and communication. This means that if we are hoping that students become more competent in these four selected outcome areas—they are actually making gains. For these outcomes, the relationship was as predicted—less past sociology was associated with greater gains. As a SAC, we have shared samples of syllabi and assignments that have been created to help students develop in our core outcome areas. We should continue to include these assignments. However, as this is an indirect assessment, we don't know which assignments and classroom activities are actually making the difference. Furthermore, at this point in the analysis we do not know which courses (204, 205, etc.) are actually having the greatest impact on positive change scores. This also does not provide instructor-level data. This is something we will address in our continued analyses.

Unfortunately, there was no evidence that past sociology had any significant effects on pre-post index changes in the area of community and environmental responsibility. We should examine our assignments and class activities across our SAC and consider ways in which assignments and activities could be enhanced or created to boost student growth in the area of community and environmental responsibility.

It seems that younger students and white students may gain more from sociology courses in at least three of the four outcome areas. We have just begun the conversation on the implications of this.

It is also important to note that pre-test scores are always a significant predictor of how students will perform in post-test scores explaining, at minimum, one-third of the variation in post-test scores in all outcome areas. This does not mean, however, that enrollment in sociology courses makes no difference in development in core outcome areas as evidenced in the other OLS and ordered logistic models. This may suggest that it takes more than one sociology course to affect growth in the selected outcome areas.

Finally, it is important to note that the results of the cultural awareness OLS and ordered logistic regression were somewhat contradictory. The OLS regression indicated that past sociology weeks was associated with gains in the cultural awareness post-test index; however the ordered logistic regression did not. It is unclear why this discrepancy exists. One reason may be the minimal probability level used in the first OLS regression was .10. Hence, this relationship could be due to chance. Further, most of the students had only taken only as much as three weeks of prior sociology (82%) before taking the pre-test. Pascarella and Terenzini (1991) suggest, that one reason for the lack of significant effects in such analysis is that in a quarter system, measuring growth over 7 to 10 weeks is too short of a time to measure such growth. Some longitudinal analysis is needed here.

It is important to consider some of the other limitations and implications of our work here. This study likely faces the dilemma of self-selection of participants into sociology courses. Are some students more likely than others to enroll in sociology courses? For example, nearly 70% of the students were female and nearly 25% were enrolled primarily in distance learning courses. To evaluate the self-selection question, future iterations

of the survey should gather more information on student background characteristics. Further information on student background characteristics including first-generation college student status and eligibility for federal Pell grants should be added to the survey. This information would help the researchers learn more about how background characteristics affect baseline measures as well as growth over weeks of sociology. This study could be improved by examining the survey items for the purposes of improving the strength of the reliability of the indices.

Finally, it should be noted that future attempts to measure growth in core outcome areas might employ qualitative or mixed methodologies that would include direct assessment of student work. For example, a pre-post survey could be conducted again and then focus groups could be created with students segmented by loss, no change, or gain in overall index scores. This would allow the researchers to learn why such types of changes (or lack thereof) occur. Also, direct assessment such as an across-courses evaluation of student work using a rubric geared at measuring one or more core outcomes could also prove to be beneficial in determining the “value-added” of sociology. Such approaches would satiate the demand for quantitative data for measuring institutional effectiveness, while providing space through qualitative measures to learn how sociology impacts student development in core outcome areas specifically.

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Table 1: Descriptive Statistics

Variable		Frequency	Percent
<i>Gender</i>			
	Female	310	68.1
	Male	140	30.8
<i>Hispanic/Latino</i>			
		62	13.6
<i>Race'</i>			
	American Indian or Alaskan Native	40	8.8
	Asian	37	8.1
	Black or African American	27	5.9
	Native Hawaiian or Pacific Islander	11	2.4
	White	368	80.9
<i>Race (dichotomous)</i>			
	White (exclusively)	330	72.8
	Other than white	123	27.2
<i>Age</i>			
	19 or younger	85	18.7
	20-24	132	29.1
	25-30	85	18.7
	30-34	47	10.4
	35-39	35	7.5
	40-49	53	11.7
	50 and older	18	4.0
<i>Past Sociology Weeks</i>			
	2	271	59.6
	3	100	22.0
	12	46	10.1
	13	15	3.3
	15	1	.2
	22	7	1.5
	23	7	1.5
	32 or more	8	1.7

Source: Sociology Pre-Post Test Winter 2012

N=455

1- racial categories are one or more at a time