

Games at home: inclusion & special needs

"I had a student on the autistic spectrum [who] really struggled ... you put him in front of that video game and ... he became the person everybody wanted to work with... he became the superhero in that classroom."- Quote from interview participant. EE01

Keywords: Accessibility, Differently Abled, Diversity, Ethics and Games, Gender, Inclusion, Many diverse games, Special Needs

Who will find this scenario particularly interesting? Developers, Policy makers, Researchers, Young players and their families

Description



Considering the immensity and cultural relevance of videogames, the area of inclusion drew relatively little attention from the stakeholders that Gaming Horizons engaged. The exception is in education, an area in which inclusion is quite keenly felt.

A number of teachers see digital gaming as a chance to reach and engage learners with Special Education Needs (SEN). They also consider it a way towards integrating those students better, and thus make classes more inclusive, especially where there are marked differences in students' cognitive skills. At the same time, interviewees cautioned that care is required to harness gaming successfully for inclusive purposes. When it comes to players and gamers with sensory impairments, the question of game accessibility becomes critical. This is "a big tent issue" affecting millions now and millions more as playing populations age. While digital games certainly pose a number of barriers, significant gains can be made for all – as some Gaming Horizons participants pointed out- from greater attention to the needs of the full user spectrum. More awareness of design-for-all principles could lessen barriers and in doing so improve everyone's experience, just like with our streets and buildings. Indeed, advocates point to how type, telephony and email – the backbone of modern communications – emerged from the efforts of inventors to tackle special needs. Certainly, with video games and the various technology platforms they employ, the risk of exacerbating the digital divide is ever present. In this sense, accessibility is not just a matter of interactivity levels but about making sure everyone gets a reasonable chance to play.



Of course special needs is just one facet of inclusion in games, an issue that touches on many questions, like gender bias, stereotyped representation of identities, the accommodation of minorities etc. These are tackled more specifically in other scenarios.

Meet Keisha (aged 16), Marco (aged 13), and the grown-ups: Kerry and Keisha's Dad







Keisha's a gamer. When she was younger, other kids would say she was 'nerdy' like some of the boys, but she doesn't get that much anymore. Just about everyone she knows plays some sort of game, if only on the bus or the train. Keisha herself mostly goes for fantasy MMOs – her current favourite is Aion. When she started getting into games, she wanted to find other girls like herself online. The hardcore gamers she came across on the forum boards and chats then could be pretty mean, especially to girls. But she didn't let it get to her and anyway it's not so big a problem now – and you can report anyone who gets really out of line.

A while back, Keisha and her dad relocated, moving in with her dad's partner Kerry, who has a son called Marco. Marco's three years younger than Keisha and he's the only blind person Keisha's ever known. The two of them are very different in character and tastes, but as it happens they both share a long-held passion for video games.

Marco has always loved mysteries and adventures. That's what started him off playing story-based computer games, like A Dark Room, using Text To Speech (TTS) applications. Then he started playing Terraformers, an old hybrid audio and video game, and he was totally hooked. It's remained one of his all-time favourites. He played it on a PC at home that's connected to an audio system which reproduces 3D positional sound; the position and direction of the sounds, together with sound qualities and audio cues, form a sort of 3D audio gamespace that Marco navigates and interacts in.

When Keisha moved in, Marco got her to try a few audio games. She found them kind of intriguing but none of them really grabbed her enough to play them right through. Then Kerry got her this artistic sort of game called Beyond Eyes, which gives you an idea about what it's like to be blind. It wasn't much like anything Keisha had played before but she was really glad she'd had the chance to try it. And playing together with Dad was special too.



For a while now Marco's been having a go at FPS and combat games like Quake and Bayonetta 2 using the 3D positional audio. Keisha's amazed at how well he plays using sound only; she's tried and found it really hard. She says maybe one day Marco might get as good as the youtubers he's started following, like True Blind, Sightless Kombat and the others. Marco's hoping that one day he'll get to play games that go ultra mega popular, like World of Warcraft. His dad thinks he should try joining the AbleGamers Player Panel to become a game accessibility tester and Marco's giving it some thought.

Kerry's just bought a cool party game suite called 1-2 Switch for the new Nintendo Switch console they got. It's a bit like Wii Sports but with some funny touch and sound based mini games that you don't actually need to be sighted to play. Keisha and Marco have a real laugh playing together (well, against each other) and they've started thinking of ways you could use the touch and sound combination in other sorts of games. Keisha might even make a study project out of it.

In a nutshell

Due recognition of design-for-all principles, and sincere efforts to fulfil them, can reap concrete gains for everyone: for players who, for some reason, are underserved or excluded; for player-consumers desiring more immersive and diverse game experiences; for the game industry growing markets. Here, video games – considered by many as a pariah – could be seen instead as a standard-bearer.

Converting a perceived win-win to an actual won-won demands concerted – and orchestrated – efforts across the board, especially from policy makers and the game industry. Game on.

Resources
Accessibility
 Game Accessibility (International Game Developers Association) Microsoft's Gaming for Everyone
Advocacy initiatives
AbleGamers
Includification
Specialeffect
One switch games
Unstoppable gamer
About blind gamers
Steve Saylor
Terry Garrett (True Blind)
Sightless Kombat
Games and Media
Audio Game Hub
Audiogames.net
• 1-2 switch
• Everything
 Beyond Eyes (video below):

 UA-GAMES (Universally Accessible Games) – http://www.ics.forth.gr/hci/uagames/index_main.php?l=e&c=555 Human Computer Interaction (HCI) Laboratory, Foundation for Research and Technology-Hellas (FORTH), Crete, Greece. Thanks to Jeffrey Earp for the suggestion! https://about.me/jeffreyearp

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Partners



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