New Times:
First-Person Shooter Games Go to College

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RATIONALE

I am still wandering in a room where the professor is telling me, "Climb the stairs and start the rodents. Are you not hearing me, Gordon? Climb up and start the rodents, please." I am stuck because I cannot understand what rodents means. I am really tired of hearing the same sentence. (Sibel)

Made by one of the students learning to play *Half-Life* (Sierra Entertainment, 1998), this statement demonstrates the frustrations adults can feel when confronted with the task of mastering a first-person shooter game. In this instance Sibel misunderstood what one of the characters in the game was telling her. He did not say, "start the *rodents*," but rather, "start the *rotors*." As adults, we dismiss and overlook easily some of the literacies children have developed as a function of growing up in the computer age. James Gee (2002) has argued that computer games entail and support at least 36 important principles of learning. In this regard he suggests that computer-game designers might know more about creating conducive learning environments than do educators. Gee argues four main points.

First-person shooter games are part of many children's everyday lives. Over 60% of Americans (over 145 million) play videogames (Jenson, 2002). As such, these games are part of the everyday, real-life literacy practices of most of our students—to say nothing about the part they play in shaping students' conceptions of literacy or what it means to be literate. Further, the videogame market is growing. "More than $6.35 billion worth of computer and videogame software was sold last year; that's expected to increase this year" (Jenson, 2002, p. 23).

First-person shooter games involve semiotic text. Videogames constitute multimodal, semiotically rich texts which are integral to our broadening perspectives of new literacies for our present age. Gunter Kress (2000) has dubbed this "the era of multiliteracies" (p. 153), one characteristic of which, he says, is the proliferation of "multimodal semiotic objects" (p. 160). Said more simply, symbols, images, graphs, diagrams, sounds, music, gestures, and a host of other sign systems often stand beside or in place of print in our modern communication landscape.

First-person shooter games create opportunities for critical thinking. Videogames provide an opportunity for active, critical learning through identity work, thus fostering

students' identities as text participants, text users, code-breakers, and critics (Luke & Freebody, 1997). Gee argues, "If we want to 'break the rules' and read against the grain of the text for purposes of critique, for instance, we have to do so in different ways, usually with some relatively deep knowledge of how to read such texts 'according to the rules'" (2002, p. 24). Knowledge of how to read videogame texts is crucial for literacy professionals wishing to engage students in the critical examination, deconstruction, or reconstructions of such texts.

First-person shooter games are culturally situated texts. Many people justifiably worry about the practices endorsed by first-person shooter games and how these games position people in society. Critics argue that people learn from video games, but what they learn is socially and morally reprehensible. They argue that these texts are violent, ideological, oppositional, and powerfully persuasive, and as such, "are neither culturally neutral nor benign" (Nixon, 1998, p. 20).

While we were interested in recording what participants described as their lived-through experiences in learning to play a first-person shooter game, we were particularly interested in the "cultural models" (Gee, 1990) that adults bring with them when learning. For purposes of this study, cultural models are defined as sets of images, story lines, principles, mental frames, theories, or metaphors brought when "reading" or interpreting a text. One way to think about cultural models is as cultural capital, representing cultural resources used when processing any text.

METHODOLOGY

Players of the Game

Twenty adult literacy workers (16 females; 4 males) who were enrolled in an advanced degree program at a major midwestern university were asked to purchase the computer game *Half-Life* (Sierra Entertainment, 1998) and master playing it as part of a course requirement. Kimberly, one of the participants, described the first-person shooter game *Half-Life* in her final paper:

> The game takes place in the labs of a top government defense agency, and the character, Gordon Freeman, is a new employee who is an engineer. He will be testing some new nuclear device, which goes horrifically wrong, thus setting up the entire plot from there on out. The character is placed in the position of hero, and it is up to him to get to the surface (as the lab is underground) and get help. Meanwhile the government doesn't want it leaked out that there has been a nuclear disaster and so decide to eliminate anyone involved with the project as a cover-up.

Throughout the play of the game the videogame player is the main character, Gordon Freeman, a good-guy scientist caught up in a bad situation. The game involves killing monsters (complete with blood splattering against the screen) and government-hired snipers who attack the main character. Hall (2002) describes *Half-Life* as a runaway

bestseller in the computer game market among adolescents. He attributes the game's success to particular shooter-game characteristics which adolescents find especially appealing: (a) the game is "first-person," meaning the player is the main character; (b) the computer screen serves as eyes, with the bottom of the screen showing the player's weapon as though it were being carried; (c) the main character has freedom of movement (i.e., there is no movement track built into the program); (d) the game is a three-dimensional environment where players can share space; and (e) the game provides a highly complex atmosphere in which many points can be earned.

Data

Participants were asked to keep a double-entry journal as part of their experience, using the first column to record their thought processes while learning to play the game and the second column to record observations they made of someone else learning to play the game, preferably a teenager. At the end of the course, participants were asked to write a three- to four-page paper discussing an interesting experience they had while learning this game. Double-entry journals and end-of-course papers form the corpus of data analyzed and discussed in this paper.

Data Analysis

There were two phases to data reduction and analysis. In phase one all double-entry journals and final papers were transformed into three-line poems for purposes of highlighting idea units. This technique, called poetic analysis, was initially used by Kambler and Fine (2001) for purposes of calling attention to the central idea within running pieces of discourse. Once all double-entry journals and final papers were parsed, each stanza was coded in terms of its theme. Using this technique, 21 reoccurring themes were noted. Table 1 shows the number of participants who mentioned particular themes as well as the number of idea units in the corpus of data that dealt with that theme. Below is a portion of Jane's double-entry journal transformed into three-line poems. A theme is identified below each stanza:

"Mom,
you play it."
"No way," she says.
    theme: Social Learning is Powerful Script

I hate
the image of the guy
with a valve in his eye.
    theme: I Have Moral & Ethical Concerns Script

Feeling guilt
For not playing
and for playing, putting aside more important work.
     theme: Meaningless Child's Play Script

Where are the females?
The trainer appears to be a military Barbie
Has any woman ever been responsible for war?
     theme: Another Male-Dominated Arena Script

Phase two consisted of classifying the themes. After collecting a list of themes, we grouped themes. Our groups consisted of learning-related themes, game-related themes, and cultural-models themes.

FINDINGS

Three Main Groups

Learning-related themes. Not surprisingly, given the nature of the learning task, many of the themes dealt with progress reports, discoveries, and strategies used in learning to play the game. Interestingly, almost everyone began learning enthusiastically, thinking they would master the play of this game in a hands-on fashion by doing rather than by reading or engaging in other intellectual work prior to playing. Yet the majority of players ended up frustrated at some point ($n = 13$) and reported reverting back to learning in a more linear, step-by-step fashion. Nonetheless, the learning strategies participants reported using usually seemed predictable. For example, participants reported reading the manual to learn more about how to the game. Sixty-four percent of the total journal entries (213 idea units out of 334) were about understandable and predictable learning strategies.

Game-related themes. We saw three categories (Escapism, Unexpected Consequences, and Games Like This Make Me Sick) as unexpected by-products of playing the game (10% or 35 idea units). In the Escapism category, participants explained that they had not expected the game to have anything to do with real life and were surprised when it did. In the Unexpected Consequences category, Gloria reported, "I must admit I liked smashing things with the crow bar" (double-entry journal). Gloria's response indicates she was not expecting such enjoyment. Dan compared his attraction to Half-Life to an addiction (double-entry journal). Pam reported the finger movements necessary to make the game work "bugged [her] subconsciously and unconsciously" (final paper). Nearly half the participants ($n = 9$) reported they felt ill after playing the game for 20 minutes or less.

Cultural-models themes. After eliminating themes that dealt with learning and the game itself, what remained was a set of categories that reflected attitudes, dispositions,

and frames that participants brought to the game. These we identified as cultural models and defined as explicit and implicit mental frames held by participants prior to playing the game, as evidenced in their discourse. One way to think about the cultural models we identified is to see them as mental frames that adults hold and which block adults from coming to understand and appreciate the new literacies that today's students bring with them to school.

Cultural Models Brought to Gaming

We found that adult literacy workers brought to the learning of first-person shooter games six cultural models. Each cultural model will be labeled and defined operationally through quotes and paraphrases from participants' journals and papers. By using the participants' words, we hope to lend credence and clarity to each category.

Meaningless child's play. Including these quotations, there were 19 references to this project as meaningless child's play by the adults who participated in the study.

> While I think it is important that educators be knowledgeable about the kinds of computer games students play, this game isn't worth it. It simply takes too long to learn and I don't see any real point to the game. It makes me so mad to spend time on that game when I have other work to do. (Beth, double-entry journal)
> I find I want to do this fast. My life has been so frantic lately. . . . [There are] too many things to think about and [I'm] too tense and there are a hundred other things I need to do. (Gloria, double-entry journal)
> I guess I just don't get the "goal" or outcome if there is no consequence to being unskilled. Part of me cringes as I write this because what if those were my feelings about learners? If they don't have the skills then they have to suffer the consequences—up to and including termination?! (Kim, double-entry journal)

Literacy to me means print literacy. Overall there were 16 instances in which participants equated literacy with print literacy. Often the very metaphors they used were print-based.

> Half-Life sat on the top shelf. I took it and walked away. Unlike my delay at the shelves in the library, I didn't even scan one other title, didn't look them over, or read the back covers. I just needed this one. (Beth, double-entry journal)
> While it might be fun to play first-person shooter games on the computer, this is hardly the stuff of real literacy. Real literacy involves the hard work of reading, writing, and keeping one's nose to the grindstone. While I know we are talking about the "new literacies," it is the old reliable literacies of reading and talk that still carry the day. I just can't see condoning wasting time playing computer games. While I know that children often learn things much more easily than do we adults, "computer game is one thing and literacy is another." (Maria, final paper)
> It was very shocking to see my 10-year-old son doing the game . . . He seemed to do the game instinctively. Though he didn't read the manual, nor did he

exercise in rehearsal stages, he was great in doing it. . . . But still I have
difficulty in coming up with any connection between his accumulated know-
how for successfully doing computer games and his literacy development. To
me it seems that computer game is one thing and literacy is another. (Maria,
final paper)

Though males are stereotyped in our society as never wanting to ask for directions,
eight participants (including men and women) recorded that they purposely went about trying
the game without glancing at the manual. However, once frustrated by this have-a-go strategy,
participants went back to manual hoping to somehow find answer to their questions.

The HEV suit was surrounded by a glass wall and I couldn't penetrate the
wall. I went back to my manual to see how to get into the HEV suit—the
manual was no help. (David, double-entry journal)
After three or four times . . . I was completely lost . . . So I started over by
reading the manual. (Marilyn, double-entry journal)

Lee (double-entry journal) reported being chided by her husband and son for
following a set of printed-out tips ("cheat sheets") she found on a web site rather than
learning through playing the game. Maria (double-entry journal) reported that her son was
irritated by her asking him the same question over and over again. She reported that he
said, "Mom, stop asking me. I don't know how I came to know it. I am just doing. Then
it works."

Contrary to the idea that print is the only valuable medium for literacy, almost the
opposite mindset is needed to master Half-Life. Daniel describes this "new literacy" mindset.

Throughout the game, the player interprets and negotiates the feedback
provided by the computer game. Much of this feedback is similar in nature to
oral or written input—you may hear an explosion or read a sign on a wall or
crate. However, most of the feedback is more abstract and less traditional—a
colored line, a "monster sound," red triangles flashing on the screen, numbers
diminishing. This kind of feedback is initially subject to negotiation, as the
player becomes familiar with the meaning behind the symbols, colors,
numbers or whatever. I remember the first time my screen turned sideways on
me and I couldn't figure out what was happening. I looked at some numbers
(with a red cross beside them) and realized that I was dead and lying on the
ground. (final paper)

Rather than there being a "manual" with "answers," first-person shooter games are
open, sensitive to input.

The unique thing about the computer game is that every response the
player makes provokes a reaction from the computer that leads to a new
response. (Sibel, final paper)

Another male-dominated arena. Surprisingly, many participants came to the game
with assumptions about the male-dominated nature of the game without having had any
real experience playing the games themselves. First-person shooter games were perceived

as combat games and combat games were perceived as the kind of games that appeal to men. Many of these beliefs were supported by experiences once learners began interacting with the game (e.g., the main character was male; the game involved violent combat). In total, 11 idea units addressed the issue of gender-bias in first-person shooter games.

> While the gender difference did not surprise me . . . this game, like everything else, plays to males, which is really offensive when you think about the fact that we are talking about "new literacies" in "new times. . . . There are only two female characters in the entire game." (Kim, double-entry journal and final paper)

> It's no wonder males like this game, it's just crass enough to be at their level. We women don't have killer instincts. We operate with higher cultural standards than graphic violence. (Tasha, final paper)
> There is one small picture on the back of the box that looks like it might be female. The trainer for the Hazard Course appears to be a military Barbie. I wonder if a woman has ever been responsible for a war in real life? (Jane, double-entry journal)

> What really began to frustrate me was that there were only two female characters within the entire game . . . and one of those you never see, you only hear! (Kim, double-entry journal)

Although female participants may have been the first to notice the lack of women characters in the game itself, several of the men were uncomfortable as well. Despite this, almost without exception those who mastered the game were males, and males in the course were seen as the persons to turn to when expert help was needed.

> I know when I was faced with uncertainties [in the game] . . . I wanted desperately to have a classmate (preferably one of the guys . . .) help me though the barrier. (David, double-entry journal)

Everyone has better toys than I. When things did not go the way participants thought they should, participants were prone to blame it on their tools.

> While I know that a poor worker always blames his or her tools, I also know I could master this game if I only had a new computer, a new joystick, a decent manual, a better copy of the game, or all four of these things. I swear it is not me, my 6-year-old computer really does have an inferiority complex. (Dan, double-entry journal)
> I wonder if the graphics on my computer are too old for this program? (Cynthia, double-entry journal)

> I didn't see any icons, or new images that looked like hints. . . . I began wondering if that was the problem with my computer. (Joyce, double-entry journal)

> Would a joystick control be easier to use? (Tasha, double-entry journal)

Given how rapidly the computer world changes, blaming computer equipment might not have been a totally unreasonable hypothesis.

> I was on the train entering the laboratory or mesa when my machine froze like an old record player that got stuck. I had to shut down my entire system just to get my CD out of the computer. (David, double-entry journal)

Many did not realize they had to make some adjustments to their computer in order for the game to play properly.

> Only when my husband who noticed the poor visual quality configured the setting for the audio and visual quality, could I notice that I need to interact with the characters in the game. (Mika, double-entry journal)

I don't like the way I'm being positioned. For many participants, playing this unfamiliar game realigned their status among family members, peers, and even strangers who were sometimes more knowledgeable or interested.

> While playing this game might have some educational merit, I object to the way this game positions me. It puts me, for instance, at the mercy of my husband, my son, my brother-in-law and other males (mostly) to whom I don't wish to be beholding. (Tasha, final paper)

Husbands were reported as particularly problematic.

> Peter (my husband) came in as I was bumping down a hallway and started laughing. I told him to leave. (Lee, double-entry journal)

> Bob plopped down the Half-Life game manual and told me to do my homework. Why am I dreading this? (Tasha, double-entry journal)

There were, however, less likely candidates. For example, where the game was being purchased, other customers were even a source of intimidation.

> With my lack of interest and experience in computer games, buying Half-Life was my first cross-cultural experience. I had no idea what part of the store I would find it in . . . Three or so bagged [sic] pants-ed boys hung around, but I couldn't bring myself to ask them, so, with no clerk in sight, I cruised the store and left. (Beth, double-entry journal)

I have moral & ethical concerns. Many students made quite elaborate and explicit statements about the moral issues the game raised.

> Am I missing the boat—should pop culture be left out of the classroom even if it's stomach churning? Do we allow children to write about what goes on in their lives even if the subject matter is disgusting to us or do we do like Andy's 8th grade language arts teacher and lower their grades for topics that aren't "nice and neat" or topics that we didn't know existed when we were growing up? (Debbie, double-entry journal)

A child proficient in this sort of gaming activity will certainly have acquired considerable skill in accessing information for his or her own success. She will know how to survive the dangers of others; she will know how to manipulate others to orchestrate her own success. She will not have been working toward the preservation of shared goals and values, however. (John, final paper)

It was disturbing to me, as a mother, to hear my two little girls (then, eight and ten years old) shouting, "Wait, 'til I die! Just wait 'til I die!" when I called them for dinner. (Gloria, double-entry journal)

I object to playing and learning this game as it makes me appear as if I am dismissing my parental and professional duties to protect the young. Further, I look immoral, like I don't care what lessons about shooting and killing children are learning by playing computer games of this sort. Put simply, I object to using my money to support companies "that market violence." (Jane, double-entry journal)

Lee reported that her moral crisis started at the cash register when she was in the process of buying the game:

Buying this thing required that I give the cashier my birthdate. I asked her, "Is it that bad?" . . . [I wondered] What would it be like to play it with my 7-year-old son and my 10-year-old daughter? (double-entry journal)

Kimberly reported that the "violence [is] at times disturbing.

As I continue the game I feel more and more desensitized and more engrossed in the game and disconnected from reality." (double-entry journal)

DISCUSSION

While studying participants' cultural models, we found that no one held all six simultaneously. The most cultural models anyone held was four (Daniel, Marilyn, and Jane), with three (Sibel, Lee, Kim, May, Gloria, and Beth) or one (Pam, David, Debbie, Julie, Mika, Maria) being more likely. However, the number of cultural models an individual possesses is hardly the issue.

Theoretically, these results are significant in that they attest to the experiential gap between today's youth and the adult literacy workers who are their teachers or who soon will be in the business of preparing the teachers that will teach them. If identity is formed through everyday literacy, then we as educators should study common literacy events in order to better understand our students and to be able to build curriculum from that point of reference. This is particularly true if we wish to create critically literate individuals for the 21st century.

In practice, cultural models are underlying systems of meaning that operate in a society to position participants in that culture in particular ways (Luke & Freebody, 1997). To assume that first-person shooter games are meaningless child's play is to dismiss the

Table 1
Idea Unit Themes

Themes/categories	Number of participants	Number of idea units
Learning		
Progress report	12	37
Discoveries, insights, & summative statements	17	42
Summary of strategies used	7	12
Let's take this bird by bird	3	4
I'm hooked	9	12
Seeks expert advice	8	13
Adults are not as good at learning as children	3	6
Different drummers	6	16
Self-defeating	3	5
Be strategic	9	25
Frustrated	13	31
Social learning is powerful	5	10
Unexpected by-products		
Unexpected consequences	8	9
Escapism	7	13
Games like this make me sick	9	13
Cultural models		
Meaningless child's play	11	19
Literacy to me means print literacy	11	16
Another male-dominated arena	6	11
Everyone has better toys than I	10	16
I don't like the way I'm positioned	7	18
I have moral & ethical concerns	7	13

Note. Total number of participants = 20. Total number of idea units = 334.

literacies that children and adolescents bring to school. Many educators argue that pop culture and media do more to define what literacy is in our society than do educators and formal instructional programs. To the extent to which this is true, it behooves all of us to become cognizant of the cultural models that we hold and from which we operate.

Today, literacy is more a semiotic event than ever before; not only are there multiple literacies, but literacy comes in bigger, better multimodal packages (Street, 1995). To hold a cultural model that prioritizes print literacy over and above the processing of other semiotic systems seems hopeless. With an expanded definition of literacy comes a much-

needed, expanded potential for communication—one that transcends culture and particular ways of knowing. Yet the issue is not just about which sign systems are involved in communicating, but also how sign systems socially position us among one another. Both males and females playing male-dominated first-person shooter games are provided no counter-narratives, no alternate visions of what is possible. Even new literacies can position women in stereotypical roles.

Though the game seemed to breed stereotypical images of men and women, playing the game did not. In this study women were just as likely as men to lament the inherent inadequacies of their computers. The cultural model, "Everyone has better toys than me," was meant to be reminiscent of a bumper sticker that reads, "The man who dies with the most toys wins!" While this bumper sticker was meant to be funny, it works because it captures men's love of electronic gadgets in our society. Our theme, "Everyone has better toys than me," was indicative of a cross-gender, electronic experience.

Though some experiences created some sense of gender equality, other experiences seemed to make participants feel subservient or oppressed. "I don't like the way I'm being positioned" is probably the most telling category of all. Women in this study avoided the combat game, perhaps in an effort to avoid appearing less able. Sometimes by playing the game, they were immediately positioned as "at the mercy" of their husbands, sons, or boyfriends. Often computer games were read as negative in terms of positioning. Again, given that this is a new literacy, the potential for positive positioning of women needs to be explored and exploited.

Not surprisingly, given the current nature of U.S. society, about 35% of the sample (n = 7) claimed the moral high ground. John, for example, saw first-person shooter games as the nemesis to what quality education ought to involve:

> I... found... the ethos established by the game encouraged a view of education as a process of rote learning and data gathering, in which other people exist primarily... to deposit facts... But [even] the support of others was designed for individualized achievement, not for the promotion of the commonwealth. I am brought back to the disclaimers of the licensing agreement: the makers foreswear any responsibility for "loss of good will" as a result of playing the game. This disavowal betrays a realization that 'collaboration,' 'support,' and 'interactive' work is not the same as conversation and community building. (final paper)

The cultural models we bring to learning new literacies are important not only in terms of how we position ourselves as learners, but also how we socially position ourselves in relationship to the learners we teach. First-person shooter games, situated at the cusp of 21st century literacy, might help us to understand how to keep our curricula current and our teaching relevant. There is some urgency, we believe, in finding ways to talk about the texts and literacies that make up the contemporary world in which today's young people live (Vasquez, 2000). As this study shows, these texts are neither culturally neutral nor benign. They are violent, ideological, oppositional, and powerfully persuasive (Nixon, 1998). As part of the youth culture, they are heavily resourced and marketed. We

believe it is imperative that future literacy educators understand these literacies so as to help young people become more critical users of such texts, gain greater control of more conventional forms of literacy, and see more purpose and relevance to their own lives in their everyday school worlds.

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