Assistive Technology for Entertainment and Leisure

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Why is Assistive Technology for Entertainment and Leisure Important?

Is this an "inclusive playground?"

Playground Equipment

https://youtu.be/GCV1bt6C6HI?t=21s

AT for playing games

AT for playing videogames

- ▶ large switches and joysticks:
  https://youtu.be/QOhJmREwLSo?t=20s

- ▶ chin joystick + voice control:
  https://youtu.be/30QGu0-uctQ?t=58s

- ▶ controller for one hand:

- ▶ Tetris by humming:
  https://www.youtube.com/watch?v=Yx-M1rcsM_s

Accessibility features in video games

- ▶ subtitles
- ▶ selectable colorblindness-friendly color schemes
- ▶ ability to disable effects like screen shake, flicker, etc.
- ▶ remappable key bindings
- ▶ independent volume settings for dialogue, sound effects, music
- ▶ redundancy in information presentation
- ▶ others?

Discussion questions

- ▶ Should every game be accessible to every potential player?
- ▶ How much responsibility for accessability should fall on features within games? (vs assistive technology used by the player to interact with the game?)
- ▶ Should we prefer strategies to make mainstream games accessible over games designed specifically to be accessible to a certain group? (For example, one-switch games or audio-only games.)
- ▶ I could find almost no products addressing videogame accessibility for players with cognitive impairments (with the exception of educational titles). What types of assistive technology and/or game design strategies would be helpful for this population?

- ▶ In research projects, reduction is often used as a strategy for making games accessible to users with motor impairments. This usually means reducing the complexity of gameplay or automating some aspects of gameplay. Is reduction a good/valid strategy for games accessibility?

- ▶ Is including an easy mode a valid strategy for games accessibility?

- ▶ Some computer games use programmatic strategies to block input that does not come from a physical mouse or keyboard. This is intended to prevent cheating, but it also prevents the use of many assistive technologies. Is this ethical?