

## **A Community Unseen Should Not Be Left Unnoticed: A Web-based Instructional Module on Promoting Campus Diversity**

Nikie Reyes  
University of Hawaii at Manoa  
2600 Campus Road, Honolulu, HI 96822  
USA  
njreyes@hawaii.edu

**Abstract:** Unlike the lesbian, gay, or bisexual populations, the transgendered community is more at risk of becoming victims of harassment, violence, and discrimination. Transgendered students are more likely to become victims of hate crimes and social prejudice because of the physical or behavioral characteristics they possess that easily distinguish, and readily identify them as transgendered. The creation of the web-based instructional module was to educate students of the University of Hawaii at Manoa about gender diversity and equity on campus, raise awareness regarding transgender specific issues in education, and increase the cultural sensitivity towards gender variant students on campus. The effectiveness of the module was determined by data retrieved through a formative evaluation process. Participants were given pre and posttests, as well as likert-type surveys. Overall, the instructional module was positively received, and the results were favorable, with implications of where the instruction needed to be revised. Revisions to the instructional module were made based on participants' feedback and assessment results.

### **Introduction**

Colleges and universities all over the United States have aimed towards creating and enforcing policies and practices that promote diversity and equity for its students. According to the 2008 Digest of Education Statistics published by the National Center for Education Statistics, there are 4,314 degree-granting institutions. Of the 4,314, only 280 colleges and universities across the United States have non-discrimination policies that include gender identity and expression (Transgender Law and Policy Institute, 2009).

At the University of Hawaii at Manoa, new and transfer students are given the option to attend campus orientations held at the beginning of each semester. The orientations are designed to educate students about the student code of conduct and campus policies. Although the orientations cover policies against violence, harassment, and discrimination, gender diversity and equity is a topic that is not widely discussed. The Lesbian, Gay, Bisexual, and Transgendered, and Intersex (LGBTI) Student Services office at the University of Hawaii at Manoa provides academic support and services for the LGBTI community on campus, but is deficient in providing an online resource that highlights pertinent information about gender diversity and equity on campus. There is a need to offer this information from a centralized location that addresses all factors related to gender diversity, equity, and transgender issues in education.

## Literature Review

Unlike the lesbian, gay, or bisexual populations, the transgendered community is more at risk of becoming victims of harassment, violence, and discrimination. Transgendered students are more likely to become targets or victims of hate crimes and social prejudice because of the physical or behavioral characteristics they possess, that easily distinguish and readily identify them as transgendered (It's Time, Illinois, 1997).

Being an advocate for the transgender community involves striving for acceptance, support and inclusiveness of all people. The goal surrounding the effort of the instructional module is aimed towards developing and promoting educational efforts that raise awareness level and increase the sensitivity towards gender variant students on campus (Washington and Evans, *Beyond Tolerance*, Chapter 11).

In Lucier's study "Technology: A Potential Ally for Lesbian, Gay, Bisexual, and Transgender Students," he validates the need for online resources for the transgendered population. He states that resources for information can be critical to students questioning their sexuality or gender identity. Naturally, transgendered students will want to find information, but at the same time, keep their questioning secretive for personal and safety reasons (1998).

The instructional module should not only target heterosexual students on campus, but extend to the transgender community in need of additional resources for academic and transition support. Due to the absence of the presence of the transgender community on campus and their inability to publicly voice their concerns, colleges have been slow to recognize, much less, provide support to transgendered students (Bauder, 1998). The creation of an online resource for transgendered students will provide a location for them to seek the support they need, and additionally, educate others students in the academic community of the University of Hawaii about the issues gender-variant students face on campus.

The best method for creating an instructional module and disseminating information to a wide audience is by publishing it to a web page over the Internet. A web page is accessible 24 hours a day to anyone with a computer or smart phone that has the capability of accessing data over the internet, either wired or wirelessly, through a web browser. The internet provides a medium for students to search for information anonymously regardless if sites are accessed through a computer on campus, or a personal laptop from the comfort of their own home. In other words, the use of electronic media to publish an instructional module is an effective way for individuals to anonymously acquire information that they otherwise would not want to publicly obtain (Lees, 1998).

Glimps and Ford, professors at Tennessee State University, state that "technology-based instruction, which includes the incorporation of sound instructional design and proven learning-centered techniques, is an important strategy to use when teaching students about diversity." This belief stems from their observation that students in this generation are digital-natives who are conditioned to learning through multimedia and interactive resources. In order for the instruction to be effective, they suggest modules must illustrate how diversity

issues have affected communities, and how they are vital to the nature of individual identities (2008).

## **Methodology**

The purpose of the instructional module was to develop and evaluate a web-based, instructional module designed to educate students of the University of Hawaii at Manoa about gender diversity and equity on campus, and to raise awareness regarding transgender specific issues in education.

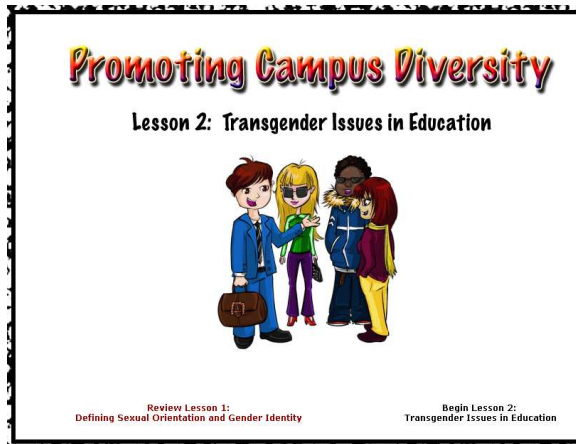
The terminal goal of the instructional module was to positively affect the attitudes of the participants, and increase the number of allies to the transgendered community. Becoming an ally is demonstrated by exhibiting tolerance and acceptance of gender-variant students on campus, and offering direction for transgendered students that need assistance in locating personal and academic support.

### *Module Development and Design*

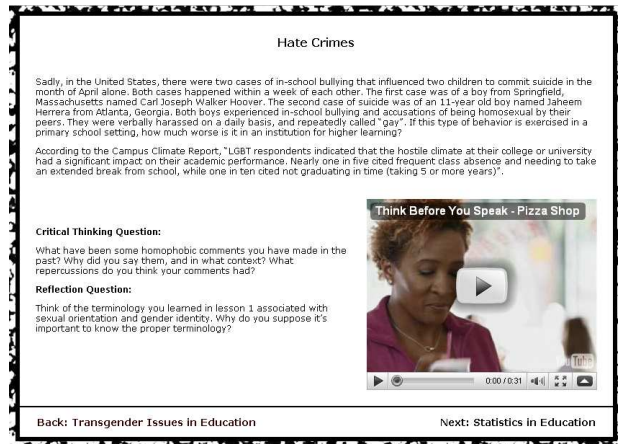
The web-based instructional module, titled “A Community Unseen Should Not be Left Unnoticed: Promoting Campus Diversity”, was divided into three lessons: 1) Defining Sexual Orientation and Gender Identity, 2) Transgender Issues in Education, and 3) Becoming an ally. The lessons were developed using John Keller’s ARCS model of motivational design, which focuses on addressing attention, relevance, confidence, and satisfaction of the participant.

To garner the participant’s attention, each instructional module began with a page that stated the main instructional goal and performance objectives for that particular lesson. Providing relevance and significance to the participant was issued using a critical thinking question. The question was strategically placed within the content, and was designed to trigger reflection about the lesson content. Confidence and satisfaction were addressed with pre and posttests.

Content for the instructional module was derived from the University of Hawaii’s Safe Zone training at the University of Hawaii, which is a workshop that addresses campus safety, diversity, and non-discrimination. With the collaboration of a subject matter expert, the researcher composed information that was relevant to educating the audience about transgender issues in education. The content was delivered using text, images, and videos of public service announcements. The figures below illustrate the graphical interface of the web-based instructional module. Figure 1 shows the introduction page for Lesson 2: Transgender Issues in Education. Figure 2 shows an example of a webpage containing text-based content and a video from Lesson 3: Transgender Issues in Education, Hate Crimes.



**Figure 1.** Sample introduction page.



**Figure 2.** Sample lesson content page.

The web-based instructional module was designed and created in Adobe Dreamweaver. Images were rendered in Adobe Photoshop. The pre/posttests and surveys were created using Google Forms.

### *Participants*

In order to qualify for this study, participants had to be either an undergraduate or graduate student of the University of Hawaii at Manoa, and at least 18 years of age or older. Because each individual is an integral piece of the campus community, this specific population was chosen. Their attitudes, ideals, and experiences concerning social issues directly affect the learning environment on campus.

### *Instruments*

At the beginning of the instructional module, every participant was required to complete a demographic survey. The survey gathered background information about who they were: gender, age, ethnicity, religious affiliation, sexual orientation. It also included a section of likert-scale questions that measured their attitudes towards homosexuality.

Each lesson contained a pretest and a posttest. The pretest, given at the start of each lesson, measured the participants' knowledge of the material before the lesson, and the posttest, given immediately after the completion of the lesson, was used to determine if the material presented was effective in providing and retaining instruction. Lesson 1 contained four pre and posttest questions. Lesson 2 contained three pre and posttest questions. Lesson 3 contained two pre and posttest questions.

At the end of the instructional module, participants were given a survey to evaluate the effectiveness of the module. Qualitative and quantitative data were collected from the survey. The first half of the survey contained likert-scale questions. There were also four open-ended questions, which allowed the participant to explicitly express their thoughts and feelings about their experience, as well as their overall impressions of the module.

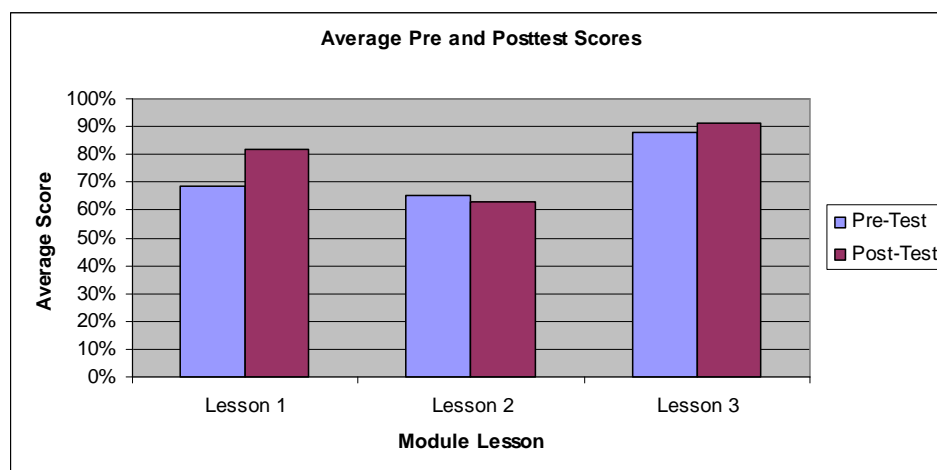
To compare whether or not their attitudes towards transgender students had changed, participants were given a final attitudinal survey that measured their overall attitude towards transgender issues in education, and whether or not they were willing to become allies to the gender-variant population.

## Results

Twenty individuals agreed to volunteer and participate in the research study. Eight of the 20 participants were Male, and 7 were Female. The average age of the participants was 31. When asked what about their sexual orientation, the majority responded as being heterosexual, while two identified as being bisexual. 10 participants identified with being affiliated with a religious organization. The religious affiliations identified were Roman Catholic (3), Protestant Christian (2), Buddhist (3), Jehovah's Witness (1), and Hindu (1). Four participants answered "None" to the question, and one participant identified as an Atheist.

### *Quantitative Data*

The pre and posttest scores showed that the module was effective in delivering instruction. In Lesson 1: Defining Sexual Orientation and Gender Identity, the pretest score average was 68%, as shown in Figure 3. There were two questions that were commonly missed in the pretest. The first question was a cloze-sentenced that asked, "If you label yourself as gay, lesbian, or bisexual, your sexual orientation is classified as being...?" In the second question, participants were given the definition of a word, and were asked to identify the correct term. The definition provided was, "This medical condition is the term given to individuals that experience an identity crisis with their biological sex." Only 58% participants answered both questions correctly.



**Figure 3.** Average Pre and Posttest Scores

The posttest scores for lesson 1 improved remarkably with the participants scoring an average of 82%. For the posttest question that asked the participant to identify what constitutes homosexuality, 89% answered the question correctly. After completing lesson 1,

95% of participants were able to correctly identify the medical condition in the pretest, which is gender dysphoria.

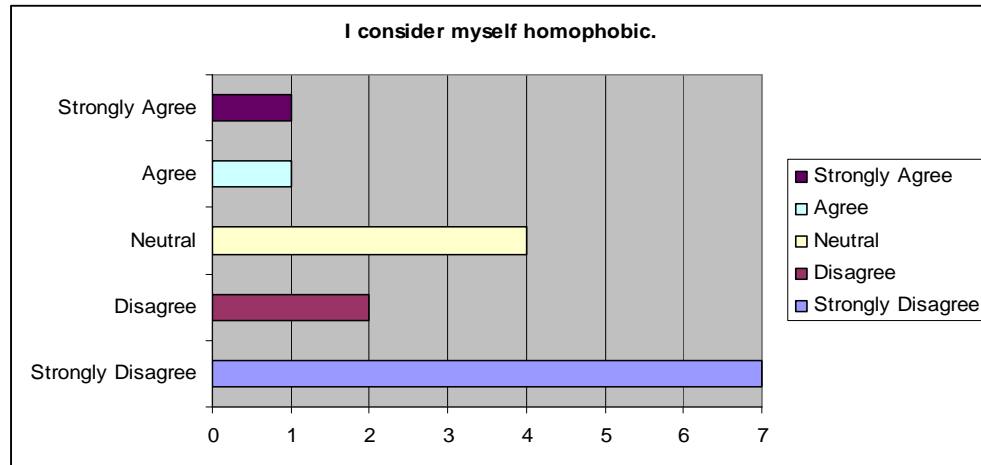
However, there was a slight drop in the test score averages for Lesson 2: Transgender Issues in Education. The posttest scores dropped 2 percentage points from 65% in the pretest, to 63% in the posttest. One reason for this could have been due to the poor formatting of the test questions. Instead of having concrete answers for each choice, the response for letter choice E was “Both A and C”, and letter choice F was “Both B and D”. This might have caused confusion in choosing the appropriate answer. Since the average scores for both the pre and posttests were low, it is also necessary for the researcher to analyze the overall instruction of the lesson, and determine whether or not the content was delivered effectively. The majority of Lesson 2 was text-based, and could improve by implementing interactive material.

For Lesson 3: Becoming an ally, the result of the average test scores for the pre and posttest scores were similar. The pretest showed an average score of 88%, with a slight increase of two percentage points to 91% in the posttest.

Although the pre and posttest scores illustrated the lessons were effective in providing instruction, the researcher was interested in determining whether or not the module itself could impact the attitudes of the participant positively. The lessons and pre and posttests played an important role in delivering information and knowledge the participant needed to create informed opinions about transgender issues in education, but was it sufficient enough to create an attitudinal shift?

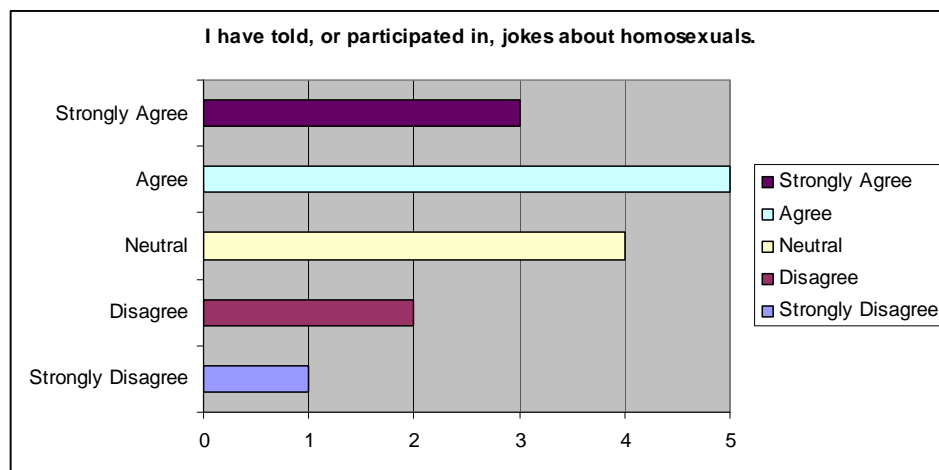
### *Qualitative Data*

The demographic survey, containing a five-point likert-scale, given at the beginning of the module, revealed interesting information about the participants' attitudes towards homosexuality. When asked whether or not they considered themselves to be homophobic, 9 participants, as shown in Figure 4, generally disagreed with the statement, while 4 felt neutral, which might have also meant they did not have an informed opinion about homosexuality at the time. There were, however, 2 participants that identified with being homophobic, as indicated by their response of “Strongly Agree” and “Agree”.



**Figure 4.** Participants' response to being homophobic.

When asked if they have told or participated in telling jokes about homosexuals, a high percentage of the participants, as shown in Figure 5, agreed that they had. Eight of the 15 participants, or 53%, had agreed that they had. Three participants generally disagreed with the statement, while 4 indicated they were neutral.



**Figure 5.** Participants' response to telling jokes against homosexuals.

An attitudinal shift was identified for the participant that identified as being homophobic. When asked, "What is most valuable about this instructional module?" the participant responded with:

- *"That knowledge can change attitude. This module helped me not only to understand the different definitions and meaning of many words and terms, but most of all, the attitude of people towards this issue and to identify what attitude I have towards this issue."*

Another student that had indicated they participated in telling homosexual joke also illustrated an attitudinal shift by providing this statement:

- *“Understanding that saying things like, “That’s gay,” is wrong and hurtful. Even though you may not think it’s actually “gay,” using that word in reference to something “stupid” or “silly” is not good. Also, I liked the videos in the module. It was a good supplement to the text you provided!”*

When asked questions regarding transgender topics in education, 80% believed that transgendered students enhance the diversity of the school. Three were neutral to the statement, and one student disagreed. 100% of participants agreed that transgendered students should attend the University of Hawaii openly with no threat of harm whatsoever, and all but one participant agreed that teachers, staff, and students should make a concerted effort to challenge all sexual and gender-orientation slurs. Although only 73% felt that sexual and gender orientation should be included in diversity tolerance or multicultural curricula and taught to the student body, 100% agreed that Students should know where to go for resources on gay, lesbian, bisexual, and transgender issues. As a result, all but one participant is willing to direct a transgendered student to the right parties, or give them the resources they need to find support if they needed help.

### *Module Evaluation*

At the conclusion of the instructional module, participants were given a survey to evaluate the effectiveness of the module in two main areas: 1) Web-design and Layout, and 2) Content Delivery. When asked to choose from a list of suggestions on how the instructional module could be improved, 60% felt that the test used in the instructional module could be improved. 77% felt that the instructional module activities needed to be more stimulating. Other suggestions included making the instructional module more difficult, improving the instructional methods or organization, and increasing the content covered.

### **Discussion and Conclusion**

Based on the feedback given, this study showed that there is a need for students to be aware that there are transgender issues in education, as well as understand how they can create conducive learning environments for everyone on campus by preventing social prejudice and discrimination. The web-based instructional module was effective in providing instruction, as well as affecting change in the attitudes of the participants.

Publishing the instructional module through a web-based medium to make it accessible to the public was successful in delivering information, but the method of obtaining data, as well as providing instructive feedback for the pre and posttests needs improvement. There were limitations to using the Google Forms service. Google Forms only obtains data, and is not capable of providing feedback.

Affecting change through the instructional module was effective. One participant stated that transgender issues in education were “a very important and timely topic.” Another stated, “Overall, I thought it [instructional module] was good. The best parts for me were the ones that clarified the vocabulary and the general frame in which the discussion of LGBT ought to be carried out.”



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