

Bringing gaming to the disabled

October 22 2009, By Steve Steinberg

Ironically, it was located in one of the least-accessible areas of the Games for Health conference held a few months ago in Boston. Up a set of stairs and around a corner from the large conference halls and breakout rooms was the AbleGamers Accessibility Arcade.

Here, many in the gaming community got a chance to see -- and to experience -- what gaming is like for those with disabilities. As a game journalist, I can't think how many times I've trashed on a game's controller scheme for being illogical, unintuitive or just plain bad. But as lousy as those controller setups were, they were at least playable.

To a huge number of gamers and would-be gamers, though, even the most sensible and well-laid-out controller scheme is unplayable. For them, accessibility and interface issues make gaming at best an incomplete experience and at worst a total impossibility.

"The number of disabled people in this country is staggering," says Mark Barlet, a disabled vet and the founder of the AbleGamers Foundation (ablegamers.com), a non-profit advocacy group for the disabled. "You're talking about 15.1 percent of the population that is considered disabled."

You'd think that a group that numbers in the millions would be an attractive one for first- and third-party publishers, but while the total number of disabled folks is large, the group is segmented in such a way that makes it less of a financial plum to [game makers](#). Disabilities can range from vision and hearing issues to physical issues that can be both mild and profound. To deal with all of the accessibility issues raised by

such a diverse group is more than most developers are willing to do.

One way that disabled gamers are able to do their fragging, racing and leveling up is through modded or hacked controllers. I had previously thought that the toughest thing I'd done as a gamer was to play through the Dreamcast version of "SoulCalibur" using the fishing-rod peripheral that came with my Japanese version of "Sega Bass Fishing."

That, though, was child's play next to trying to Wii my way through an air hockey game using a Wii Remote velcroed to the top of a hat. For those with limited use of their arms, though, that's the only way the game can be played.

Even more humbling was winding through the tracks of "Forza Motorsport" while controlling my car with a device I moved with my chin. I had the "luxury" of using foot pedals, but for those without the use of their arms or legs, speed would be controlled with a sip-and-puff device that would translate their exhaling and inhaling into accelerating and braking.

But just because these means of playing exist, it doesn't mean that they're finding their way into the homes of the disabled. And, again, it boils down to money. On the PC-gaming front, things are a little friendlier to the disabled gamer. "PC gaming is so much easier to deal with, because the USB port has allowed anyone with an idea to make some kind of human-interface device," Barlet says.

Console gamers aren't as lucky.

"The companies that make the consoles make a lot of profit by selling you controllers," Barlet says. "And because they're making a lot of money on these controllers, they're very proprietary about how they interact with the box. As a result, the entry point for making a custom

controller is anywhere from \$25,000 on up to \$50,000 or \$55,000 for an Xbox controller."

So, yes, a company could theoretically create a custom controller that would allow a person who, for example, only had the use of one hand to play "Halo"; but because of licensing fees, the cost of each controller would probably be price-prohibitive.

The AbleGamers Foundation does more than just point out the plight of the disabled gamer. It's also been instrumental in getting developers to make changes in existing code to make games more accessible. One of its biggest successes was with EA and Mythic's "Warhammer Online."

"When that game came out," Barlet says, "it was almost a perfectly accessible game." The only problem was that it wouldn't recognize Windows' on-screen keyboard. For those who can't use a traditional keyboard, an on-screen mouse-and-click keyboard is the only way to input letters.

"We contacted Mythic. It took some pushing to get to the right people, but Mythic listened to our problems. They actually invited me into the studio, showed me the fix, and said, 'Is this what you're looking for?' When the next patch came out, the on-screen keyboard was fixed."

And, while color blindness isn't officially considered a disability, Barlet and crew have also been vigilant in helping this not-so-small minority in their gaming. Studies put the incidence of colorblindness at between 5 and 8 percent for men, and about half-a-percent for women. That's a whole mess of people. The majority of these are situations where the person has trouble distinguishing between red and green.

"'EverQuest II' had a huge colorblind issue when it first released," according to Barlet. "If you were colorblind, 'EverQuest II' would kill

you." Thanks to Barlet's persistence, an early patch made the game more accessible to the colorblind.

The foundation's work in this area is far from done. Despite the size of the colorblind population, developers continue to crank out games in which being able to tell your reds from your greens is vital to gameplay. The latest "World of Warcraft" killer, "Aion," has an on-screen mini-map that indicates your enemies in red and your allies in green-blue.

What the foundation is really looking for is more public awareness of what it's doing. "The disability club is easy to join, but hard to get out of," says Steve Spohn, the associate editor of the foundation's Web site and a muscular dystrophy sufferer. "You never know when you're going to get invited, because it's so easy to have an accident or a disease. And when you need advocates for those with disabilities, you're glad they're there. When you don't need them, you're not even sure that they're there. And that's what we're fighting."

This really only scratches the surface of what Barlet, Spohn and the rest of the folks at the AbleGamers Foundation are about. I don't mean to get preachy or goofy, but the next time you sit down to play a [game](#), turn off the volume, mess around with the color settings on your television or try to use your DualShock with only one hand. For a lot of gamers, that's what a typical gaming experience is like. And who knows? The next Night Elf that saves your virtual butt from an angry mob in Azeroth may be doing it from a wheelchair and using a one-handed keyboard.

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