This paper reports on the development, design, and initial field testing of a narrative simulation, "'This Just Is!' Jeff's Story," that focused on homophobia and adolescent suicide. The initial field test was conducted with two user groups—a graduate class of professionals in the field of higher education student development, and a small group of ministers certified as pastoral counselors. The evaluation utilizes data obtained through expert feedback, exercise field tests, individual and focus group interviews, and observation, as a basis for informing continued development of this design. Formative evaluation results are summarized in the following areas: usability; veracity; the extent to which the user felt the experience was informative; cognitive, or the extent to which the exercise provoked thinking; affective, or impact on attitude; and the value of group discussion in the exercise process. Desired learning outcomes that focus on attitudes, beliefs, and biases may lend themselves to further evaluation of narrative simulation in creating contexts in which to examine deeply held beliefs. (Contains 40 references.) (MES)
Evaluating Narrative Simulation as Instructional Design for Potential to Impact Bias and Discrimination

By:

Nancye McCrary & Joan M. Mazur
EVALUATING NARRATIVE SIMULATION AS INSTRUCTIONAL DESIGN FOR POTENTIAL TO IMPACT
BIAS AND DISCRIMINATION

Nancye McCrary
Joan M. Mazur
University of Kentucky

Abstract

Simulation exercise as instruction has a long history in skill development involving performance tasks. Traditionally physical simulators have been used in diverse fields such as military flight instruction and industrial training. More recently paper & pencil simulation exercises have employed narrative in instruction aimed at solutions to work place problems, such as sexual harassment. This evolution has led to a refinement of principles of simulation exercise design, as well as evidence for specific problem characteristics that indicate potential effectiveness in use of simulations. Issues such as racism, anti-Semitism, sexism, disability, and homophobia present instructional challenges due to the covert and rigid nature of some attitudes and beliefs. This paper reports on the development, design, and initial field testing of a narrative simulation focused on homophobia and adolescent suicide. Desired learning outcomes that focus on attitudes, beliefs, and biases may lend themselves to further evolution of narrative simulation in creating contexts in which to examine deeply held beliefs.

Narrative Simulation as an Instructional Design Strategy

Simulation exercise as instruction has a long history in skill development involving performance tasks. Traditionally physical simulators have been used in military flight instruction, industrial training, and an array of other performance-based instructional problems. More recently paper & pencil simulation exercises have employed narrative in instruction aimed at accident prevention, farm safety, and solutions to work place problems, such as sexual harassment. This evolution has led to a refinement of principles of simulation exercise design, as well as evidence for specific problem characteristics, which indicate potential effectiveness in use of simulations. Issues such as racism, sexism, anti-Semitism, disability, and homophobia present instructional challenges due to the covert and rigid nature of some attitudes and beliefs. Group discussion is one powerful way of beginning to examine beliefs and synthesize new information regarding biases. Narrative simulation has the potential to initiate such discourse by providing less threatening contexts in which to think about and express deeply held beliefs. As a result it provides exposure to alternative ways of thinking. Desired learning outcomes that relate to attitudes, beliefs, and biases may well lend themselves to further evolution of narrative simulation as an instructional design strategy.

Based on the work of Bruner (1986), Cole (1994), Howard (1991), Sarbin (1986), and others, this simulation exercise was developed as instructional material for presenting content on homophobia related to adolescent sexual orientation. "This just is!" Jeff's Story uses a narrative approach to engender discourse and to inform regarding this difficult and prohibitive topic. It specifically deals with adolescent sexual orientation, homophobia, and potential suicide. It is a powerful contemporary culture tale that offers opportunity for situated presentation of information (Lave and Wenger, 1991, Schell and Black, 1997, Young, 1993). The purpose of this paper is to describe the design and preliminary evaluation of this innovative narrative simulation. The evaluation utilizes data obtained through expert feedback, exercise field tests, individual and focus group interviews, and observation as basis for informing continued development of this design.

"This just is!" Jeff's Story is a narrative simulation designed for target groups of parents, helping professionals, and adolescents. The story centers on a fourteen-year-old boy discovering his own homosexuality and struggling with problems of discrimination, violence, and suicidal thinking. This true story was adapted from a web page, developed by a parent who was faced with these issues. The title "This just is!" was adopted from a statement found in her son's journal after his suicide.2

The grand scheme was to explore instructional possibilities relative to constructivist theory. Narrative simulation provides opportunity to teach through problem-solving practice in real world environments (Duffy and Cunningham in Jonassen Ed., 1996). The overall intent was concerned with exploring instruction designed to impact socially constructed attitudes, creative problem solving, and independent thinking skills. Simulation exercise with its imperatives for "real world" learning, veracity, and practice before the fact, as opposed to retrospective methods such as case study (Cole, 1997), seemed an appropriate place to begin. The narrative simulation approach increasingly involves the user in the story by virtue of question & answer decision points embedded throughout.

2 http://members.tripod.com/~clavtoly/Bill's_Story
We began this project with a broad question regarding whether instruction can be effectively designed to decrease bias and discrimination. Questions regarding bias, stereotyping, and attitudinal change appear to be some of the most challenging issues faced by contemporary educators (Boyer, 1995, Vitz, 1990). An initial single focus on homophobia was chosen because discrimination towards gays is so pervasive in contemporary American culture (Helminiak, 1994). Open expression of homophobia has been painfully demonstrated in the most recent well-publicized case of Matthew Shepard, who was brutally beaten and hung on a fence to die, solely because of his homosexuality (Barrett, 1998). Furthermore, discrimination towards homosexuals, in most cases, is still legally condoned in this country (Plaster, 1998, Stachelberg, 1998). Relative to public education, Sandra Prettyman writes, “Creating a forum for discussion and an awareness of the issue [homophobia] will help promote student safety in schools and will help students begin to recognize and critique the oppression that many different groups of people face in our country today (1997, p. 93).” The long-range goal for this project is to develop a series of narrative simulation exercises that will impact various kinds of discrimination, both in pencil/paper and multimedia formats.

**Promoting Tolerance and Inclusion through Instruction**

While tolerance and inclusion are often recognized as priority issues in various instructional contexts (schools, business and industry, and the military), problems regarding how to promote sensitivity to difference with regard to race, culture, religion, gender, disability, and sexual orientation persist. Most trainers and educators realize that addressing these issues in general, rather than personal terms, has proved to be a superficial and ineffective approach to problems that have serious legal and moral consequences. It has been particularly difficult to address these issues in engaging and meaningful instructional ways. This has been partly due to the fact that instructional materials and approaches, designed to engender personal reflection and discourse on these difficult topics, are limited, often nonexistent (Prettyman, 1997).

However, there is an emerging body of qualitative literature that seeks to address these issues. The 1998 journal of Qualitative Studies in Education 11(2) provides an editor’s introduction that signals “strong support of this model culture (stories heard, stories lived, and stories told) contributes to cognition (attitudes, beliefs, meaning, model, which he describes as “a cultural, cognitive, and behavioral model...of beliefs and...behavior (p.333)”. In people live, observe, and communicate about cannot be captured in a meaningful way with only the abstract theoretical foundation for use of narrative simulation in education. He states: “The robustness of the life stories also provided important clarity on the issue of impacting learner attitudes and beliefs. Cole constructs solid his efforts in farming and mining safety. While emphasizing seemingly traditional performance outcomes, Cole has especially powerful with regard to the affective domain (Vitz, 1990).

The context of contemporary culture. Instructional narrative that combines didactic information and narrative may be non-didactic (affective) aspects of instruction. “Narration (as paradigm) respects reason...as including metaphor as orientation.

**Affecting Beliefs and Behavior through Narrative**

Walter Fisher (1995) offers well-articulated foundation for use of narrative to integrate the didactic and non-didactic (affective) aspects of instruction. “Narration (as paradigm) respects reason...as including metaphor as well as argument, as inextricably bound to values, and as historical and contextual (p.173).” Fisher reminds us that objectivist thinking is rooted in concepts, methods, and hypotheses, which are historically grounded in myths. He adds, “objectivist thinking and discourse cannot advance without recourse to imagination (p.174).” The implications, for purposes of this project are to design instruction, which fills the space beyond—the gapping hole—as it were, left by the singular focus of classical science. That is, instruction designed with a primary focus on values in the context of contemporary culture. Instructional narrative that combines didactic information and narrative may be especially powerful with regard to the affective domain (Vitz, 1990).

Henry Cole (1997) has organized and articulated issues regarding instructional narrative simulation through his efforts in farming and mining safety. While emphasizing seemingly traditional performance outcomes, Cole has also provided important clarity on the issue of impacting learner attitudes and beliefs. Cole constructs solid theoretical foundation for use of narrative simulation in education. He states: “The robustness of the life stories people live, observe, and communicate about cannot be captured in a meaningful way with only the abstract principles of paradigmatic thinking (p.332).” One important contribution Cole makes is a narrative conceptual model, which he describes as “a cultural, cognitive, and behavioral model...of beliefs and...behavior (p.333)”. In this model culture (stories heard, stories lived, and stories told) contributes to cognition (attitudes, beliefs, meaning,
and knowledge), which in-turn contributes to conduct (behaviors, actions) that results in consequences (effects, outcomes). While the process is linear, insights gained through it often fold back into an interplay of the whole. Cole's model illustrates the relationship between narrative, cognition, behavior, and consequence. One point that he stresses is that narrative simulation can be an effective means to vicariously experience consequences and may even have power to change behavior before the fact. In Cole's original model consequences necessarily follow from narrative, cognition, and behavior. This model is pertinent to this development project with one exception. That is, we would add some indication that only when the social is made personal do consequences necessarily result from this process (see figure 1). This is an effort to move Cole's model a step further for specific consideration of issues of social values such as discriminatory behavior. This is to say that unless the cultural collective consequences are made personal through experience (vicarious or real); they may have no impact, behaviorally speaking, on individual attitudes and beliefs underlying discrimination. "Bruner (1986, 1990a) notes that a universal problem in education is the matter of translating socially relevant information into information that is personally relevant for the individual (Cole, 1997, p.334)." Narrative form has the power to make the socially relevant more personal for the learner (Bruner, 1986, Cole, 1997, Vitz, 1990).

Figure 1. Cultural, Cognitive, and Behavioral Model of Bias and Discrimination

"The kind of meaning the narrative conveys about human existence requires the use of discourse, which can be differentiated from mere collection of words or sentences. A discourse is an integration of sentences that produces a global meaning that is more than that contained in the sentences...(Polkinghorne, 1988, p. 31)." In addition to personalizing dilemmas and decisions, narrative also has important potential to stimulate group discussion. Bruner (1996) writes "...we form a representation of the world as much from what we learn about it through others as from responding to events in the world directly (p.165)." This concept provides an important frame for instruction aimed at impacting the affective domain. We often develop attitudes, beliefs, and biases based on what we learn from others (individually and collectively) rather than actual experienced events. This is especially true with regard to homophobia and racism. Usually personal experience with those discriminated against is limited. Moreover, even when we have opportunities for such experiences, these experiences are filtered through pre-existing cultural and personal belief systems. Isolated experiences serve to either confirm pre-existing notions or stand as rare exceptions. Rarely do these exceptions impact deeply held beliefs. However, since experiences that result in bias are developed and conveyed largely through the vehicle of narrative, it is quite appropriate to look to forms of instructional narrative to change such beliefs. Sarbin (1986) contends that as human beings we make moral decisions according to narrative structures. As such, the use of stories has an enduring, if not prevailing, history as instructional practice.

Combining Narrative Structure and Simulation

Some important findings have emerged from research with narrative simulation exercises. Stories, when used in this manner, provide opportunity for critical thinking and decision making. As narrative simulation stories unfold, dilemmas develop which engage the learner in real world problems and relative solutions. The narrative
exercise requires gathering information, interpreting data, making choices, remembering and utilizing relevant information, and actually interacting with the plot of the story (Cole 1997, Howard 1991, Ormer 1996, Schell and Black 1997, Vitz 1990, Young 1993). The learner literally becomes a character in an unfolding tale. As such, he or she is more likely to discuss beliefs, attitudes, and biases, otherwise considered taboo. Most would agree that bias and discrimination are serious problems, which tend to arrest individual and cultural growth and development. However, the tendency of human nature is to view these issues as other people's problems (Bennett, 1998). As an instructional strategy, situated cognition has been used to relate subject matter to the concerns of learners (Shor, 1987). Situated learning involves immersing learners in activities and environments that facilitate ability to make meaning (Lave and Wenger, 1991). Situated learning typically involves four guiding principles: (1) learning is grounded in everyday activities; (2) knowledge is acquired situationally and transfers to similar situations; (3) learning is the result of a social process involving certain ways of thinking, perceiving, problem solving, and interacting; and (4) learning exists in complex social environments made up of actors, actions, and situations (Anderson, Reder, and Simon 1996). Dilemmas rather than content drive this type of learning. Certain problems are presented that serve to challenge the simulation user.

"This just is" Jeff's Story combines the aesthetic and affective power of narrative with the situated cognition of simulation by re-creating a real-life situation and utilizing strategically placed decision points. It involves the user as a character in an unfolding story, providing opportunity to think through problems, respond to questions, and resolve dilemmas as the story progresses. Additional information in the form of statistics, news media excerpts, history, and commentary is provided throughout the narrative. These appear at the bottom of each page and are distinguished from the narrative by use of text boxes. Users may choose to read any or all of this additional information.

Development of the Narrative Simulation: "This just is!" Jeff's Story

The Search for a Story

The imperatives of veracity and fidelity for simulation effectiveness led to an initial search for a true story. While it is possible to create a narrative with truth-likeness, it seemed that it would be more powerful to use an actual contemporary story. The power of contemporary, true story narrative to support reflection and change has been recently documented (Bliss and Mazur, 1996). Additionally, true story cases combined with facilitated discussion of difficult topics can create conditions for conversation and community (Mazur and Bliss, 1995). While Bruner (1990) and Grossman (1992) suggest that verisimilitude or plausibility is sufficient in narrative, Phillips (1994) argues for the use of true stories "when something important hangs in the balance (p. 17)." Moreover, evidence exists that the true story case provides for intense engagement and personal involvement in the story (Bliss and Mazur, 1995).

Bill's Story appeared in the form of a web page that was dedicated to prevention of teenage suicide and violence towards gays. Bill Clayton's mother developed this web page, after his death. She was contacted and generously agreed to assist with the content and design of this instructional package. Thus, Gabi Clayton is an important collaborator on this project, offering editorial revisions and support along the way. For example, she suggested that the use of the term lifestyle in the original answer choices is a "trigger phrase-lifestyle has been used over and over by people who are homophobic. So has the issue of choice" (Gabi Clayton, 1998, in e-mail reply). Most importantly, she provided crucial input to assure maximum fidelity. Her story seemed appropriate for use is this project for several reasons. It is a well-written account of the struggles of one family to deal with adolescent homosexuality, abuse of and violence towards homosexuals, depression, and teen suicide. More importantly, Bill's Story includes vivid accounts of dilemmas and decisions faced by Bill Clayton and his family. It is a true story in which a family faced problems head-on, made appropriate decisions, and provided more than adequate support. However, Bill's Story is also one that, despite all efforts to intervene, ends in tragedy. This contradiction is the dynamic diagonal in this composition, which is intended to inspire robust discourse.

Adapting the Story to Narrative Simulation

The next issue was development of the true story into a narrative simulation exercise. This required transforming it from a retrospective account to an unfolding and interactive tale. We adapted Cole's (1997) behavioral model, which illustrates the relationship between narrative, cognition, conduct, and consequence. He stresses that narrative simulation can be an effective means to vicariously experience consequences and may even have power to change behavior before the fact. This adaptation goes a step further (indicated by broken lines) to suggest that unless the cultural collective consequences are made personal, they may have no impact, behaviorally speaking, on individual attitudes and beliefs underlying discrimination. [Insert figure 1 about here.]

Following the work of Halpern (1984) and Cole (1997), the first task was to create a qualitatively different instructional environment that would encourage critical forethought (simulation) instead of informed hindsight (case study). The story was condensed and critical decision points were determined. Each decision point or dilemma required developing corresponding questions and answer choices. The initial questions were developed and reviewed
by various experts in the fields of Educational Psychology, Curriculum and Instruction, Instructional Design, and Ethics, as well as both parents and gays. These reviewers assisted by suggesting important editorial revisions.

Using Qualitative Field Study for Content Development

During this initial process of revision it became increasingly apparent that there was a need for the simulation designer (McCrary) to develop a qualitatively unique and deep understanding of the broader issues of bias and discrimination. Various techniques of qualitative field study were employed to broaden the designer's personal understanding and to enrich the final product. The final tasks in development of the instructional components included design of questions and instructional response choices, as well as supplementary explanatory information for an instructor's guide. Due to the fact that homophobia persists as an "invisible issue" (Prettyman, 1997, p. 92) in American contemporary culture, understanding a range of possible user characteristics and designing response choices that would be informative and meaningful was a daunting task. Qualitative field study was viewed as an appropriate means to this end. A series of participant observations and interviews were completed, contributing data specifically on homophobia, as well as the larger topic of discrimination, including racism, sexism, anti-Semitism, and disability. Two major reoccurring themes surfaced throughout these formal and informal observations and interviews. Those were religious belief and unwillingness to claim personal bias. From a classical instructional design perspective, religious belief and denial of personal bias might be considered as important entry-level characteristics the target learner.

For purposes of this design effort, religious beliefs may be no less important than preexisting attitudes and beliefs about worker safety or gender related behavior in the workplace. Diana Butler Bass (1998), associate professor of religious studies at Rhodes College, posits that in the cases of African American slavery, the subjugation of women, and anti-Semitism, "Christianity developed elaborate theological systems based on a few biblical texts to keep people subject to the cultural status quo and male authority (D5)." It follows that discrimination towards homosexuals may, in fact, be encouraged by such theological systems. Additionally cultural experience and background may contribute to miseducative experiences regarding race, gender, and minorities. Eisner references John Dewey in describing miseducative experience. "Miseducative experience arrests growth and/or develops dispositions towards a domain of human experience that limit or diminish the probability of growth in that area. (Eisner, 1998, p.99)."

The reoccurring theme of the refusal of those observed and interviewed to claim personal prejudice also raised questions and design considerations. Most informants interviewed were quite comfortable discussing pervasive discrimination in our culture, yet, almost without exception, viewed it as the behavior of others. "But focusing on the prejudices of others leads us down just one path to a hostile and divided culture as each group, blind to its own flaws and vulnerabilities, comes to believe that it holds the moral high ground (Bennett, 1998)." This reiterates the problem in education of social versus personal relevance (Cole, 1997, see figure 1). Discriminatory behavior usually results in immediate and tangible consequences for others, rather than the perpetrators themselves. Therefore, situating the learner as a character in an unfolding tale through the use of engaging questions and frank responses may be the most crucial function of narrative simulation for this type of instructional design effort. "This just is!" Jeff's Story employs this function in situating instructional experience in an environment that encourages reflection, empathy, and compassion.

Program Description

"This just is!" Jeff's Story is an instructional program that tells a concise story. It includes an embedded question following each possible decision point in the narrative. After each question several possible answer choices are listed, as well as space for write-in answers. Graphics are included throughout as a means to appeal to aesthetic and sensory ways of understanding and remembering. Each page of narrative includes an isolated text box following the story segment that contains pertinent historical accounts, news media excerpts, and statistical data. A separate answer discussion key is attached, which includes questions and answers from the exercise booklet. Following each possible answer choice is a subjective commentary relative to that particular answer. The answer discussion key, as the name suggests, is designed to stimulate group discussion and individual reflection. Users are asked to compare their answers with those in the answer discussion key and read the accompanying comments. They are then encouraged to discuss individual opinions with the group. Since this instructional package is intended for widely diverse audiences and settings, an instructor's manual is provided. The instructor's manual includes additional information for facilitating participant discussion. It provides suggested focus for discussion and clearly outlined objectives. This manual is designed to prepare and guide facilitators through the instructional process.

2 Homophobia has been defined as "irrational fear and hatred of those who love and sexually desire those of the same sex (Pharr, 1988. P. 1)." Comparisons have been drawn between homophobia, racism, and anti-Semitism in terms of discrimination that includes verbal and physical violence, even death (Pharr, 1988)
On April 4, 1997, Steven, his girlfriend, Julie, and Jeff were walking near the County High School on their way to Julie's to watch a video they had rented. Four guys from their high school were cruising by the school. They recognized Jeff and followed the three, yelling angry obscenities. "Queers, faggots..."

Steven, Julie, and Jeff tried to ignore the insults and threats, deciding to cut through the school grounds to avoid the car following them. The guys in the car parked and proceeded, on foot, to surround Jeff and his friends. They brutally assaulted Steven and Jeff, kicking and beating them unconscious. It was a bright spring afternoon, and all Julie could do was scream at them to stop. When Steven and Jeff regained consciousness, they went with Julie to find the school custodian. He called the police and an ambulance. Both boys were in serious condition with multiple abrasions, bruises, and broken bones.

**Question F:** As Jeff's parent, you are now faced with what to do to help your son. How will you proceed?

- 41. Get Jeff to a psychiatric hospital immediately.
- 42. Tell Jeff that this sexual orientation he has chosen almost got him killed and has brought nothing but trouble.
- 43. Call the minister at your church to get his advice.
- 44. Tell Jeff you love him and want to help him through this difficult time.
- 45. Talk to your friends and try to get their advice.
- 46. Tell Jeff you love him and want to help him through this difficult time.
- 47. Make an appointment with a family therapist to get some professional help for you and your son.
- 48. Other

**A Bit of World History**

"Who belonged in a concentration camp, according to the Gestapo? Above all four groups of people: political adversaries, members of inferior races and inferiors from the standpoint of race biology, criminals, and asocials. ...All groups of prisoners in the concentration camp had to wear external markings which were sewn on their clothing, namely a number and a triangle of a certain color on the left side of the chest as well as the right trouser leg. Red was the color of the political prisoners. The other colors and designations were as follows: Green for criminals... violet for Jehovah's witnesses, black for asocials, pink for homosexuals, at times brown for gypsies... Jews wore an inverted yellow triangle underneath their red, green, black, or other markings, forming a star with six points." (Kogon, 1946, cited from Duberman, 1989, p.376)

[Jeff wrote this in his journal! His brother found it when he was going through Jeff's belongings after the funeral.]

**Evaluation of "This just is!" Jeff's Story**

**Focus of Field Testing**

An initial field test of the narrative simulation was conducted with two user groups. These included a graduate class of professionals in the field of Higher Education Student Development at a large southeastern university and a small group of ministers certified as pastoral counselors working in a large urban area in the northeast. Since the simulation will have to be promoted by facilitators or those engaged in raising awareness on the issues addressed in the narrative simulation, these groups of users were selected for initial user tests.

The design features prioritized for field-testing were usability, impact on user attitudes, and relevance of didactic information embedded throughout the exercise. We wanted, first, to determine the overall usability for ease in following instructions, answering questions, and cohesiveness of narrative composition. To this end we used a participant evaluation that was designed to be filled-out immediately after completion of the exercise. Additionally participants were asked to fill-out another very brief evaluation following the review of the answer discussion key and subsequent group discussion. This served to provide specific information about the value of group discussion. Cohesiveness of the composition was determined through careful analysis of participant answer choices, with particular attention to user write-in answers. The next priority was to collect preliminary data on the potential of this exercise to impact user attitudes regarding homosexuality. This was done through a comparison of initial participant
evaluations with a follow-up evaluation, which was completed at least two weeks after the simulation experience. We considered time for reflection an important factor in attitude change, recognition of impact on beliefs, and ability to articulate such. Finally, we wanted to determine the relevance of the didactic information embedded throughout the narrative simulation. This information, appearing in text boxes, was evaluated through overall analysis of participant answers and comments on various participant evaluations, as well as comments during group discussion.

The higher education development professionals used the simulation exercise during one graduate class period, while the ministers used it during a quarterly ministerial meeting. The narrative simulation packet was distributed and users were instructed to work through the simulation. Immediately following individual use of the simulation packet, users filled out a brief evaluation that included questions regarding usability, veracity, informative aspects, and impact on attitudes and beliefs. The participants then worked in small groups to discuss their responses and the narrative itself. Following the group work, users were asked to respond to several questions specifically regarding the impact of group discussion. Finally, the designer debriefed the users in an open-ended group discussion to elicit any additional feedback not addressed by the evaluation questionnaire. We also attempted to contact users after several weeks in an effort to ascertain residual effects. Although the initial field tests include fourteen users, we were only able to obtain eight returned follow-up evaluations. The follow-up contact occurred at least two weeks after the simulation experience. It includes ten statements similar to those in the initial evaluation.

Formative Evaluation Results

Table 1 summarizes the participant evaluations and includes percentage results for eleven questions regarding the individual experience and four questions relative to the group discussion. These were rated from one to five (5 = highest agreement) on a Likert scale. As part of our analysis, we categorized these statements under six areas: 1) veracity, 2) general usability, 3) the extent to which the user felt the experience was informative, 4) cognitive or the extent to which the exercise provoked thinking, 5) impact on attitude, and 6) the value of group discussion in the exercise process. These findings are summarized and reported in terms of general agreement with specific evaluation questions as indicated by user choice of either number (4) or (5) on the scale, disagreement by choice of number (1) or (2), and those choosing number (3) were viewed as neutral.

Table 1. Initial User Evaluation Results "This just is!" Jeff's Story (n = 14)

<table>
<thead>
<tr>
<th>Simulation Evaluation Questions</th>
<th>Design Category</th>
<th>Agree (1,2)</th>
<th>Disagree (3,4)</th>
<th>Neutral (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I could relate personally to this story.</td>
<td>Veracity</td>
<td>28%</td>
<td>28%</td>
<td>36%</td>
</tr>
<tr>
<td>Jeff's Story was realistic.</td>
<td>Veracity</td>
<td>86%</td>
<td>0%</td>
<td>7%</td>
</tr>
<tr>
<td>The questions were easy to answer.</td>
<td>Usability</td>
<td>57%</td>
<td>43%</td>
<td>0</td>
</tr>
<tr>
<td>The directions in the exercise are easy to follow.</td>
<td>Usability</td>
<td>93%</td>
<td>7%</td>
<td>0</td>
</tr>
<tr>
<td>I found the additional information at the bottom of some pages and informative.</td>
<td>Informative</td>
<td>50%</td>
<td>7%</td>
<td>29%</td>
</tr>
<tr>
<td>This story gave me new information about homophobia and discrimination towards gay youth.</td>
<td>Informative</td>
<td>29%</td>
<td>43%</td>
<td>29%</td>
</tr>
<tr>
<td>Prior to working this exercise I had not thought much about discrimination towards gay youth.</td>
<td>Cognitive</td>
<td>0</td>
<td>100%</td>
<td>0</td>
</tr>
<tr>
<td>What I learned from Jeff's Story will help me respond to discrimination towards gay youth.</td>
<td>Cognitive</td>
<td>50%</td>
<td>14%</td>
<td>36%</td>
</tr>
<tr>
<td>The questions in this exercise were thought provoking.</td>
<td>Cognitive</td>
<td>93%</td>
<td>7%</td>
<td>0</td>
</tr>
<tr>
<td>I found Jeff's Story disturbing.</td>
<td>Attitude</td>
<td>79%</td>
<td>0%</td>
<td>21%</td>
</tr>
<tr>
<td>This exercise made me feel uncomfortable.</td>
<td>Attitude</td>
<td>21%</td>
<td>64%</td>
<td>21%</td>
</tr>
<tr>
<td>The group discussion while reviewing the answer discussion key was helpful.</td>
<td>Collaboration</td>
<td>86%</td>
<td>0%</td>
<td>14%</td>
</tr>
<tr>
<td>It was useful to hear other viewpoints regarding decision points in the exercise.</td>
<td>Collaboration</td>
<td>93%</td>
<td>0%</td>
<td>7%</td>
</tr>
<tr>
<td>The group discussion caused me to rethink some of my initial responses.</td>
<td>Collaboration</td>
<td>71%</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>The group discussion enhanced my experience with this exercise.</td>
<td>Collaboration</td>
<td>86%</td>
<td>0%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Usability

Two specific evaluation items related to general usability. Those were statements regarding following the exercise instructions and relative ease of answering the embedded questions throughout the exercise. 93% of users indicated that the instructions were easy to follow, while 57% agreed that the questions were easy to answer. During group discussion it was noted that one reason users said exercise questions were difficult was because they struggled with the dilemmas presented. Written comments regarding general usability were as follows. "Good exercise, very interactive." "It's a wonderful concept and the tool is well designed!" "Excellent investigative tool."

Veracity

Two statements in the participant evaluation related specifically to truth-likeness of the narrative. Although participants were told that this exercise was based on a true story, we wanted to know whether they personally perceived it as believable. Thus one statement concerned the extent to which users could relate personally to the story, while the other simply stated that "This Just is!" Jeff's Story was realistic. Only 28% indicated that they could relate personally, with 28% claiming inability to relate and 36% remaining neutral. However, 86% of participants indicated that the simulation was realistic. There were no written comments specific to the category of veracity.
Informative

One evaluative statement relative to the informative nature of the simulation dealt with appropriateness of the additional information provided in text boxes throughout the narrative. A second statement in this category related to whether the story itself provided new information about homophobia and discrimination toward gays. We wanted to know if such a contemporary story was familiar to users, as well as determine whether the history, news media information, and statistics provided was noticed and to what extent it appropriately informed. The participants in these two initial field tests indicated that while the story did not provide new information on homophobia or discrimination (only 29% agreed), the text box information was appropriate and informative for 50% of these users. Two written comments relative to this category were especially helpful in our thinking about further development. One user wrote, "already had experience with homophobia". Another noted that the historical information "seemed one-sided". The debriefing discussion clarified this issue. Users noted that more geographically relevant examples would be pertinent.

Cognitive

The statements in this category pertained to users' sense of their own thinking process with regard to the issues at hand. These were designed to get a sense of whether participants felt they had thought about this topic previously compared to the extent to which this experience would provoke cognitive processing. We also used a statement about whether users' felt that the thinking stimulated through the exercise would impact personal behavior relative to discrimination. The issue of whether participants had previously thought about discrimination towards gays reflected 100% disagreement. That is, all users believed they were aware of this issue before participating in the field test. 50% indicated that this experience would ultimately change their behavior with regard to discrimination towards gays, and 93% said the narrative simulation was thought provoking.

Affective

This category consisted of two statements intended to understand the extent to which this experience was disturbing and made participants feel uncomfortable. Our agenda here was to produce some way to begin to determine optimal balance between necessary discomfort for narrative effectiveness (cognitive dissonance) and residual negative feelings as a result of undue discomfort. Interestingly enough, 79% of users said, "This Just Is!" Jeff's Story was disturbing and only 21% claimed that it made them feel uncomfortable.

Group Discussion

We felt that one of the most important factors for productive impact of this instructional design would be group discussion. In that spirit, we emphasized collaboration by including four statements regarding group process in this instructional experience. These statements had to do with whether group discussion was helpful, whether it was useful to hear others viewpoints, whether group discussion caused rethinking of initial responses, and whether group discussion provided overall enhancement of the experience. Agreement on these issues was, respectively, 86%, 93%, 71%, and 86%, leaving only a small minority of participants neutral or in disagreement.

Follow-up Evaluation

Table # 2 shows the results of the participant follow-up evaluation. The general themes of these statements reflect issues similar but not identical to the initial instrument. These themes included, broader understanding, stimulation of further discussion of homophobia and discrimination towards gays, utilization of information retained, actual change in behavior, continued thinking on the subject, change in attitude after reflection, lingering disturbance, increased awareness and sensitivity, retention of information gained from group discussion, and overall satisfaction with having had the experience. One striking difference in the follow-up results and those of the initial evaluation was that more respondents indicated a neutral position on many of the statements in the follow-up scale. 63% of participants indicated a broader understanding of homophobia after the simulation experience, 50% said they had discussed these issues further, 88% suggested that the experience continued to be thought provoking, 63% said they still found the exercise disturbing, and 76% were glad they had participated. In disagreement with the statements 63% indicated that they had not yet been able to utilize the information gained from the exercise and 51% said they did not feel differently than they did immediately after the experience.
Table 2. Follow-up User Evaluation Results “This just is!” Jeff’s Story (n = 8)

<table>
<thead>
<tr>
<th>Design Category</th>
<th>Agree (##4,5)</th>
<th>Disagree (##1,2)</th>
<th>Neutral (##3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have already been able to utilize the new information presented in this exercise.</td>
<td>Behavioral</td>
<td>13%</td>
<td>63%</td>
</tr>
<tr>
<td>What I learned from Jeff’s Story has helped me respond better to discrimination towards gay youth.</td>
<td>Behavioral</td>
<td>38%</td>
<td>25%</td>
</tr>
<tr>
<td>I have discussed my thinking on this topic with others since working the exercise.</td>
<td>Cognitive</td>
<td>50%</td>
<td>38%</td>
</tr>
<tr>
<td>I find this experience has broadened my understanding of homophobia.</td>
<td>Cognitive</td>
<td>63%</td>
<td>25%</td>
</tr>
<tr>
<td>The questions in this exercise continue to be thought provoking for me.</td>
<td>Cognitive</td>
<td>88%</td>
<td>13%</td>
</tr>
<tr>
<td>After reflection I felt differently about this experience than I did immediately after working the exercise.</td>
<td>Attitude</td>
<td>38%</td>
<td>51%</td>
</tr>
<tr>
<td>I am more aware and sensitive to broad issue of discrimination since my experience with Jeff’s Story.</td>
<td>Attitude</td>
<td>26%</td>
<td>26%</td>
</tr>
<tr>
<td>I am glad I had the experience using this exercise.</td>
<td>Attitude</td>
<td>76%</td>
<td>13%</td>
</tr>
<tr>
<td>I still find Jeff’s Story disturbing.</td>
<td>Attitude</td>
<td>63%</td>
<td>25%</td>
</tr>
<tr>
<td>I remember more from the group discussion than the actual exercise.</td>
<td>Collaboration</td>
<td>25%</td>
<td>38%</td>
</tr>
</tbody>
</table>

Reflections on Instructional Narrative Simulation

What are the implications for the use of narrative simulation to address difficult topics such as bias and discrimination? To what extent can the use of qualitative development strategies and ethnographic field study methodologies inform the design of such instructional materials? The results of preliminary field-tests are encouraging in several areas. First, the transformation of a true story case into an instructional narrative simulation was possible and indeed achieved some of the desired design intentions (character/circumstance identification and user engagement). Secondly, embedding didactic information along with narrative informed and served to further frame the story as contemporary. It appears that the embedded didactic information accomplished these objectives without eroding the flow of the story or the involvement for the majority of users in this group. Third, the combination of the narrative simulation with group discussion appears to have potential to greatly increase the impact of the experience. This is particularly important because it is precisely the lack of public discussion and disclosure of personal belief that appear to be key issues in addressing the so-called “invisible” aspects of homophobia and other forms of discrimination. Fourth, this experience of the simulation appears to have affects beyond the initial use of the exercise, as indicated by responses to the follow-up evaluation. Finally, the results of this initial user test suggest several improvements in the design. Those include the use of more geographically diverse didactic information to promote user identification and revisions to the instructor’s manual regarding reaction to user responses.

These results engender a commitment to look carefully at responses to questions on additional tests with other user groups (parents, adolescents, etc.), in order to make informed judgments regarding retaining questions that are never selected or may otherwise detract from the power of the narrative. Lastly, through the design process for the narrative simulation, we have found the use of qualitative methods in the development process has much promise. Such field study immerses the designer in the context of instruction and also provides rich, contemporary insights that can be folded back into the design.

References


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