Fair play: gender, digital gaming and educational disadvantage

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Abstract

Since the spectacular runaway best-seller, "Barbie Fashion Designer" appeared on the shelves in October 1996, selling a half-million copies in its first two months and vanquishing the slash-and-bash market leaders "Doom," "Quake," "Duke Nukem," and "Mortal Kombat," major corporate e-sponsored research campaigns have been launched to identify the differently gendered play patterns of boys and girls and to discover what girls "like best". This astonishing breakthrough into the previously dormant market for computer-based playware for girls ushered in a retooling of technology – a retooling accomplished, however, by affirming rather than challenging received gender stereotypes that preserve girls' historically assigned locations in the gender order. In the field of education, video games have the capacity to capture and hold the attention of players of many different ages, and to "teach" new players the functions and controls of a new game with far greater alacrity and to greater functional effect than schools teach. This paper examines gender and computer game playing, in particular questions of identity, access and playful engagement with these technologies. Because computer-based media are not only central tools for learning and work, and because games and simulations are increasingly being recruited as educational and instructional genres, it is likewise exceedingly important, from an educational equity standpoint, to examine the ways in which rapidly evolving computer game-based learning initiatives threaten to compound and intensify girls' computer disadvantage, a cumulative dis-entitlement from computer-based educational and occupational opportunities.

1 What real girls play

The video game industry is one of the largest entertainment industries in the world, last year (2003) making more money than the Hollywood film industry,

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$7 billion U.S. (http://theesa.com/pressroom.html [1]). In the field of education, that video games have the capacity to capture and hold the attention of players of many different ages, and to "teach" new players the functions and controls of a new game with far greater alacrity, and to greater functional effect than schools teach comparably, and even far less complex, skills and knowledge, has not gone un-noticed. Working as we both do in faculties of education, our own studies of gender and computer game playing, examine questions of identity, access, and playful engagement with these technologies from the following premises:

(1) As Henry Jenkins and others have argued for some time, far more boys than girls play computer/video games, and boys' early and sustained exposure to and experience with gaming places them at an advantage with respect to computer competence and confidence when they enter and as they continue their schooling (Jenkins [2], Kafai [3, 4]).

(2) There is a tendency in the literature on girls/women and computer game playing to construct their gaming choices and play styles as distinctly, and essentially "female," characterizing those who choose to play as "liking collaboration," "non-violent" and "easy" computer games (Brunner et al. [5], Glos and Goldin [6], Groppe [7], Orr Vered [8], Schott and Horrell [9], Subrahmanyam and Greenfield [10]). Its worth noticing that the stranglehold these kinds of stereotypical and essentializing identifications and characterizations have had and continue to have on received wisdom, both popular and academic about gender and play interests, styles and preferences by no means originates with video game playing, but is indigenous to the culture of computing more generally, and that this gendered computer culture always already mediates girls' interactions with those technologies, among which game playing is only the most recent subject of attention.

Because computer-based media are now central tools for learning and work, and because games and simulations are increasingly being recruited as educational and instructional genres, it is likewise exceedingly important, from an educational equity standpoint to examine the ways in which rapidly evolving computer **game**-based learning initiatives threaten to compound and intensify girls' computer disadvantage, a cumulative disentitlement from computer-based educational and occupational opportunities. In the U.S., for example, Henry Jenkins and Kurt Squire received $25 million in funding for a collaboration with Microsoft to design playful educational video games. Initially titled the "Games to Teach" project (http://www.educationarcade.org/gtt/ [11]), it has developed in the recent year into the "Education Arcade" (http://www.educationarcade.org/ [12]) and still working on creating discipline- driven computer games (Atwood [13]). In Canada, we are part of a project called SAGE ("Simulations and Advanced Gaming Environments for Education) which just received $3 million to study and build computer games for learning. In educational settings, the tendency has been to presume that technologies are "neutral" tools deployed by educators for ameliorative ends. Video and computer games, however, are far

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from neutral and we have seen little evidence of new educational gaming work being informed by attention to girls' perspectives on gaming, their participation in and exclusion from game cultures, and an absence of theoretically adequate and empirically grounded studies of the kinds of games, characters, and overall approaches to 'play' that might better engage and involve girls. A case in point is Jim Gee's recent book on learning in video games, in which he summarily dismisses "gender" from his own consideration of video games and learning (Gee [14]).

This dismissal is typically justified by reference to the recent proliferation of data from large-scale quantative research "studies" reporting that women are playing and buying at least as many computer and video games as men are, and in some cases, reporting that they play *more* often, not less. A recent study by the Pew Internet and American Life Project, for instance reported that 57 percent of female U.S. teenagers play on line (Lenhart et al. [15]), while another study on college gaming finds that "Surprising, slightly more women than men reported playing computer and online games (approximately 60% women compared to 40% men), with about the same number of men and women playing *video* games" (Jones [16]). This study goes on to explain that, "Part of the reason more women than men play computer games may be that video games are generally focused on action and adventure (often violent in nature), while computer games are typically traditional games (e.g. solitaire, board games)." In both of these studies, and indeed in all of the studies we've examined thus far, statistics like these are used to dismiss the question of gender and computer game playing from the outset (it is no longer a "problem" since so many more women are indicating that they are playing). Once gender has been excised as statistically in-significant, there is typically no further gender-based dis-aggregation of data, even when it might seem that statistically relevant distinctions should be made with respect to game preferences and time on the game (c.f. http://www.media-awareness.ca/english/resources/research_documents/studies/video_games/vgc_preferences.cfm [17]), silencing in turn any follow-up research questions about whether and what women/girls are ***actually*** playing, and whether or how their engagement with game play is actually playful at all.

In the initial empirical work that we present here, we find *no reason to believe*, and in fact, *many reasons to disbelieve* the ways in which these large studies are reporting on game play, and good reasons for concern about what of significance is being actively obscured by them.

This process is not without subtlety. A recent study on college student's game play states, for example:

> "Male and female online gamers prefer different types of games, with female gamers preferring quiz, trivia and contest games, while male gamers select action games as their favorite type of online game."

A careful analysis of the kinds of discursive constructions of women as "gamers" illustrates how studies are creatively manufacturing "equal numbers" in order to dismiss gender as a relevant consideration for video game markets. Significant in this case is a slippery discursive shift which constructs women

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who play card games as "female gamers". How is playing card games or online board games equivalent to playing a role playing game or first person shooting game? What is accomplished by naming women who play card games or board games on line as "gamers"--- this rhetorical sleight of hand makes possible a significant next move: to disregard gender differences and compile aggregative data on game players as a homogeneous group. And this, indeed, is what typically follows for this same study goes on to report that:

> "People who play online games spend an average of 3 hours per week playing games and an average of 5.4 hours per week playing off line games on their PCs."

With the earlier discursive shift having effectively masked gender, it now becomes possible to refer research findings to "people", instead of to men vs. women) precisely at the points where such a distinction might matter most, for example, in making it evident that, since far more women than men play online card games of 20 minutes or less duration, and far more men play computer and video games which demand upwards of 40 hours to complete, men can be shown in these same data to be playing nearly twice as long as women.

Part of what this kind of reporting is disguising then, is precisely how pervasively video and computer game playing is still the realm of men and boys. Meanwhile, notions of "progress" in the area of gender and technology are continually being bolstered up by a tendency to seek out narratives of redemption in the putting forward of exceptional cases. The BBC, for instance, recently reported on young women gamers playing "Counterstrike." The interviewees in the piece noted that 99% of the people who play Counterstrike are male, and that they created a community to play together because "females that do come into this world feel overpowered or that they are not welcomed. If people just opened their minds and didn't see us as being male or female, it would be much better" (Hermida [18]). What was intriguing about the piece was that women did not compete directly with men in a Counterstrike competition *and* that this fact was an especially "hot topic" for the discussion which is posted following the article.

Moreover, while much has been made in recent years of the fact that computer games have generated more options for female characters and their development, including the much written about success of Lara Croft or of the central role of the female character of Samus in Metroid Prime, it remains the case that female characters account for, according to one source, approximately 16% of available game characters, almost all of whom are highly sexualized. All of this matters greatly when trying to get an accurate picture of what "real girls play".

What video/computer games ***do*** real girls play? Who do they play with? How do they play? And how is it that they themselves are constructing their own game play as different and/or the same as boys/men who play games?

1.1 Solitaire

In our initial talks with girls and young women on the subject of their video game play, we found that besides the usual recitation of the video games and

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types of games that they reported playing, (interesting in itself for their remarkable but typically un-remarked on inability even to correctly **name** the games they claim to have played), their own game play was also mediated by whether or not they played alone, who they played against (if anyone), and whether or not they enjoyed competition or considered themselves to be competitive. We found that girls' construction of what they played and for what reasons varied somewhat from individual to individual, but that for nearly all of our pilot subjects (36 in total), if they *did* play video games, they most typically played card games, tetris-like games, gender-appropriate games (like "Sabrina the teenage witch") and online but otherwise traditional board games ***on their own***. In that case, of course, questions of competition and competitiveness can scarcely arise.

Ages of participants in the pilot study ranged from 12-13 and 22-23, with one exception, a woman in her late thirties.

None of the boys reported playing with girls: all reported playing with other boys, and yet **all** of the girls reported playing with boys and only infrequently, with other girls. When girls and young women reported playing games which were decidedly not gender appropriate (like Halo, Vice City, or Diablo II), they *always* reported playing with a male player. While this is just an initial pilot of what will be a much larger study, what we think might be highly significant is whether and how for most women, transgressing gender 'norms' in relation to playing games, occurs most frequently when it is legitimated by male relations (boyfriends, cousins, brothers and fathers) and therefore does not transgress gender stereotypes nor jeopardize a normalized, stereotypical feminine identity which is clearly outside of the masculine culture of video game playing.

Perhaps one reason for this is, again, the masculine culture of computing more generally which positions women and girls as less competent and/or confident in relation to computers. Throughout our interviews, girls and women characterized their own game play as being inadequate and/or less competitive for reasons which make little or no sense in relation to their own lives and experience. One young woman claims that she doesn't play video games anymore because the controls "got too complicated", another claims that her "fingers are too stubby" to work the controls properly to navigate RPG games, and yet another, herself an athlete in a sport requiring exceptional hand-eye coordination, claims that she lacks the hand-eye coordination required for competitive game play. In our previous work on gender and technology we found that young women constructed similar excuses as to why the boys in their classroom tended always to monopolize the best machines – as one young woman put it, "girls have weaker knees" so they couldn't compete with the boys who could "run faster" to get there first (Jenson et al. [19]). These kinds of responses, a species of what we call "magical realism", indicate to us that when girls and women see themselves as competing directly with their masculine counter-parts they tend to side-step the possibility of such gender-inappropriate engagement by discounting themselves as equal-opportunity competitors.

The one and only genre of game which both the young women and girls we interviewed indicated that they played generically was racing games. Racing

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games are in an obvious way highly accessible – they all operate on the same general premise, maneuvering an object in a limited space, most typically for a limited amount of time, with simple, familiar and easily intuited controls (which can get be used more complexly but don't have to be) and they most typically (with multiple controllers) can be played with other people. Racing games, uniquely, offer a ubiquitous baseline understanding of 'how to play the game' and while the story line, characters, vehicles and playability might alter, the premise remains the same – driving and/or racing.

One final noteworthy point is that there is a significant generation gap between the girls and young women we interviewed – because the women in their 20's did not, for the most part, currently play video games, their naming and experience of those games was limited to their early preteen and early teenage years. Most young women, for example, indicated that they stopped playing video games around the age of 14 and have not played since and their game playing preferences indicate that. Many are reporting that, unlike boys who play "for fun", girls who continue to play beyond adolescence aren't really, by their own accounts, "playing" at all, they are "de-stressing", relaxing, or passing the time when they are bored---which is surely a very different, and significantly different thing from our invisibly but deeply gendered conceptions of "play". Equally significantly, the games girls report playing or having played are those bundled with the consoles they purchased (e.g. "Duck Hunt"), or else, like Tetris and Solitaire, those readily available free of charge online. Economics intersects here in all-too- familiar ways with gender, and we see that where women *do* purchase games, they do so for their sons, their brothers or their boyfriends. Their rights to and control over their own leisure time are slight relative to their male counterparts, whether men or boys. Finally, we see in subtle and not so subtle ways how girls who in mixed company do not promptly disqualify themselves as credible gamers are invariably ridiculed and their game interests and capabilities undermined and diminished by the boys in whose presence such dangerously inappropriate desires and capabilities are voiced, indicating that it might matter enormously to the validity of game research data in what context and by whom women and girls are asked to speak about their gaming interests, desires and experiences, a point succinctly summed up for us by one young man who explained:

> "If a guy asks another guy, " do you play video games?" he'll pretty much always say yes, because guys know video games are about competing with other guys, and about winning. But if a girl asks a guy if he plays, he'll say no, so she doesn't think he's a social misfit who only likes to stare at a computer screen."

This simple and obvious point about the critical importance of addressivity in computer game research, about who asks what, in what contexts, and for what purposes, seems invariably to be overlooked in both qualitative and quantitative studies of gaming and play. In these and many more respects, we argue, its time for game research to "get real". So what about the girls? What, and how, do "real girls" play?

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