Accessibility in Game-based Assessments

View our guidelines here

Designing your videogame assessment so it is:
ACCESSIBLE FOR ALL STUDENTS

SENSORY WARNINGS
Flashing lights can easily trigger seizures. Provide a sensory warning or a grading scale so players know what to expect.

SIMPLE CONTROLS
Create controls that allow for easy, simple movement on the keyboard/controller.

ADAPTABLE GRAPHICS
Screens come in all shapes and sizes – make sure your game can fit effectively on them.

STAY FOCUSED
Keep the learning target at the heart of the game!

GIVE OPTIONS
Allow features to be turned on or off depending on the player's needs.

KEEP LEARNING!
Explore other sources and talk to your students/players

For more information, scan this QR code or click here

SENSORY WARNINGS

Flashing lights can easily trigger seizures. Provide a sensory warning or a grading scale so players know what to expect.

All students can have different reactions to flashing lights in video games- some minor, some major. Prepare for both!

Guidelines:

- Provide an explicitly stated sensory warning before your game begins
- Be mindful of flashing lights in game design - or create a graded scale
  - Green (or ☀) = no risk
  - Yellow (or ☀☀) = mild risk
  - Red (or ☀☀☀) = high risk

(Salvador-Ullauri et al., 2020)

SIMPLE CONTROLS
Create controls that allow for easy, simple movement on the keyboard/controller.

Does the player have to press down with 2 fingers and stretch their hand across the keyboard to do something? This could be challenging for students with varying degrees of fine motor skills.

Guidelines:

- Keep controls simple, easy to remember, and allow time for stretching & rest.
- If needed, give a warning if complex controls are absolutely necessary.

(Chiasson et al., 2020)

ADAPTABLE GRAPHICS

Screens come in all shapes and sizes – make sure your game can fit effectively on them.

There are varying degrees to accommodations for students with visual impairments. Some students require large screens or devices able to zoom in to a large degree.

Guidelines:

- Keep this in mind when choosing font size, font style, and graphic quality
- Test game out with zooming to avoid glitches

(Chiasson et al., 2020)

STAY FOCUSED

Keep the learning target at the heart of the game!

While games-based assessments can be engaging and fun for students, don't forget the main goal: helping students learn and giving teachers assessment data.

Guidelines:

- Always keep learning target in mind
- If a game feature dulls or masks an important assessment piece, skip it
- Don't sacrifice an opportunity for learning because of a game feature

(Zapata-Rivera, D., & Bauer, M., 2012)

GIVE OPTIONS

Allow features to be turned on or off depending on the player's needs.

Allow your students to decide what is best for them. Give them options for features and/or modifications based on what works best for them. This way they are in control of their experience.

Guidelines:

- Allow features and/or modifications to be turned on or off.
- Make sure students still get a strong experience even without certain features.

Spiel and Gerling (2021) did a systematic review on computer game design and neurodiversity, concluding that neurodivergent populations are typically excluded from the design process. Include your students in the game design!

Check out these and other sources to learn more!

[The International Game Developers Association (IGDA)](#)

[AbleGamers.org](#)

[Universal Design for Learning (UDL)](#)

References

Chiasson, A., Thompson, C., Court, F., Hamilton, I., Berg, J., Voelker, T., (2020). *Game Accessibility Posters*. IGDA-gasig. https://igda-gasig.org/how/game-accessibility-posters/

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