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Video-Based Educational Module to Support Adaptive Gaming Services

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Community Mentor: Clayton Guffey, MSW, CRC, ATP, CEAC

BACKGROUND

20% of gamers have a disability that affects their ability to game³.

Benefits of gaming:

- Social engagement
- Enablement²
- Independence¹

Accessible gaming:

- Adaptive controllers
- Accessibility settings
- Modified standard controllers



Barriers to access:

- High cost of equipment⁵
- Limited number of specialists with experience in gaming
- Complexity of learning to use the equipment
- Minimal ongoing support with the equipment⁴

Abandonment:

- Likelihood increases with inadequate training, poor person-technology fit, or lack of ongoing support

To ensure individuals with disabilities are able to game, resources to improve access to adaptive technology and reduce abandonment are needed.

PROJECT OBJECTIVES

1. Improve access to adaptive video gaming technology
2. Mitigate abandonment of the technology

METHODS

Over 14 weeks, the student designed and created an educational video-based module in collaboration with AzTAP. The process included:

- Conducting research on current accessible gaming technology
- Identifying video topics that would be useful to the community
- Writing the script for each video
- Editing and adding subtitles

VIDEO TOPICS

1. Technology Overview
2. Quadstick Basics
3. One-handed Evil Controllers
4. Xbox Adaptive Controller
5. HORI Controllers
6. Adapters
7. 3D Printed Mods
8. Ergonomic Considerations
9. Benefits of Gaming
10. Gaming Support at AzTAP

PROJECT OUTCOME

To evaluate the module's effectiveness in meeting the objectives, four AzTAP staff members watched the complete module and responded to a qualitative follow-up questionnaire comprised of six questions:

1. Do you feel these videos would assist you while providing adaptive gaming services at AzTAP? Why or why not?
2. Do you feel that AzTAP's gaming clients would benefit from these videos? Why or why not?
3. Are there topics that were not discussed or covered in the videos that you feel are necessary to include?
4. After watching these videos, do you feel that gaming services are important for AT resource centers to offer?
5. What effect, if any, do you feel these videos could have on device abandonment?
6. After watching these videos, do you feel more confident in providing gaming services for AzTAP clients?

RESULTS

| THEME | SURVEY RESPONSES |
|--|--|
| Support for Providers | <p>"They will be great reference and starting point for us to give to persons or families that are exploring adaptive gaming options."</p> <p>"...they can provide a good foundation for us to get started with a person or family."</p> <p>"Even though this can be overwhelming, the videos show you step by step how to do a set up. This information will be helpful to those demonstrating it"</p> |
| Support for Clients | <p>"They are also done in a way that would probably put the clients at ease about gaming and using our services."</p> <p>"So often persons do not know the questions to ask or the things to say so these video's will help them develop, refine, and direct their requests. They also give hope, give persons and families starting information on options they may not have known even existed. They may also provide hope to persons and families that adapted gaming is an option for them or their family member."</p> |
| Reducing Abandonment | <p>"If you do not use it, you lose it and that is the main thing about having these videos available."</p> <p>"A more informed person or family will hopefully be more engaged and maybe empowered to make a better decision on what they get. They will be more prepared for the complexities and/or the things they will need to consider."</p> |
| Ongoing Resource | <p>"These videos are an ongoing resource for people who are into gaming. So, if they at some point lose their settings or configurations, it will be easier to come back to the videos to figure it out again or family members to help them. It will also help us at the representatives of the assistive technology field to go back to those videos to refresh the information in our heads."</p> <p>"We will have the videos to use a reference and use them to ensure we are doing the set up correctly."</p> |
| Importance of Adaptive Gaming Services | <p>"Often, children or young adults with complex disabilities are excluded from participation in regular recreational activities or the way they participate is dramatically altered without the same real experience as their peers."</p> <p>"They can with the right equipment and game conceivable play at or near the same level as their peers. Gaming may be the ideal recreational activity for children and young adults with disabilities. This is something that AT centers should be offering and promoting."</p> |

DISCUSSION

Goal 1: Improve access to adaptive gaming

According to survey responses, the goal of improved access seems to have been achieved through:

- Helping AT providers feel more confident with providing gaming services
- Helping clients learn how to use complex and intimidating equipment
- Supporting clients with knowing what to ask for from their AT provider

Goal 2: Mitigating abandonment

The module may be able to mitigate abandonment through:

- Fostering a stronger person-technology fit
- Providing an ongoing resource
- Helping clients be more engaged in the service delivery process

LIMITATION

Inability to see clients during the COVID-19 pandemic limited the ability to gain the client perspective on the videos and their effectiveness as an educational tool

IMPLICATIONS

- Support other AT resource centers and therapists in providing adaptive gaming services
- Appeal to gaming tech designers to create more inclusive equipment, and to funding agencies to provide resources for the equipment

FUTURE CONSIDERATIONS

- More video topics:
 - Gaming for individuals with total vision blindness
 - Funding resources for adaptive gaming equipment
- Evaluate the effectiveness of the module from the client's perspective

ACKNOWLEDGEMENTS

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REFERENCES

See provided reference list