# Who Will Use Our Electronic Teacher's Guide? A Preliminary Analysis of Preservice Teachers' Knowledge of and Attitudes Toward Issues Surrounding the Holocaust

Brendan Calandra
*Georgia State University*

Thomas R. Lang and Ann E. Barron
*University of South Florida*

**Abstract**

To ascertain the current status of Holocaust knowledge and attitudes of prospective teachers and to inform the development of a web-based educational resource for teachers of the Holocaust, an exploratory analysis was conducted at a public university in Florida. Data were obtained from prospective teachers ($N = 464$) who completed a knowledge test, a survey related to bias toward traditionally marginalized groups, and a multicultural affinity scale. Statistical analyses were conducted to examine potential group differences for gender, race, age, and college major. No statistically significant differences were found for the knowledge test or students' bias toward marginalized groups. On the multicultural affinity scale, statistically significant results were obtained for gender and race. Results from this study can serve to guide the curriculum of teacher education programs as well as the development of resources such as the website, Teacher's Guide to the Holocaust.

In 1994, Florida passed a law requiring Holocaust education in all public schools. The intent was to teach issues related to the history of the Holocaust and to encourage tolerance of diversity (State of Florida, 2004). Rather than a separate subject area, the recommendation was focused on cross-curricular integration at all grade levels.

To address the urgent need for curricular materials related to Holocaust education, a website titled The Teacher's Guide to the Holocaust (http://fcit.usf.edu/Holocaust) was developed at the University of South Florida. It consists of thousands of resource documents, photographs, lesson plans, maps, videos, and other resources. Although the Teacher's Guide was initially launched over 8 years ago, it is under constant revision and expansion.

The design of comprehensive resources such as the Teacher's Guide to the Holocaust requires a great deal of research, collaboration, and assessment. This article highlights an exploratory analysis that was conducted to guide the development of the website and to measure the level of Holocaust knowledge and attitudes of prospective teachers.

## Holocaust Education Mandate

Teachers can use historical events like the Holocaust to inform students of the potential consequences of racial and cultural intolerance. The United States Holocaust Memorial Museum's (2001) Guidelines for Teaching About the Holocaust (http://www.ushmm.org/education/foreducators/teachabo/part_2.pdf) suggest, "The history of the Holocaust represents one of the most effective and most extensively documented subjects for a pedagogical examination of basic moral issues" (p. 1). In addition to the moral imperative to support Holocaust education, several states (including Georgia, New Mexico, Ohio, Connecticut, and New York) have mandated Holocaust-related curricula (Banks, 2000). California's Assembly Bill 3216 and New Jersey's State Legislative Bill A-2780 also require Holocaust education (Geiss, 1997). A similar legislative mandate on instruction related to the Holocaust was passed in Florida in 1994. Florida State Statute 1003.42 requires that members of the instructional staff of public schools teach the following:

> The History of the Holocaust (1933-1945), the systematic, planned annihilation of European Jews and other groups by Nazi Germany, a watershed event in the history of humanity, to be taught in a manner that leads to an investigation of human behavior, an understanding of the ramifications of prejudice, racism and stereotyping, and an examination of what it means to be a responsible and respectful person, for the purposes of encouraging tolerance of diversity in a pluralistic society and for nurturing and protecting democratic values and institution. (State of Florida, 2004)

For more information on state mandates, standards, and contacts, visit Beyond our Walls: State Profiles on Holocaust Education at the United States Holocaust Memorial Museum website (http://www.ushmm.org/education/foreducators/).

## Development of Online Resources

"One of the responsibilities of a teacher in the public school system is to educate all students according to state mandates" (Geiss, 1997, p.5). Unfortunately, many teachers are not prepared to teach issues related to tolerance, multicultural education, and events such as the Holocaust (Geiss, 1997; Greenberg & Fain, 1979). Such preparedness requires knowledge of the events of the Holocaust, as well as attitudes that support the treatment of this sensitive subject in classrooms.

In response to the bill passed by the Florida Legislature, graduate students and staff at the Florida Center for Instructional Technology (University of South Florida) designed a web-based instructional program for Holocaust education. The goal of the website was to

provide a single starting point for Holocaust education with relevant background information and links to instructional resources. The target audience is certified and prospective teachers, many of whom have had little or no training for teaching such sensitive material (Barron, Calandra, & Kemker, 2001).

The content of The Teacher's Guide to the Holocaust is presented from three perspectives: Timeline, People, and The Arts. In designing the site, it was hoped that, through the study of the Holocaust students and teachers alike would be able to develop an understanding of the ramifications of prejudice and racism, and help to ensure that an event such as the Holocaust will not happen again (Barron, 1998).

The initial release of The Teacher's Guide to the Holocaust was unveiled by the Florida Commissioner of Education in 1997 (see press release at http://fcit.usf.edu/holocaust/credits/release.htm). As well as being accessible online, a CD-ROM version was sent to every public school, college of education, and professional development center in Florida. Since then, the project has been continually revised and expanded. The website currently consists of an amalgam of over 10,000 files in a variety of media, including virtual reality tours of memorials and concentration camps, videos of survivor testimonies, galleries of photographs, primary source documents, music, plays, maps, and student-activities (see Figure 1). During the month of April 2004, the website received 19.7 million hits from 164 different countries.
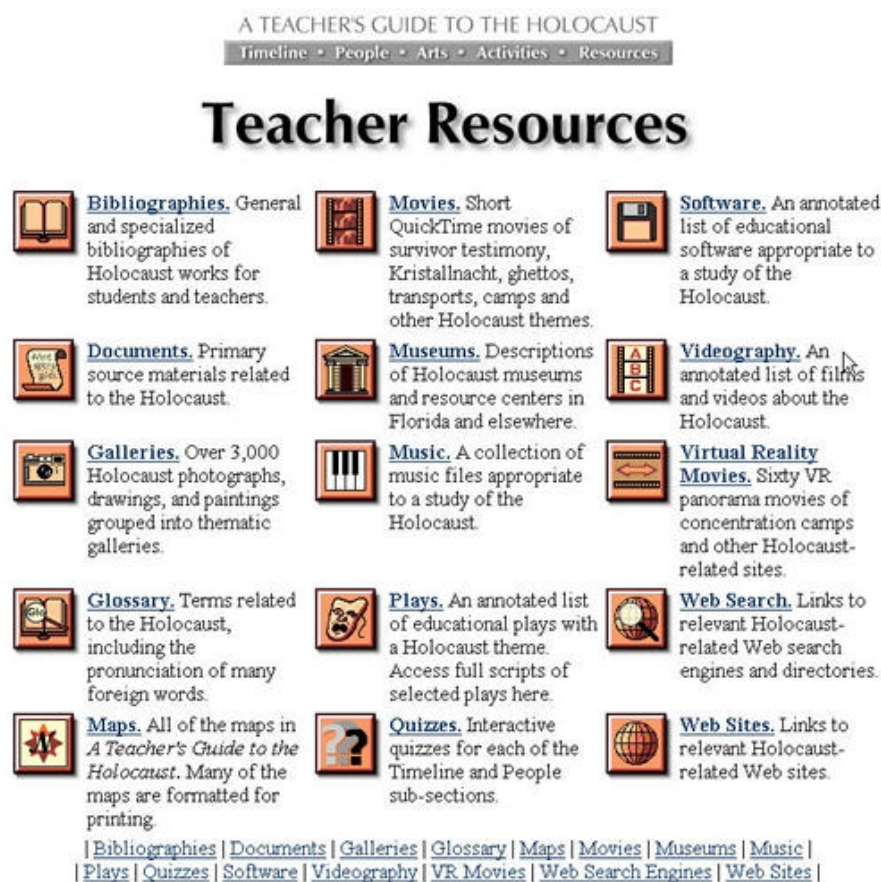


**Figure 1.** Screenshot from A Teacher's Guide to the Holocaust website (http://fcit.usf.edu/holocaust)

**Rationale**

The validation of the content and design of a comprehensive resource such as the Teacher's Guide requires a great deal of research. Throughout the project, collaboration with the Florida Holocaust Museum and similar organizations provided valuable guidance (see Credits at http://fcit.usf.edu/holocaust/credits/credits.htm). In addition, extensive literature reviews and research studies have been conducted.

This article focuses on a research study that was designed to measure prospective teachers' knowledge about the Holocaust and their attitudes toward traditionally marginalized groups. The instrumentation and methods used in this study were developed with special attention to existing literature. The framework for the study encompasses four major areas.

1.  General historical awareness of the Holocaust.
2.  Attitudes and Holocaust education.
3.  Knowledge base for Holocaust education.
4.  Teacher perceptions of Holocaust education programs.

The first two areas were consulted to obtain published background information about teachers' knowledge and attitudes about the Holocaust. Although the literature related specifically to teachers (in these two areas) is sparse, data exists about the awareness level and attitudes of the general population.

Investigation into the knowledge base for Holocaust education helps to answer the question, "What should teachers know about the Holocaust?" The answer to this question, in turn, assisted in the development of an instrument to measure Holocaust knowledge. The final area (teacher perceptions) was explored to gain additional insight into the optimal design of a resource such as the Teacher's Guide.

**General Historical Awareness of the Holocaust**

Current American teachers are separated from the event of the Holocaust geographically and by generation. For this reason, teachers may lack perceptions of the Holocaust as a unique event from World War II, and they may have difficulty conveying the relevant knowledge and attitudes to their students. Unless Holocaust education is an integral part of middle/high school curricula or preservice education courses, it is imprudent to assume that teachers are adequately prepared to teach these sensitive issues.

The poor state of historical awareness among Americans was reflected by two polls conducted by the Roper Organization for the American Jewish Committee (AJC). The first survey, conducted in 1992, found that 22% of American adults and 20% of high school students thought it was possible that the Holocaust never happened. Another 12% were not certain whether it was possible or impossible. Due in part to discrepancy over the clarity of the questions on the first poll, a second AJC/Roper poll ($N$ = 996 adults and 506 high school students) was conducted in 1994. The second poll reported, "Of those with less than a high school education, 55% knew what the Holocaust was. This rose to 74% among high school graduates, 87% among college graduates, and 92% among those with advanced degrees" (*The New York Times*, July 8, 1994, as cited by Raven, 1995). More than 22% of those surveyed did not know that the Nazis first came to power in Germany, and more than 13% did not know that Adolf Hitler was the leader of Nazi Germany (Raven, 1995).

The lack of general knowledge about the Holocaust could be the result of many factors, including minimal state standards, the treatment of the Holocaust in high school textbooks, and teacher education curricular requirements. For example, the Holocaust first emerged as a topic of public high school social studies curricula in the late 1970s. A 1980 analysis of 28 high school textbooks focusing on world history found that the Holocaust was not even mentioned in some textbooks and that the information that was presented was inadequate and insufficient to lead students to a clear understanding of how and why the Holocaust occurred. For example, none of the textbooks conveyed the message that the killing of Jews was part of a well-planned process (Eichner, 1980).

Mandated state standards dealing with the Holocaust did not appear until the 1990s (Schweber, 1999). In addition, there is no mention of the Holocaust in the standards provided by the National Council for Accreditation of Teacher Education (NCATE). Even for those teachers who are specializing in social studies education, there is no specific requirement for Holocaust education (NCATE, 2002).

**Attitudes and Holocaust Education**

Florida legislation mandating Holocaust education was designed to educate students on the history of the Holocaust as a singular event, but it is also designed "for the purpose of encouraging tolerance of diversity in a pluralistic society" (State of Florida, 2004). Any message put forth with the intent of effecting attitude change is deemed a persuasive message according to Eagly and Chaiken (1998). Within that context, the message presented by Holocaust studies is a persuasive one because it strives to change students' attitudes regarding discrimination and tolerance. Teachers' and students' *attitudes* toward traditionally marginalized groups in our society are, therefore, an important element of Holocaust education.

On a national scale, anti-Semitism has increased in recent years, reversing a steady decline from 1992-1998. Figure 2 shows the results of surveys conducted by the Anti-Defamation League (ADL), which was based on answers to 11 statements. Note that the "Most Anti-Semitic" category declined from 20% in 1992 to 12% in 1998 and then increased to 17% in 2002. The "Not Anti-Semitic" group increased from 39% to 53% and then dropped to 48% in the same time period. These results are based on interviews of approximately 1,600 people. "The margin of error in a poll of this size is plus or minus three percent, but it is higher for subgroups" (ADL, 2002, p. 3). The ADL attributes the recent increase in anti-Semitism to world events (terrorist attacks and the Arab/Israeli conflicts) and to more sophisticated screening and analysis of the data.
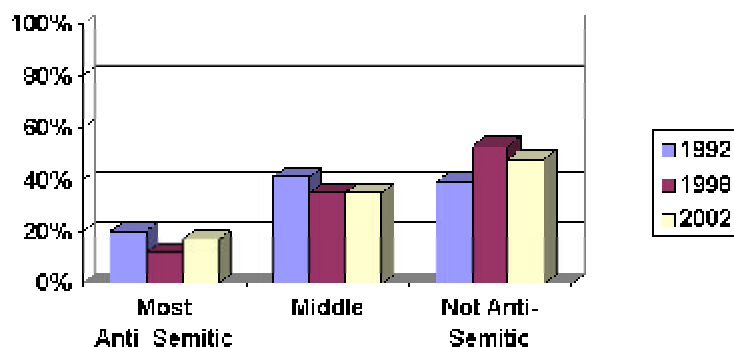


**Figure 2.** Distribution of the population on the anti-Semitism index.

The surveys also indicated several predictors of anti-Semitism, such as age, race, and origin. All three surveys found that Americans with more education were less likely to hold anti-Semitic views. "A regression analysis of the 2002 survey results confirms one of the most important findings from the 1992 and 1998 surveys: that education is a very strong predictor of anti-Semitism" (ADL, 2002, p. 13). About 1 in 10 (12%) of college graduates fall into the most anti-Semitic category, compared to nearly one in four (23%) of the citizens who have only a high school education. Age and race were also found to be important factors in anti-Semitism. In the 1998 survey, adults over age 65 were twice as likely as those under 65 to fall into the most anti-Semitic category. In the 2002 survey, seniors were only 13% more likely to fall into the most anti-Semitic category (possibly because of the decline in the population who lived during World War II).

Related to race, African-Americans are nearly three times as likely as Caucasians to fall into the most anti-Semitic category (ADL, 2002). The study also found significant differences in attitudes between foreign born and US born Hispanics. "Forty-four percent of foreign-born Hispanics fall into the most anti-Semitic category, while only 20% of Hispanics born in the U.S. fall into this category" (Anti-Defamation League, 2002, p. 23).
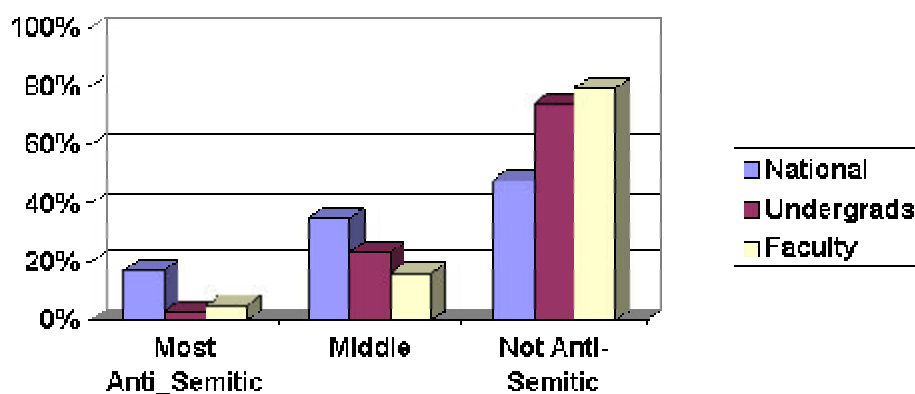


**Figure 3**. Anti-Semitism on college campuses.

The ADL also conducted the survey on college campuses in 2002 (for the first time). The results show that "Anti-Semitism on college campuses is virtually non-existent" (ADL, 2002, p. 35). As illustrated in Figure 3, undergraduates and faculty members are considerably less likely to be in the most anti-Semitic category.

Several studies have investigated prospective teachers' perceptions of and attitudes towards cultural diversity and traditionally marginalized groups. A 1994 study based on data from a survey of third- through fifth-grade teachers in a Southeastern school district and a Midwestern school district investigated the overall attitudes of teachers toward cultural diversity. Several factors, including socioeconomic and demographic factors of the teachers, level of education, type of certification received, and regional differences, were investigated. Findings in the study indicated that teachers felt positively toward the issue of cultural diversity in the school systems. Results also indicated that minority teachers had more positive attitudes toward cultural diversity than did majority teachers, although not to a significant degree (Edwards, 1994).

Johns (1997) conducted a descriptive case study of teachers' attitudes related to the implementation of multicultural curriculum and instruction. Two surveys were distributed in conjunction with a number of personal interviews and nonparticipant observations of middle school teachers in a Florida county. The first survey addressed

self-perceptions of teachers with respect to cultural diversity, as well as their individual comfort level in working with diverse populations. The second survey focused on the implementation of multicultural teaching concepts. Findings indicated that the teachers felt that multicultural education should pervade throughout the entire school curriculum. Although the teachers observed seemed to hold themselves responsible for the implementation of multicultural education in their individual disciplines, only half of them were actually utilizing a multicultural approach.

To be effective, teachers need to be provided opportunities to develop the knowledge, attitudes, and skills required to initiate and facilitate dialogue on culturally sensitive topics such as race and racism (Howard & Denning del Rosario, 2000). As role models, teachers' attitudes and actions are important components of Holocaust education.

## Knowledge Base for Holocaust Education

Given the fact that many states now support Holocaust education, the question is raised as to what prospective teachers should know (or be taught) about the Holocaust. "Knowing subject matter and being able to use it is at the heart of teaching all students" (Ball, 2000, p. 243). Much of the research on Holocaust curricula in the schools also suggests that sound pedagogical rationales, goals, and objectives be developed for the teaching of the Holocaust. Totten and Feinberg (2001) pointed out that "well constructed rationales for Holocaust study represent the foundation for successful curriculum design" (p. 21).

Although teachers have a lot of the responsibility for forming their individual curricula, there are general guidelines available for those who intend to teach the Holocaust. For example, the United States Holocaust Memorial Museum (USHMM) produces a free set of Teaching Resources and Guidelines for Teaching About the Holocaust that provide a list of suggested topic areas for a course of study on the Holocaust. They are as follows:

**1933-1939**
Dictatorship under the Third Reich
Early Stages of Prosecution
The First Concentration Camps

**1939-1945**
World War II in Europe
Murder of the Disabled
Persecution and Murder of Jews
Ghettos
Mobile Killing Squads
Expansion of the Concentration Camp System
Killing Centers
Additional Victims of Nazi Persecution
Resistance
Rescue
U.S./World Response
Death Marches
Liberation

**Post-1945**
Postwar Trials
Displaced Persons Camps and Emigration

**Additional Topics**
Anti-Semitism
WWI Aftermath
Nazi Rise to Power

The guidelines are divided into three chronologically categorized domains and a fourth additional domain. There are topics, however, that overlap several domains. Probably the most apparent example is that of anti-Semitism, a topic in the fourth domain that can be applied to many of the other topic areas.

Another resource, Facing History and Ourselves (FHAO; http://www.facinghistory.org/), is an initiative to train American educators to engage students in conversations about the Holocaust and forms of "intergroup conflict" such as racism and prejudice in order to foster "perspective taking, critical thinking, and moral decision making and to help students develop into humane and responsible citizens" (Schultz, Barr, & Selman, 2001, p. 5). This curriculum can be fashioned by individual teachers. However, it generally includes class discussions about readings from the *Facing History and Ourselves Resource Book: Holocaust and Human Behavior* (Parsons & Strom, 1977); films with FHAO study guides; guest speakers; literature; and journal writing. The typical unit is a 10 week or semester long course that begins with an exploration of self and group identity, and it continues with an examination of the Nazi rise to power and the Holocaust as a case study "of the escalating events that led a democracy to erode into genocide" (Schultz et al., 2001, p. 5).

A study conducted by Schultz et al. (2001) demonstrated that eighth-grade students ($N =$ 346) in FHAO classrooms showed increases in "relationship maturity" and decreases in racist attitudes and self-reported fighting behavior relative to comparison students. Research results on change scores indicated that, relative to the comparison group, the FHAO students changed significantly more on relationship maturity scales. There was also a significant difference between the groups on modern racism change scores.

**Teacher Perceptions of Holocaust Education Programs**

In 1998, two British researchers gathered data from secondary teacher's perceptions about the Holocaust as an historical event and about how it is taught in the classroom. They found many areas pertaining to teacher's perceptions on teaching the Holocaust that needed further investigation. Specifically, Brown and Davies (1998) found that teachers devoted insufficient time to teaching the Holocaust and used the events of the Holocaust as a mere context for understanding World War II. In addition, the teachers did not collaborate effectively and lacked clarity about the cognitive and affective aims of Holocaust education.

Geiss conducted a 1997 case study in a Florida public school and reported that instructors who were required to teach the Holocaust by state mandate were faced with a number of difficulties. Few teachers had even been notified of the legislation. Those who had, found they were left with no in-service training or county guidance on proper instruction of the Holocaust. "This is a vast and intimidating subject, and without proper training, teachers felt unprepared to instruct" (p. 7). The situation was compounded because the targeted teachers had no resource materials and were not aware of any available county material.

A similar study was conducted by Holt in 2001. In this research, a survey was distributed to 254 teachers in Indiana (reading/language arts and social studies from grades 6-12). Results indicated that 80% were unfamiliar with the Holocaust resolution adopted by the

state in 1995. In addition, although most of the educators felt comfortable with their knowledge base related to the Holocaust, they indicated that most of the knowledge was gained through self-study, not as a result of teacher education programs. As suggested by Geiss (1997), teachers must be equipped with the resources and information they need to ensure that students will be able to learn from the Holocaust and develop an understanding of the ramifications of prejudice and intolerance.

## Method

The purpose of this study was to measure the current knowledge and attitudes of prospective teachers as they relate to Holocaust education. It was hoped that results could help inform not only future research on Holocaust education in the United States, but provide suggestions for the improvement of the instructional website, A Teachers' Guide to the Holocaust. The following questions served as a focus of the study:

1. What is the extent of prospective teachers' knowledge about the Holocaust?
2. What are prospective teachers' perceptions of and attitudes toward diversity and multiculturalism?

### Participants

Participants in the study were 464 prospective teachers enrolled in 18 sections of an undergraduate course (EME 2040: Introduction to Computers in Education). The sample was drawn from four consecutive semesters of the course. In order to encourage a high participation rate, individual incentives in the form of extra credit for the course were offered to participants. It was deemed appropriate to study prospective teachers from a variety of educational disciplines. The intent of the Florida mandate was for cross-curricular integration. In addition, the United States Holocaust Memorial Museum (2001) has recommended that the study of the Holocaust can be effectively integrated into any number of subject areas.

The sample was 78% female and 22% male. The ethnic composition of the sample was 73% White (non-Hispanic), 14% African-American, 7% Hispanic, 3% other, 2% Asia/Pacific Islander, and 1% American Indian. The majority of the participants were sophomores and juniors (39% and 38%, respectively), with the remaining students nearly equally divided between freshman and seniors. Participants' ages ranged from 17-56, with the majority (67%) between the ages of 18 and 21. Forty-eight percent listed their major as Elementary Education, 24% as Secondary Education, 7% Special Education, and 6% Physical Education. The remaining 15% listed a variety of other majors.

### Instrumentation

Three instruments were designed to measure prospective teachers' knowledge of the Holocaust and attitudes toward traditionally marginalized groups: (a) A multiple-choice test of knowledge related to the Holocaust; (b) an attitude scale designed to measure bias toward traditionally marginalized groups; (c) and a multicultural affinity scale. Each of the measures utilized in this study was designed with a different structure and purpose; therefore, each measure will be described individually.

*Knowledge test.* A Holocaust knowledge test was developed, addressing well-documented topics such as anti-Semitism, the aftermath of WWI, and the Nazi rise to power. To verify the appropriateness of the content included in the test, the test items were correlated with the *Guidelines for Teaching about the Holocaust*, produced by the United States

Holocaust Memorial Museum (2001) in Washington, DC (see the Results section). The final version of the knowledge test provides coverage of all of the topical areas identified in the Guidelines, except two (Murder of the Disabled and Death Marches), which are not directly represented.

The knowledge test items were assembled into a single-answer, multiple-choice test format and reviewed by content experts. The final version of the knowledge test consisted of 44 items, each of which presented four response options. The instrument was first administered in the spring of 2000 with prospective teachers at a large state university (Calandra, Fitzpatrick, & Barron, 2002). Examination of individual item psychometrics and feedback from respondents were used to guide minor revisions to the knowledge test. The knowledge test was administered three subsequent times during the following three consecutive semesters.

*Attitude scales.* The two scales developed to measure bias and general attitudes toward multicultural affinity were initially constructed based upon existing validated instruments for measuring these constructs.

- Bias toward traditionally marginalized groups. The first scale, developed to measure prospective teachers' bias toward traditionally marginalized groups, employed a semantic differential format. Responses to each pair of 18 bipolar adjectives (e.g., Honest – Dishonest) were obtained on a 5-point scale. As target concepts for the bipolar adjectives, each participant was presented with two of six traditionally marginalized groups (i.e., African-Americans, Hispanic Americans, Jewish Americans, Asian Americans, Persons with Mental Handicaps, and Homosexuals). Multiple versions of the instrument were constructed from all pairs of these six groups in a randomized, counterbalanced design. This resulted in 30 versions of the bias instrument.

- Multicultural affinity. The second attitude scale employed 21 items indicative of attitudes both toward traditionally marginalized groups in general (e.g., "Minorities have contributed much to the cultural life of America"), and toward specific groups (e.g., "I am usually comfortable around homosexuals"). The specific groups identified on the perceptions scale were balanced among the six traditionally marginalized groups. Responses to each item were obtained on a 5-point Likert scale (with 1 = *strongly disagree* to 5 = *strongly agree*).

**Procedures**

At the beginning of a class session, the instructor introduced the study and solicited student participation. Each participant received a packet containing a knowledge test, a scantron answer sheet, and one of 30 versions of the instrument containing the two attitude scales. Students were encouraged to answer the questions as honestly as possible. Following administration of the instruments, students were asked to place the instruments in the original envelope and return the entire package to the instructor or graduate assistant.

**Data Analysis**

Although data were collected over the course of four semesters, each group of responses was examined individually and then compared across the four groups prior to combining the data. The analyses consisted of item analysis, exploratory factor analysis, and known groups analyses. An item analysis was conducted on the knowledge test to examine trends

among the items and to explore potential areas for future development. Exploratory factor analyses were conducted on the instrument designed to measure attitudes toward multicultural diversity to provide initial evidence of the construct validity of these attitude scores. Because the instruments were very different in scale and scope, the results are presented separately.

## Results

**Knowledge Test**

Items were first examined according to their level of difficulty, which ranged from 0.09 to 0.95. When trends in item difficulty were examined, a pattern emerged suggesting that the easiest items contained references to the actual events of the Holocaust, concentration and death camps, and general sociohistorical topics such as anti-Semitism and the First World War. The most difficult items appeared to cluster around the events that led to the Nazi rise to power and the Holocaust. It is also interesting to note that the majority of the most difficult items dealt with foreign or specialized vocabulary such as Terezin, Reichstag, or Kristallnacht (see Table 1).

Internal consistency reliability (Cronbach's alpha) for the knowledge test was .74. The group mean score for the knowledge assessment was 20.34 out of a possible 44 correct answers with a standard deviation of 6.47. A series of ANOVAs were conducted in order to examine potential group differences in Holocaust knowledge for gender, race, age, and college major. The nominal alpha level for the set of tests was set at .05. No statistically significant differences were found between any of the groups examined.

**Attitude Scales**

*Bias toward marginalized groups*. To estimate respondents' perception of traditionally marginalized groups, an index of perceived bias was calculated. This index was obtained by calculating a deviation score from a neutral response to each item (e.g., deviation from 3.0 on the 5-point scale). As deviations in either direction may be considered bias, the absolute value of the deviation score was obtained. The deviation scores were then averaged across the set of bipolar adjectives for each of the traditionally marginalized groups that respondents were presented, and then averaged across all 18 items to obtain a mean absolute deviation from neutrality score for each respondent. The internal consistency reliability (Cronbach's alpha) for this scale was estimated to be .95.

A series of ANOVAs were conducted in order to examine differences in attitudes between known groups (i.e., gender, race, age, and college major). No statistically significant differences were found for any of these group comparisons. Students' scores on this attitude measure suggested no significant bias toward traditionally marginalized groups.

*Affinity scale.* Two factors, accounting for 92% of the common variance, were evidenced for the set of items dealing with cultural diversity (see Table 2).

Factor 1 accounted for approximately 77% of the variance. The 10 items associated with this factor appeared to measure multicultural interest. Cronbach's alpha for this set of items was estimated to be .78. Higher scores on this factor represent greater multicultural interest in events and activities. Factor 2, accounting for approximately 15% of the variance, was represented by nine items, which appeared to capture elements of social proximity or social distance. Cronbach's alpha for this set of items was estimated to be

.75. High scores on this factor represented more willingness to socialize and become affiliated with members of minority groups.

A series of MANOVAs were conducted in order to examine differences in attitudes between specific groups (i.e., gender, race, age, and major) on the two attitude subscales. Experiment-wise alpha was controlled at .05 for the set of four tests. Statistically significant results were obtained for gender, $F(2, 440) = 13.41$, $p = <.0001$, Wilks lambda = 0.94, and race, $F(2,440) = 5.60$, $p = .0040$, Wilks' lambda = 0.97. In addition to testing for statistical significance, Mahalanobis distance ($d^2$) was used to represent the magnitude of group differences (i.e., the multivariate effect size). The obtained values of $d^2$ (0.13 and 0.34 for race and gender, respectively) were relatively small, but the effect size for gender was notably larger than for race. An examination of the sample means suggests that females reported themselves to have higher levels of multicultural interest ($M = 3.42$) than did the male participants ($M = 3.20$; see Table 3).

**Table 3**
Affinity: Group Means and Standard Deviations

| Group | N | Multicultural Interest | | Social Proximity | |
|---|---|---|---|---|---|
| | | *M* | *SD* | *M* | *SD* |
| Gender | | | | | |
| Female | 342 | 3.42 | 0.48 | 4.13 | 0.48 |
| Male | 101 | 3.20 | 0.62 | 3.84 | 0.61 |
| Race | | | | | |
| Non-White | 121 | 3.49 | 0.43 | 4.17 | 0.49 |
| White | 322 | 3.32 | 0.55 | 4.03 | 0.54 |

In addition, the women reported closer proximity (less social distance) than did the men ($M = 4.13$ and 3.84 for the women and men, respectively).

**Discussion**

This study of the knowledge and attitudes of prospective teachers has several implications for research and development. As mentioned previously, a review of the literature produced little information on what prospective teachers in the United States know about issues surrounding the Holocaust. It appears that prospective teachers' knowledge about the Holocaust may be limited. On only 18 of the 44 knowledge test items did more than half of the participants provide the correct answer.

It was evident that the prospective teachers surveyed knew less about social and political conditions that led to the Nazi rise to power and the Holocaust than the actual event itself. This is disappointing in that it is crucial that teachers and students understand the

issues leading to the Holocaust. As stated in the *Guidelines for Teaching About the Holocaust,* students should learn that "the Holocaust was not an accident in history – it occurred because individuals, organizations and governments made choices that not only legalized discrimination but also allowed prejudice, hatred, and ultimately, mass murder to occur" (United States Holocaust Memorial Museum, 2001, p. 1). As a result of the current analysis and mandated Holocaust teaching standards, it is evident that particular attention needs to be paid to developing resources that help users locate and identify with information describing the social and political climate leading up to a catastrophic event like the Holocaust.
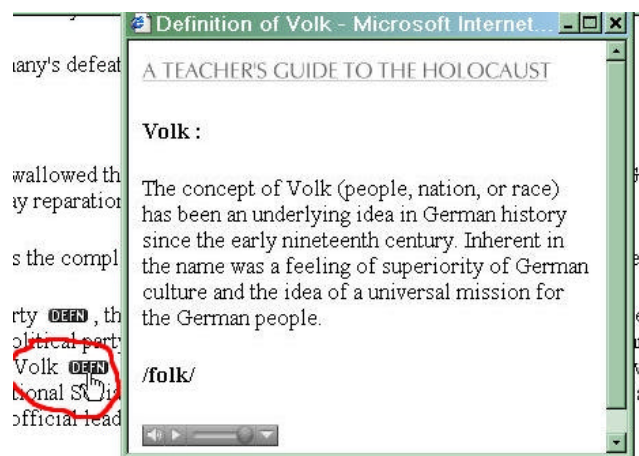


**Figure 4**. Pop-up window interactive gloss.

Participants in the study also seemed to have trouble with test items that dealt with foreign or specialized vocabulary such as *Reichstag, Terezin,* or *Kristallnacht.* To address this issue, interactive glosses (dialog boxes) of foreign or specialized vocabulary have been embedded within the Teachers' Guide to the Holocaust (see Figure 5). Teachers can click on the Definition icon and hear the pronunciation of the term or phrase.

Students' scores on the "Bias Toward Marginalized Groups" measure did not suggest any significant bias. In addition, there were no significant differences among gender, race, age, or college majors. This finding is consistent with the 2002 survey conducted by the ADL that found almost no anti-Semitism on college campuses.

In the multicultural affinity scale, differences in race and gender were observed on measures of multicultural interest and social proximity. Specifically, women reported higher levels of multicultural interest and closer proximity. This is consistent with a study by Reinhardt (1997), in which women reported lower levels of homophobia (prejudice toward homosexuals) than did men. Future studies could look more closely at individual marginalized groups to determine if gender is a consistent factor in the attitude toward the various groups included in this study (African-Americans, Hispanic Americans, Jewish Americans, Asian Americans, persons with mental handicaps, and homosexuals).

Statistical differences on the affinity scale were also noted for race. This result supports the finding by the Anti-Defamation League indicating that race can be a predictor of anti-

Semitism. This factor could also be analyzed more closely in future studies that isolate the marginalized groups.

The intent of this study was to examine knowledge and attitudes of prospective teachers from a variety of subject areas because the Holocaust mandate is intended to have a cross-curricular focus. However, it is likely that these issues will be covered in some content areas (such as social studies and language arts) more than in others (such as mathematics and physical education). A future study could narrow the target population to those most likely to teach the Holocaust on a regular basis.

Future research could also assess the knowledge and attitudes of in-service, rather than preservice, teachers with regard to the Holocaust and its inclusion in their curricula. For example, in a Canadian study, 23 teachers were given a semistructured interview comprised of questions covering teachers' views on Holocaust education, in general, and on specific areas of Holocaust content. Findings were used to make suggestions for strengthening antiracist education (Short, 2000).

Participation in this study was voluntary, and few students chose not to answer the attitude surveys, even though the content could be viewed as sensitive. However, self-report surveys can be influenced by the gender or race terminology in the assessment instruments (Gomez & Trierweiler, 2000). In future studies, focus groups, interviews, or observational research could be used to triangulate the data provided by self-reporting.

The current study was conducted at a single university in Florida. Future research related to teachers' cognitive and affective preparedness for Holocaust education could be conducted with a larger population across the United States or, indeed, across several countries. For example, a recent article in the *Yad Vashem Magazine* noted that anti-Semitism is on the rise in Europe. The author pleaded, "Antisemitism must be combated with serious and widespread education about the Holocaust (Rozett, 2004, p.2).

A large stone at the base of a memorial in Treblinka is inscribed "Never Again" in six languages (see http://fcit.coedu.usf.edu/holocaust/GALLFR/Ftreb17.htm). By producing instructional resources such as The Teacher's Guide to the Holocaust and including Holocaust education in the curriculum, teachers' and students' knowledge about this event may be increased and a repeat of history avoided.

## References

Anti-Defamation League. (2002). *Anti-Semitism in America*. Retrieved May 15, 2004 from http://www.adl.org/anti_semitism/2002/as_survey.pdf

Ball, D.L. (2000). Bridging practices: Intertwining content and pedagogy in teaching and learning to teach. *Journal of Teacher Education, 51*, 241-247.

Banks, D.N. (2000). *Promises to keep: Results of the National Survey of Human Rights Education 2000*. Retrieved December 1, 2003, from http://www.hrusa.org/education/PromisestoKeep.htm

Barron, A. E. (1998). Developing a large-scale instructional programme on the Web. *Educational Media International, 35* (3), 192-196.

Barron, A., Calandra, B., & Kemker, K. (2001). Teacher's guide to the Holocaust: An extensive online resource for teachers. *Society for Information Technology and Teacher Education International Conference 2001*(1), 2568-2573.

Brown, M., & Davies, I. (1998). The Holocaust and education for citizenship: The teaching of history, religion, and human rights in England. *Educational Review, 50*(1), 75-83.

Calandra, B., Fitzpatrick, J., & Barron, A. E. (2002). A Holocaust website: Effects on prospective teachers' factual knowledge and attitudes toward traditionally marginalized groups. *Journal of Technology and Teacher Education, 10*(1), 75-93.

Eagly, A.H., & Chaiken, S. (1998). Attitude structure and function. In D.T. Gilbert, S.T. Fiske, & G. Lindzey (Eds.) *The handbook of social psychology* (4th ed., Vol. 1, pp. 269-322). New York: McGraw-Hill.

Eichner, M. S. (1980). An analysis of the treatment of the holocaust in selected high school world history textbooks, 1962-1977. (Doctoral dissertation, The University of Michigan, 1980). *Dissertation Abstracts International, 41*(02A), 0622.

Edwards, M.S. (1994). A comparative analysis of teachers' backgrounds as a factor in their perceptions and attitudes of cultural diversity in two urban school districts. (Doctoral dissertation, The University of Akron, 1994). *Dissertation Abstracts International, 55*, (05A), 1186.

Geiss, S.A. (1997). *Implementing Holocaust education curriculum to comply with Florida legislation 233.061 at the middle school level.* (Master's Final Report, Nova Southeastern University, 1997). (ERIC Document Reproduction Service No. ED 422215).

Gomez, J. P, & Trierweiler, S. J. (2000). Does discrimination terminology create response bias in questionnaire studies of discrimination? *Personality and Social Psychology Bulletin, 27*(5), 630-638.

Greenberg, B., & Fain, S. (1979, April). *A study of the impact of the television show "Holocaust" on adolescent attitudes and knowledge*. Paper presented at Annual Meeting of the American Educational Research Association, San Francisco, CA. (ERIC Document Reproduction Services No. ED170209)

Holt, E. R. (2001). Implementation of Indiana's resolution on Holocaust education by selected language arts and social studies teachers in middle schools/junior high and high schools. (Doctoral dissertation, Indiana State University, 2001). *Dissertation Abstracts International, 62*(02A), 445.

Howard, T. C., & Denning del Rosario, C. (2000). Talking race in teacher education: The need for racial dialogue in teacher education programs. *Action in Teacher Education, 21*(4), 127 -37.

Johns, J.T. (1997) A descriptive case study of teacher attitudes related to the implementation of multicultural curriculum and instruction in the various disciplines at the middle school level (diversity). (Doctoral dissertation, University of Central Florida, 1997). *Dissertation Abstracts International, 58*(10A), 0705.

National Council for Accreditation of Teacher Education. (2002). *Program standards.* Retrieved May 14, 2004, from http://www.ncate.org/2000/unit_stnds_2002.pdf

Parsons, W. S., & Strom, M. Stern. (1977). *Facing history and ourselves resource book: Holocaust and human behavior.* Retrieved July 2, 2004, from http://www.facinghistory.org/facing/fhao2.nsf/all/Holocaust+and+Human+Behavior+PDFs?opendocument

Raven, G. (1995). Major Holocaust polls show built in bias. *The Journal of Historical Review, 15*(1), 25.

Reinhardt, B. (1997). Examining correlates of homophobia in heterosexual college students. Paper presented at the annual meeting of the American Psychological Association, Chicago, IL.

Rozette, R. (2004). Combating antisemitism: Education. *Yad Vashem Magazine.* Retrieved on May 14, 2004, from http://www.yad-vashem.org.il/about_yad/magazine/magazine_new/mag_32/Combating.html

Schultz, L. H., Barr, D. J., & Selman, R.L. (2001). The value of a developmental approach to evaluating character development programs: An outcome study of Facing History and Ourselves. *Journal of Moral Education, 30*(1), 3-27.

Schweber, S. A. (1999). Teaching history, teaching morality: Holocaust education in American public high schools. (Doctoral dissertation, Stanford University, 1999). *Dissertation Abstracts International, 60*(04A), 1072.

Short, G. (2000). Holocaust education in Ontario high schools: An antidote to racism? *Cambridge Journal of Education, 30*(2), 291-305.

State of Florida. (2004). *Florida Statute 1003.42*. Retrieved May 14, 2004 from http://www.flsenate.gov/Statutes/

Totten S., & Feinberg, S. (2001). *Teaching and studying the Holocaust.* Boston: Allyn and Bacon.

United States Holocaust Memorial Museum. (2001). *Teaching about the Holocaust: A resource book for educators.* Retrieved May 14, 2004 from http://www.ushmm.org/education/foreducators/teachabo/teaching_holcaust.pdf

**Author Note:**

Brendan Calandra
Georgia State University
email: mailto:mbcalandra@gsu.edu

**Table 1**
**USHMM Guidelines Matched to Items From Holocaust Knowledge Test**

| Topics | Knowledge Test Items | *p* values |
|---|---|---|
| **Additional Topics** | | |
| Anti-Semitism | Which of the following is true about anti-Semitism? | 0.59 |
| | Hitler's political agenda was described in which book? | 0.60 |
| WWI Aftermath | During the five years immediately following the First World War, German society... | 0.70 |
| Nazi Rise to Power | In 1933, the Reichstag (German parliament) was burned, allowing... | 0.22 |
| | How did Hitler become a member of the Reichstag (German parliament)? | 0.27 |
| | The Beer Hall Putsch was... | 0.34 |
| | The Nazi party's rise to power in Germany was a result of... | 0.36 |
| | When did the Nazi party officially come into power in Germany? | 0.46 |
| | In 1933, Hitler was officially appointed... | 0.47 |
| | As a cover for military defeat, many Germans wanted to believe that they had lost the First World War because... | 0.66 |
| **1933-1939** | | |
| Dictatorship under the Third Reich | In order to quickly and severely punish resisters, what was decreed in 1941? | 0.20 |
| | What was one of the manifestations of the Führerprinzip? | 0.34 |
| Early Stages of | Kristallnacht is... | 0.18 |

Prosecution

| | | |
|---|---|---|
| The First Concentration Camps | The first Nazi concentration camp used mainly for political prisoners was… | 0.20 |

**1939-1945**

| | | |
|---|---|---|
| World War II in Europe | The second World War was caused by the… | 0.42 |
| | As a result of Nazi oppression during World War II, the number of people murdered was in the… | 0.58 |
| Persecution and Murder of Jews | The systematizing and regulating of discrimination of Jews in early Nazi Germany was made possible through the… | 0.46 |
| | Roughly what percent of the European Jewish population perished as a result of the Holocaust? | 0.30 |
| Ghettos | The Terezin ghetto was… | 0.28 |
| | Jewish ghettos were formed by the Nazi regime in order to… | 0.77 |
| Mobile Killing Squads | What were Einsatzgruppen? | 0.35 |
| Expansion of the Camp System | The Nazi answer to the "Jewish question in Europe" reached in Wannsee in 1942 was called… | 0.41 |
| Killing Centers | The killing factories created to annihilate European Jewry were called… | 0.73 |
| Additional Victims of Nazi Persecution | Those people sent to the six death camps… | 0.31 |
| | How old were the majority of Holocaust victims? | 0.66 |
| | People murdered because of Nazi doctrine did not include… | 0.57 |

|  | The Holocaust was… | 0.95 |
| Resistance | Bands of armed resisters to the Nazis mostly situated in eastern Europe were called… | 0.23 |
|  | The first rebellion in a major city against established Nazi oppression was… | 0.55 |
|  | An example of passive resistance to the Nazis was… | 0.56 |
|  | Active resistance to the Nazis was… | 0.64 |
|  | Any form of resistance to Nazi oppression in Germany was… | 0.78 |
| Rescue | Almost 8,000 Jews were hidden and ferried to safety by the citizenry of… | 0.28 |
|  | Who led an effort that saved 100,000 Hungarian Jews? | 0.37 |
| U.S./World Response | The law stating that a war of aggression, in any form, is prohibited under international law was a conclusion of… | 0.18 |
|  | When the war was over, German citizens who lived near concentration camps during the war were… | 0.40 |
|  | No significant resistance was encountered in 1938 when Hitler annexed… | 0.65 |
| Liberation | What happened when allied troops discovered concentration camps? | 0.54 |

**Post-1945**

| Postwar Trials | In regard to responsibility for actions, the International War Crimes Tribunal concluded that… | 0.33 |
|  | Adolf Eichmann was… | 0.34 |
|  | The Nuremberg trials were historically important because… | 0.52 |

| Displaced Persons Camps and Emigration | The number of people displaced after the Second World war reached... | 0.09 |
| | After the war, many of those displaced were... | 0.42 |
| | Restitution efforts for the Holocaust... | 0.58 |

**Table 2**

**Rotated Factor Pattern and Structure Matrices for Attitudes Toward Traditionally Marginalized Groups**

| Item | Factor 1 Multicultural Interest | | Factor 2 Social Proximity | |
|---|---|---|---|---|
| | Pattern | Structure | Pattern | Structure |
| **Multicultural Interest** | | | | |
| I would like to know more about Asian cultural influences. | 70 | 72 | -5 | -45 |
| Jewish customs interest me. | 63 | 61 | 4 | -33 |
| I'm intrigued by beliefs and practices of minority cultures. | 60 | 63 | -5 | -40 |
| I am fascinated by how the English language is changed/adapted by different ethnic groups. | 60 | 61 | -2 | -37 |
| I enjoy when African Americans wear African style clothing. | 47 | 49 | -3 | -31 |
| I do not enjoy hearing different languages spoken. | -44 | -53 | 14 | 40 |
| It should be easier for Hispanics to immigrate to this country. | 42 | 36 | 11 | -14 |
| I enjoy socializing with people who | 36 | 50 | -24 | -45 |

| | | | | |
|---|---|---|---|---|
| differ from me in their religious beliefs. | | | | |
| Hispanics living and working in this country should use the English language for communication. | -35 | -32 | -6 | 14 |
| Holidays should be chosen to accommodate the beliefs of all religious groups in this country. | 30 | 41 | -19 | -36 |

**Social Proximity**

| | | | | |
|---|---|---|---|---|
| In order to maintain a nice residential neighborhood it is necessary to keep people from different racial backgrounds separate. | 5 | -39 | 76 | 73 |
| I would feel comfortable working with people from different racial/ethnic backgrounds. | 3 | 41 | -66 | -67 |
| It is wrong for people of different racial backgrounds to marry. | -8 | -41 | 57 | 62 |
| Social clubs should be allowed to select their members based on racial background. | 1 | -30 | 54 | 54 |

| | | | | |
|---|---|---|---|---|
| Members of minority groups should keep to themselves. | 19 | -12 | 53 | 42 |
| I dislike foods from different ethnic cultures. | -15 | -36 | 35 | 44 |
| I enjoy working with African Americans. | 22 | 46 | -41 | -54 |
| I am usually comfortable around homosexuals. | 14 | 34 | -34 | -42 |
| Homosexuals should be part of the military. | 6 | 26 | -34 | -38 |

*Note.* Coefficients have been multiplied by 100 and rounded. Interfactor correlation = -0.58