Content Research Statement

Kids affected by autism typically have three major areas of difficulty: communication and language, social skills and repetitive and inflexible behaviors. In the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) — the “bible” of psychiatric diagnosis — “autism” is refined into three levels of “Autism Spectrum Disorders”:

- Level 1 includes the highest-functioning kids, those who need some support but are generally able to function in regular school settings.
- Levels 2 and 3 include kids who require substantial support and often display “marked to severe deficits” in social, communication and behavioral control skills.

Technologies and games can be helpful for kids on all three levels, but those with more severe forms of Autism Spectrum Disorders usually benefit most from specialty technologies that address their severe limitations in developmental skills. Level 1 kids, however, can readily benefit from popular games and technologies that are being used by their typically developing peers.

Video games can be useful for practicing social skills. For these Level 1 kids, playing popular video games and using technology can be very useful for practicing and improving social skills. While some educators have argued that video games and technology are isolating, the fact is that more than 70 percent of all video game play and media use is now social. Though kids affected by autism tend toward less social technology use — using smartphones, for example, more for game play and less for texting and social media than their typically developing peers — it is up to parents and educators to ensure that technology use is predominantly social and not isolating.

Video games provide kids affected by autism with an opportunity for joint attention and shared interests with their peers. Studies suggest that kids with autism may have somewhat

unique and unusual interest in these games that differs from their peers but nonetheless gives them a basis for shared focus on an activity. Kids affected by autism may be unaware of social cues and conventions, yet when they play massively multiplayer online games (MMOs) like Roblox, Minecraft, or World of Warcraft, they need to learn the social customs of the game world. They are expected to communicate with other players of the game, be it small talk or strategy.

Kids with autism are often inflexible and rigid in their problem-solving, but repetitive and inflexible behaviors are a formula for failure in many popular video games. What works in the primary levels of a game or with the first few enemies encountered is unlikely to be the solution for the next challenges. Video games by their very nature require flexibility, learning from mistakes and adapting to new challenges and demands. The motivation stimulated by game play and the willingness to persist in the face of failure help develop important problem-solving skills.

Handling frustration, shifting routines and getting stuck are core elements of most popular video games, making them a safe place for children with autism to expand their capacities to practice transition skills, become comfortable in learning from mistakes, and to expand their range of activities. It is necessary that parents and educators help kids on the autism spectrum make connections between their game-based problem solving and real world skills.

Children affected by autism may also experience difficulties with fine and gross motor coordination. Video games require players to possess varying degrees of fine motor skills in order to use a mouse and keyboard, controller or touch screen. Active games that rely upon motion control peripherals like Microsoft’s Xbox Kinect and Nintendo’s Wii consoles can also provide gross motor control practice.

Another straightforward and compelling reason to use video games and technology to reach children with autism has been identified by Christina Whalen. Whalen and her colleagues, who developed the computer game TeachTown to help children with autism improve social, emotional, academic and adaptive skills, found that using a computer game increased motivation and attention when compared with traditional methods of teaching children with autism.

Whalen's observations are consistent with what others in the field have reported: that video-game-like tools are effective with children on the spectrum because they are consistent and predictable, may involve limited social factors, and allow children to take control and determine the pace of the activity. Many kids with autism spectrum disorders display strengths with visual spatial skills that make video game play an area of skill.

While it is not unreasonable to be cautious about the possibility of inattention, behavioral issues and even addiction, there are simple strategies to help children with autism get the most out of video games and technology without creating more problems at home and at school. The digital world offers very powerful tools for teaching problem-solving, social skills, flexibility in the face of new situations, and even developing motor skills. Raising children on the spectrum can be a challenge, but apps, games and devices can make reaching and teaching children on the autism spectrum easier.

Sources: https://tocaboca.com/magazine/autism-video-games/