

3Play Webinars | Giving Tuesday -- AbleGamers Fireside Chat

KELLY MAHONEY: Thank you to everyone for joining us today for a fireside chat with the members of the AbleGamers charity. Before we get started, I have just a few quick housekeeping items to take care of.

First, I'll introduce myself. My name is Kelly Mahoney. I'm the content and partner marketing specialist at 3Play Media, and I'll be moderating today's session. Quick verbal description-- I'm a fair-skinned young woman with long, wavy brown hair, and I'm wearing a black shirt under an orange blazer today.

So with all of that covered, I'll introduce the main event. First, I'd like to acknowledge the reason for this collaboration on today, of all days. And today's Giving Tuesday. Giving Tuesday is an internationally recognized day of radical generosity with a mission to shape a world built on shared humanity.

We're going to send a link in the chat to the organization's website for those who want to learn more. But the primary emphasis of today is that everyone has something they can give. On Giving Tuesday, 3Play Media is happy to make a donation in support of and collaborate with the AbleGamers charity that will allow them to continue the groundbreaking work that they're doing for digital accessibility in gaming.

AbleGamers works across the United States and Canada, just like 3Play Media, and I'll tell you a little bit more about the work they do. The AbleGamers charity was founded with a mission to combat social isolation through play in order to foster inclusive communities and improve the quality of life for people with disabilities.

For over two decades and counting, AbleGamers has worked to ensure that people with disabilities have the same opportunities for positive experiences through gameplay as everyone else by using a well-rounded, inclusive approach to peer counseling and professional development. And what they're doing is working. The AbleGamers charity has worked with gaming industry titans like Xbox and Activision, and the organization's ideas have influenced developers of well-known titles like *Call of Duty*, *Overwatch*, and *World of Warcraft*.

Now, with all of that being said, I'm very excited to introduce today's speakers and stop jabbing at you so we can dive into a discussion on what exactly the impact of accessibility looks like in the gaming community. Today, we're joined by Mark Barlet, the founder and executive director of AbleGamers, Dr. Andy Wu, the senior director of peer counseling, and Steve Weitz, the director of professional development. Welcome, and thank you all very much for joining us.

MARK BARLET: Thank you. Thank you for having us

STEVEN WEITZ: Thank you. It's very nice to be here.

KELLY MAHONEY: Great. So I think the most logical place for us to start is to learn a little bit more about each of you and how you fit into the AbleGamers organization. So could you tell us a little bit about how your careers and your lives have led you to where you are today and sort of which facet of the organization your role primarily focuses on? Maybe Mark, we'll start with you.

MARK BARLET: Sure. So again, my name is Mark Barlet. For those, I am a middle-aged, white gentleman with dark brown hair and a beard wearing a blue button-down shirt. Which is the first button-down shirt I've worn at the office in probably a year now.

So I am a person with disabilities. I'm a service-disabled veteran, but my disability largely never affected the way I approached gaming. But I used gaming to stay connected with my friends.

And the catalyst for me founding the organization was my best friend, a lady that I've known since the sixth grade, was diagnosed with multiple sclerosis. We used video games to stay connected with thousands of miles apart between us.

And one planned gaming session, my friend didn't log in. And after waiting a few minutes, I got worried, and I called her. And her husband picked up the phone, who was my best friend I'd met in the military. So imagine my best friend from middle school through high school and my best friend that I met in the military being husband and wife, and we played games to stay connected. And multiple sclerosis had decided that that afternoon, her hand that she uses the mouse wasn't going to work anymore.

I am a person with disabilities, but it never really dawned on me that a disability could take away the fact that someone could play a video game. And I was watching my best friend, who loved games, live that nightmare.

And so instead of playing that night, I thought I would try to search the web and find the solution to the problem. We're talking 2004. The web had solved everything, I thought. Well, I didn't find anything. I found nothing really talking about how people with disabilities could approach or play video games.

And so I kind of took that as a calling right then, that this was something I was going to correct, that this was-- I loved games. I was a gamer. I'm a gamer today. And I wanted to make sure that people with disabilities-- at the time, my thinking was, people who had progressive disabilities could continue to play. But as I went through this journey, learning that disability itself is such a wide facet and such a great big population of people.

But I want to make sure that people with disabilities can use video games to combat social isolation. And we're almost 20 years old now. And as the introduction from Kelly said, we have largely accomplished our first mission and are moving on to, really, the second part of that.

KELLY

Great. Steve or Andy, anybody chomping at the bit, please tell us how you became involved.

MAHONEY:

STEVEN WEITZ: I don't have any bits to chomp on, but I suppose I'm OK to go, if you're all right with that, Andy. So hi, everyone. I'm Steve Weitz, director of professional development here at AbleGamers. I am also a middle-aged, extremely pale white man with scruffy facial hair, round glasses, and very little hair on the top of my head, which is quite unfortunate.

But anyway, so my background actually starts with a love of video games and film. And I actually went to school to study digital art and animation to do visual effects for film. And while I was going to school, I realized that, well, games use pretty much the same thing, right? 3D animation, 3D modeling, all that kind of stuff.

So after I got out of school, I did quite a bit of freelance for feature animation, film, television animation, as well as some game production. And during all that time, I was also studying game design and development.

And after a while, I got kind of sick of freelance work. I wanted something a little more stable, so I went into higher education. And for about 14, 15 years or so, I was a college professor teaching game design and development as well as digital art and animation.

I actually met Mark a number of years ago-- probably around, what? 10 or so years ago, give or take? I, at the time, had two different National Science Foundation grants revolving around educational games because another big passion of mine through most of my life has been finding different ways of using media for social benefit. And that included educational games.

So I was running different workshops to help teachers design educational games that don't suck, that are a little more interesting. They're better as games, not just quizzes or tests wrapped up in a crude game environment.

And so I was running workshops, and one of the speakers that we had brought in was Mark Barlet from AbleGamers, to talk about the importance of accessibility. So Mark and I met, and since then, I've been doing some little freelance work here and there for AbleGamers. And about a year and a half or so ago, I came on full time at the organization.

One of the big reasons why I'm passionate about accessibility, not just because it's extremely important, but my wife, about 10 or so years ago as well, also started developing a disability. And over the years, she's been gradually eliminating diagnoses. At this point, she has a diagnosis of fibromyalgia and rheumatoid arthritis.

And she has chronic pain and cognitive issues and so on. And it has greatly affected one of the things that she loves to do, which is playing games. The mission is very important to me from a personal and professional level.

KELLY Andy, please tell us more about yourself.

MAHONEY:

ANDY WU: Yeah, thanks for having me today. My name is Andy Wu. I'm the senior director of peer counseling here at AbleGamers. I've always been a lover of video games, connecting with my brother a lot, my cousins. We used to play video games all the time.

But I spent most of my first part of my career-- well, first, I'm an occupational therapist by background and trade. So I've largely helped people recover from injury through rehab, primarily people with stroke and spinal cord injuries and so on and so forth. I spent most of my early career in higher education as a college professor, so actually teaching the students how to help other people that they would encounter in the future, patients and clients of their own.

I got really sick of that for a long time-- for a number of reasons, which I won't get into today right now. But I was looking for something that would bring me a lot of passion. Found AbleGamers about a year or four months ago or something like that.

And my role here at AbleGamers is largely to help players, help people connect to video games, to help them find the solutions to overcome some of the challenges that they have in being able to hold the controller, or push the button, or see the screen, or hear the screen, or whatever that challenge may be. It's to figure that out and help them along with that, with the play.

KELLY Great. Thank you very much.

MAHONEY:

From what I understand about AbleGamers-- and please correct me if this is a gross oversimplification-- but there are essentially two sides to the work that is done-- peer counseling and then professional development and the more technical side of things. Could you elaborate on those and give us an idea of how they work together to accomplish the goals that you've set out to achieve? Maybe Mark, it seems like you've got a good answer.

MARK BARLET: So there are-- Tiffany, there's a third pillar and I'll talk about that. So there are two sides and a sandwich in the middle.

On one side, we have our peer counseling and our engineering research. This is Andy Wu's team, really focusing on getting players with disabilities back into the game. But our mission is to enable play in order to combat social isolation and improve the lives of people with disabilities, not people with physical disabilities. And Andy's team, through peer counseling and engineering research, largely is that touch point between the organization and physical disabilities.

On the other side of our mission, we have our user research and our professional development, and Steve is in charge of our professional development. This was us working within the industry so that we could-- there's nothing I can do external-- Andy's team can build a brand new controller or something like that, but there's nothing I can do externally, for example, to add closed captioning to a game. That requires the software to be able to do that.

So user research works with game companies to actually help them evaluate and test the solutions they've made around accessibility while professional development executes our certification program, our Accessible Player Experience Practitioner certification, which trains developers to think from accessibility. Those are the two big sides.

And in the middle, my mission statement says, to foster inclusive communities. I have my community and inclusion pillar, which is really working on making sure the spaces that are created around gaming-- the cons, the conferences, the toolsets, Twitch-- these things that game gamers congregate to, also have accessibility and are also welcoming to people with disabilities.

KELLY MAHONEY: Absolutely. And I'm glad you brought Twitch up and events and cons because I do have a question about that coming later.

But first, I would like to ask sort of the distinction that I've noticed in accessible gaming between traditional accessibility is that the goal here is not necessarily to remove barriers, since the element of challenge is very important to a gaming experience. Steve, could you expand, maybe, on the ideas of challenge and access and what they mean in this context?

STEVEN WEITZ: Absolutely. So Mark had mentioned that we have a certification in Accessible Player Experiences-- what we call APX. So what APX is, it's a series of design patterns that fosters thought from the early development stage. Literally from day one, it encourages developers to think through accessibility barriers in their designs and throughout the entire development process, up until the end. And there are two components of that. There's access and challenge.

So access is all about the player exchanging information with the game. So the idea of, the player gives information to the game, usually through some form of input, like a controller, for example. And the game gives information back to the player through some kind of presentation-- a visual presentation, an audio presentation. It's giving information that's important to the gameplay.

Now, with that, if a player can't give information or get information from the game, they literally can't play the game. So it is crucial for developers to make the game accessible in both input and output so the player can literally play the game.

Now, once we get beyond that, that's where we get to challenge. That's the other side of APX. And as you noted, challenge is a little bit tricky in games when it comes to accessibility because you can't just remove challenge. Part of what makes a game so engaging is its challenge.

What we're trying to do is not to remove challenge, but to explore different ways that the challenge can be moderated for a player so that it's still challenging to them without being impossible. Because a really, really important thing to note is that a particular game that might be extremely challenging for any able-bodied person might be literally impossible for players with different disabilities.

So it's not about making a game easier, because easy is such a nebulous concept. What's easy to me might be extremely challenging for you. What's easy for you might be extremely challenging for me. It's all about allowing the players to customize things to the way that they want or need in order to play the game to have the same level of challenge that someone else might want to have.

**KELLY
MAHONEY:**

And thank you. That's actually a great segue into my next question, sort of digging into the why behind AbleGamers, if you will. And the focus is heavily on providing individualized solutions, which could have a wide variety of meanings, given such a wide spectrum of disability.

Andy, this may speak more to your side of things. Could you give us an idea of the quote unquote "typical" peer counseling process? I understand it's hard to say anything's typical, but how do peer counselors work through identifying solutions for an effective gaming setup?

ANDY WU:

So our peer counselors really-- first, I think we really get to know the person. And we get to know their gaming goals, their interests, what kind of games they want to play, how they're currently playing now, and then understand some of the challenges that they're having to pushing buttons. As Mark alluded to, that physical part of it, pushing buttons, holding a controller, moving around a joystick. What types of difficulties and challenges present to their gameplay?

And then understanding a little bit about their disability so we can plan out the solution carefully. And so we want to build in some flexibility. And we offer a lot of tools and different options for people to look through and suggest.

And we often meet with people virtually, so we get a sense of what's going on with them. And they can explain us what they're looking for and where they're trying to go, as far as what kind of games they want to get into. From there, really, it's about developing a solution with them.

So we send them our recommendations, suggestions. We have them look it over. They offer their feedback about some of the suggestions. We go back and forth.

Finally, because we're a charity, it's great that we are able to provide some people with some solutions. The actual, physical technology, equipment that's often quite expensive, that don't come standard with, obviously, the PlayStation, or the Xbox, or Nintendo Switch, or even PCs in general. So we provide those to people at no cost. And our service is at no cost, as well. So that's basically a brief overview about how we work with people individually.

KELLY MAHONEY: Could you maybe expand on, what are the hardware or software accommodations that you see most commonly?

ANDY WU: Yeah. So we have behind me this general. So if you think about an Xbox controller, it has buttons like this that kind of pair up with this.

So if you picture people, for example, who may have difficulties holding a standard controller-- that's often a very big complaint. They either have had a stroke on one side, so they have paralysis on one side of their body, and holding and accessing one side of the controls can be quite difficult. Or if they've had a spinal cord injury, the ability to grasp like this can be lost.

And so that necessitates, then, breaking out a controller, making it bigger, such as this, for example. To push a button on the standard controller, which might be this small, versus something-- or this small, these little buttons-- versus something large like this. This is a very useful tool by Logitech, where you can place these buttons wherever you want.

So it's about building that controller for somebody. Because when we talk about being able to enable play for people, we want to-- as an occupational therapist, with my lens, I feel like it's important we build in independence. And so we don't have to have the person necessarily rely on somebody else to set up their controller every single time.

So what Mark held up earlier is a QuadStick. We had the PlayStation 4 or 5 controller. It's about going to that controller and being able to play right when you want to play. Does that make sense? Sorry, Mark do you want to-- you're muted. Sorry.

MARK BARLET: This is a QuadStick here. And what this is is a fully quadriplegic person using sip and puff-- it's hard to see because it's black, but using sip and puff and straws and a joystick here. So this is something even more advanced, depending on the disability.

KELLY MAHONEY: Thank you. It's really interesting to see those. And Mark, this is speaking to something that you were mentioning earlier. When it comes to events in the gaming community, giving people a community or a place to gather, like Twitch streams and conventions-- these things can still be largely prohibitive when it comes to accessibility. So how would you say the advocacy at AbleGamers offers this place for meaningful connection and community for gamers with disabilities?

MARK BARLET: We've worked with Twitch. Twitch has actually been a real supporter of ours. We did the first live-captioned Twitch stream a couple of years ago, maybe even five or six years ago, working with them to help put tools. I don't-- are they perfect? They're nowhere near perfect. But is there movement towards moving there? Yeah, there is.

We've worked with Penny Arcade, we've worked with Rooster Teeth-- these are these big gaming conventions up in Boston, Seattle, Austin-- to create things like accessibility passes. We worked with Penny Arcade and ReedPop to make accessibility passes, make sure that there was ramps so that speakers with disabilities could actually get on stage.

I mean, this is-- we famously had a talk with Steve Spohn, my friend here at AbleGamers, who's profoundly disabled, is in a wheelchair with a ventilator. And we were going to do a panel. And they had had the entire panel up on stage, and we said, no, this isn't going to work. And we literally started removing everything off of stage.

And they started going, no, no, no. We're going to put Steve in front of the stage. And we're like, no, no, no. We're not going to do that. And we tore, basically, the entire thing to put the panel on the floor.

After that, the next year, they had four stages that were specifically designed to make sure they could accommodate a person with disabilities. That way, a player with disabilities or an advocate with disabilities can have a platform to share their unique experiences to the gaming community as well as participate.

So when we started, it was-- I would challenge you a little bit in saying I think that those spaces are far more accessible and welcoming than they were a decade ago. And I would tell any person with disabilities to not hesitate going to a Penny Arcade or going to a Comic-Con and really getting your nerd on because I think you're going to have a good time.

KELLY MAHONEY: Well, thank you. Frankly I'm glad to be challenged on a point like that. Just to add to that, do you feel that the pandemic and/or use cases like *Celeste* have had any impact here? And for those who might be unfamiliar with *Celeste*, we have a link to an article that we'll send in the chat, just for some more context.

STEVEN WEITZ: So it's funny. *Celeste* is actually an example that we use in our APX training because it does have a phenomenal implementation of accessibility that I think helps demonstrate to developers that they don't have to necessarily compromise their vision in order to put in these accessibility options.

So briefly, *Celeste* is a brutally, brutally difficult platforming game, meaning running and jumping over obstacles, around enemies, using midair dashes-- all kinds of stuff that are very, very difficult to do, especially in this game, in order to progress. But it has an assist mode built into it.

And what's cool about it is that when you enable the assist mode, the first thing it does is give you a series of disclaimers. And those disclaimers walk through basically saying, this is what assist mode does. We recommend trying it without assist mode first because it's been especially designed to be challenging, but accessible. So please try it without that first.

But if you can't play it without assist mode, we understand. We realize that everybody is different, and so we hope that you can enjoy this with assist mode on. And those are three different disclaimers. And every single one, you have to confirm to continue.

So if you get past those disclaimers and still feel like changing those settings is what the developer's vision is, then I don't know what to say to you. Because that's very clear, that this is different than what we intended, but we want you to have a good time. And the great thing about it is that there's no judgment involved. It explicitly acknowledges that every gamer is different, and that's why these options exist.

As a matter of fact, a quote that I usually give which I think is worthwhile here comes directly from *Celeste* lead designer Maddy Thorson. And so she says, quote, "From my perspective as the game's designer, assist mode breaks the game. I spent many hours fine-tuning the difficulty of *Celeste*, so it's easy for me to feel precious about my designs. But ultimately, we want to empower the player and give them a good experience. And sometimes, that means letting go."

And that basically just says it all, right? That every player is different, everyone needs different settings in order to have the appropriate level of challenge for them. So here are the settings. It's a little bit different than what we intended, but we know you might need them. Have fun.

Now, to the other side of your question-- how do you feel the pandemic has changed this? I definitely feel that, at least during the early stages of the pandemic-- and we're not quite through it yet, even though everyone seems to think we are. But in the early stages of the pandemic, everybody experienced a fairly high degree of social isolation, where people were locked down at home, couldn't have the same level of contact.

And I think it made them more aware and open-minded to the plight of people who deal with social isolation on a daily basis. So as soon as we bring that up, it kind of triggers something, and you realize, oh, there are people out there with some disabilities who are always socially isolated. They need games as a form of connection.

So I think that that has helped, at least from the pandemic side of things. And I also think that, on top of that, just generally speaking, the community has been a lot more vocal with social media and other avenues to make it very widely known that these options are necessary for a wide range of the population. And Mark, I don't know if you had something to build on that.

MARK BARLET: No, I think you hit on it, which is, for many profoundly disabled people, the pandemic was almost nothing because nothing really changed. And in fact, in some cases, some of my profoundly disabled friends say some of the wins from the pandemic is the welcoming of telemedicine and things like that, that actually have added value to their lives, that was largely missing when it was exclusively a request for people with disabilities.

KELLY MAHONEY: And sort of on that note, have any of you noticed anything in accessible gaming that has impacted the community at large? I'm thinking in terms of universal design tidbits, things that can be applied outside of the context specifically with gaming.

I mean, I know accessibility should be applied everywhere. Just curious if there's anything related to the development side of things or peer counseling that should be applied more broadly.

STEVEN WEITZ: I think an important thing to note there is that just about anything that you can add are things that players without disabilities will still use. They'll find them as nice quality-of-life options or custom things that they can tweak. But players with disabilities will literally need them. So you're getting the dual effect, the curb-cut effect-- the idea that people will use things explicitly designed for accessibility without ever realizing that they were designed for accessibility.

And I think, actually, captions are a great example of that. I mean, it's kind of a standard accessibility feature, but there have been a number of studies and reports out there talking about a very high percentage of players-- depending on the game, it could be between 80% and 95% of players-- who play with captions. And clearly, not 80% to 95% of players literally need captions for accessibility reasons, but they're still playing with them.

And just from a personal perspective, I have no particular disability that requires me to use captions, but I love using captions. Because if I can't tell what someone is saying due to an accent or I miss what someone is saying, it's often easier to quickly read it than have to rewind back or replay a section or something along those lines. So I use captions in film, television, games, everything.

MARK BARLET: And I'm the exact opposite. I am fixated by words. I don't know what it's called, but if you put captions on, I have no idea what's going on. All I do is read everything. I read. So I always turn closed captioning off so that I can actually play the game.

[CHUCKLES]

KELLY MAHONEY: It's interesting to see, though. I mean, I think you make a great point. Just like you said, there's a wide variety of people who may or may not need these things, but it's important to at least provide people with that option so that they can play in a way that makes the most sense for themselves.

MARK BARLET: One of the best practices we talk about when we get a question, often from developers, which is like, where should I put-- when you're looking at a menu or something like that, where should I put these things? And what we have recommended as a best practice is to-- especially in the challenge, the things that you add in the way of challenge features, challenge options-- is to duplicate them.

Have an access panel, have a menu that says Accessibility, and list out all your accessibility stuff. But also, put all of the stuff specifically around challenge into the Gameplay tab or the Audio tab or the Visual tab. Because, again, a person who doesn't define as a disability will be looking for a feature in the Audio tab or the Gameplay tab, while a person with disabilities would be much more likely to hit that Accessibility tab and find the same thing.

So to that point, the curb-cut idea, we actually often recommend duplicating your Accessibility menu by hiding the accessibility throughout the rest of the menus so that non-disabled person can still find that playable tweak that they need to succeed.

KELLY MAHONEY: I'm glad you bring up the specifics because I was going to sort of backtrack a little bit. I know you mentioned earlier the principles of APX, Accessible Player Experiences, and the access and challenge design patterns.

So gaming is a creative medium, and I think that it may be commonly thought that accessibility guidelines can restrain that. So can you tell us a little bit more about why you don't believe that to be true, or how people can work within these accessible player experiences to create something that is authentic, creative, and most importantly, accessible?

STEVEN WEITZ: Sure. So APX was explicitly developed to empower developers to use their own creativity in order to solve accessibility problems. Because ultimately, as you noted, we did have a number of developers say that they found certain guidelines to be a little bit restrictive.

I do want to go on record and say that I don't have a problem with guidelines. I think guidelines can do well, usually at very specific points in game development, though. They don't tend to work very well during every phase of game development. Usually, they're good as kind of a cross check. But they're very useful, for sure.

But as you noted, there were a number of developers saying that they found them to be either a little restrictive or they weren't sure how to apply them to their games. So we developed APX so that, as noted, throughout any point of the development phase, developers can find barriers on their game and try and create solutions that fit their game.

Because ultimately, they know their game best. And so they know the kinds of things that they can add that will add accessibility to that experience while also preserving the feel of the game, not dumbing down the game, et cetera, et cetera. So we've had a pretty good reaction to APX. It's been used fairly widely at this point.

MARK BARLET: And interestingly, you talked about something about just-- I can't say who, but we have just inked a contract with a museum who is looking at the APX principles and looking at the APX patterns and saying, based on what they learned-- I think we just dropped the website. The patterns are free for anyone to explore and use.

They came to us because the patterns were helping them in designing an exhibit, an interactive exhibit at a major museum. Because again, it's about-- because it's interactive and things like that, they saw that they were able to really iterate and solve problems before they had written a line of code or cut a piece of wood. Or in the drawing, in the phase of just sketching out the ideas for this interactive exhibit, they were able to start making accessible decisions when it was super affordable, almost free.

And then they reached out to us to help take it from there. So we're seeing APX actually move into areas other than the game space, where you have that challenge as being-- when you look at accessibility as a whole, it's all about barrier-free. You want zero challenges.

But there are those little intersections of space where challenge is something you want. And APX is helping in the physical space as well as in the video game space of helping them really tune that challenge to make it accessible for everyone. And guidelines don't really give you that challenge buffer as much.

STEVEN WEITZ: Yeah. And what's nice about that, too, is that, even in situations where you want zero challenge-- and you might think that, OK, roughly half of our patterns are going to be useless because they're all about, how do you preserve challenge while making options?

Well, not necessarily. Because you can use our challenge patterns as almost a lens through which to see where you might be unintentionally adding challenges to things. So we've definitely heard from a number of people outside of the game industry that it has been useful for them as they're working on a wide variety of interactive content.

KELLY MAHONEY: Great. Thank you. And in thinking about the aspect of community, of course that's important for gamers with disabilities. But do online communities or other sorts of spaces exist for these game developers so that they can connect and support one another throughout the process of designing accessible games to share resources like what you've created? Which, by the way, we did put a link in the chat for anyone who wants to check those out.

STEVEN WEITZ: Yeah, so we specifically have a LinkedIn group for anybody who is APX certified. So that's one place to go. I know that at various industry conventions, there's subgroups and things that connect people on accessibility. Mark, did you have any other resources that you're aware of for developers?

MARK BARLET: I know there are some ad hoc groups within studios. Some of our larger studio partners, like Blizzard Activision and things like that, have special interest groups around accessibility so that if you look at larger studios like Blizzard Activision, King, they're making mobile games. They're making 12 or 14 different games.

They have some special interest groups that help them share experiences across platforms and engines so that one game who's working on a similar engine can learn from a game that's already solved those problems. So we're seeing a lot of ad hoc groups inside some of these larger studios as well.

KELLY MAHONEY: Well, fantastic. Thank you all. That is the end of our prewritten questions, but we have received a lot of really interesting questions from our audience. So I'm just going to roll right into some of those that we have here.

Continuing on this idea of challenge in gaming, someone asked that some games are just built to be extremely challenging, sort of like the *Celeste* example. Another example this person provided was *Elden Ring*. Do any of you have any thoughts on how games like that can be made accessible to a gamer who's unable to manage a high level of difficulty that's baked into the game itself?

STEVEN WEITZ: I absolutely--

KELLY It seems you do.

MAHONEY:

[CHUCKLES]

STEVEN WEITZ: So yeah, I actually-- I happen to really enjoy extremely difficult games. I have like, 300 hours into *Elden Ring*, and so on and so forth. But again, what's important is that it's not about removing the difficulty. It's about moderating the difficulty so that it's still at that same high level of challenge for the player with disabilities.

So let me give you an example. When we talk about Soulslike games, which is what *Elden Ring* is, or *Dark Souls*, or *Sekiro*, or any of those, what typically makes them so challenging-- and there's a lot of things. But what typically makes them so challenging is the combat, and the idea that any individual enemy is incredibly powerful compared to any other game. So any individual enemy that you run across randomly can kill you in one or two hits.

And then on top of that, you have the fact that it's very much about timing. So controlling when do you attack? Because during your attack, there's a wind-up phase where you're vulnerable and the enemy can hit you. If you attack the enemy at the wrong time, they can block you and leave you open to counterattack.

So you have to find those right times to attack, or block, or potentially parry their attack-- which, if you block at just the right time-- it parries them and leaves them open to a wider attack. It's all about this careful timing.

So if you think about that, all of that timing, behind the scenes, is just some numerical value, right? It's just a number somewhere that says, you have this amount of time in order to perform your attack. You have this amount of time in order to parry. The enemy waits this amount of time to attack, et cetera, et cetera. It's all times.

So what you can do is, you can expose those values to the player to allow them to fine tune it. So let me give you an example. So *Star Wars Jedi-- Fallen Order* is a Soulslike game. It's not quite as difficult as the ones from From Software, but it is considered part of the Soulslike genre.

And in their difficulty settings-- they do have difficulty settings-- they have an Easy, Normal, and I think like, Jedi Master Mode. There's a few different modes. And the only thing that tweaks-- and it tells you right there. It's actually kind of nice. It tells you right there exactly what it's tweaking. So what it's tweaking is enemy aggressiveness, meaning how frequently do they attack, enemy damage, how much do they hurt you, and parry timing, the amount of time that you have to properly execute a parry when you block.

Now, the problem is that the easy mode makes the parry timing really wide and the enemy difficulty-- meaning the aggressiveness and the damage-- really low. The hardest one makes it so that the enemy difficulty is super high-- the aggressiveness and the damage-- and the parry timing is very low.

Well, now imagine that you're a player that has whatever disability that makes it so your reaction time is slower. But you really like the challenge of the game. You really like the idea that an enemy can kill you in one hit. You really like the idea that you have to be constantly on your toes because an enemy can attack at any point in time. But you just don't have the physical or mental ability to react to get the proper parry timing.

So the easy mode isn't going to work for you. It'll work from the parry window standpoint, but it won't give you that enemy difficulty. The hard mode won't work for you because it gives you the enemy difficulty, but you have very small parry windows. So that's not going to work with your disability.

Well, what if the developer just gives options to the players? So instead of a custom difficulty, where you can tweak all of those. Keep your enemy aggressiveness all the way up, your enemy damage all the way up, and your parry window all the way up.

And that creates a custom window-- custom setting, rather-- that allows you to have the reaction time that you need with the parry window, the wide parry window, but the same challenge, where you have the enemy still attacking with the same amount of damage, with the same frequency. And that can apply to literally any aspect of the game.

Now, usually that is an approach that we recommend because while universal design is phenomenal, disability is a spectrum. There is no one size fits all for absolutely everybody. However, from the universal design standpoint, *Elden Ring* is actually more accessible than I think a lot of people give it credit for. I want to make it clear, it is not very accessible. There's still a lot of things that it has problems with.

But in the general canon of Soulslike games, there are a number of different ways that you can approach combat. So unlike a lot of Souls games, you're not required to do melee combat. You don't have to get up there and deal with the parry windows, and the blocking, and all that kind of stuff. You can be a magic user, and stay far back, and just use projectile attacks.

And so just the game design itself gives additional options for ways that you can approach the game. So that's kind of the universal design standpoint. But again, from the options standpoint, allow tweaks where you can adjust the parry window timing, the enemy aggressiveness, et cetera, et cetera. Hopefully, that helps answer the question.

**KELLY
MAHONEY:**

Yeah, absolutely. I mean, I think that speaks back to the earlier point about giving the user that control and giving them the option. Exploring a similar but sort of different avenue of accommodation, are there games that are equipped to accommodate blind players or players with low vision? Andy, maybe you could tell us a little bit about some of the accommodations that you see with users with that particular set of disabilities.

ANDY WU: Yeah. For visually impaired, or blind, or low vision, however you want to categorize that and where you fall, it's a little trickier. There are some games, and you can turn on some settings.

We actually refer to-- we refer a lot of people to one of our friends in the UK who has developed a gaming database that has a lot of these different settings baked into it, so where you can filter and kind of search for games that are specific to some of the options that Steve is talking about in particular. I don't know of any good games off the top of my head. Steve is probably the better--

MARK BARLET: I mean, *Last of Us II* was able to be played by totally blind people. I would say, for my blind friends, I think one of the big things, when we talked about it at the beginning of this, I think, has happened is, *Last of Us II* was a blockbuster game that had the level of accessibility that allowed someone who was blind to be able to finish and successfully enjoy that game. They have set the bar that, I daresay-- and Steve, correct me if you see something-- no one else has seemed to have gotten near.

What they have done, which I appreciate, is they've said, what we did isn't impossible. And so I think what they have done is killed-- they have killed the comment we have heard in the past, which is, well, it's just too hard to make a game accessible for someone who's blind. It's hard, but it's clearly not too hard, because a AAA title on PlayStation with a budget just did it. So what's your excuse?

STEVEN WEITZ: Yeah, I definitely do think that Naughty Dog is currently leading the pack-- no pun intended-- in terms of accessibility, certainly with *The Last of Us II* and *The Last of Us Part I*. Sony Santa Monica is catching up a little bit with *God of War-- Ragnarok*.

We've seen a couple of other studios do some really nice things in terms of either preset bundles of accessibility options, also with the ability of tweaking, and then just a whole wide range of options. So Volition recently, with the new *Saints Row*, had a bunch of really nice accessibility options in there where you could tweak quite a bit of things related to challenge as well as access. I know *Guardians of the Galaxy* recently won a bunch of awards for accessibility, and we did train a number of them from Eidos-Montréal, so proud of that.

So yeah, there's definitely a number of studios that are catching up, but I don't know that anybody is quite to the level of Naughty Dog just yet. And for the record, Naughty Dog has gone on the record saying that they did use APX during the development of *Last Of Us II*.

KELLY MAHONEY: Great. And for those of you who are looking for resources, we got a few questions. They are-- some links have just been sent in the chat. Taming Gaming Family Video Game Database is the one that Andy was referencing earlier.

Let's see. Do you know-- in the same vein, do you have a sense of the preferred gaming platforms for various disability groups? So for example, maybe mobile games might be easier for users who are blind. This question comes from Cammy.

MARK BARLET: Cammy, I appreciate that. Andy will correct me if I'm wrong, but the reality is, as much as I wish most people with disabilities would play on the PC because it's the easiest to customize, the truth is, everyone wants to play on an Xbox or PlayStation, which is the hardest thing to navigate.

STEVEN WEITZ: Or a Switch, a Nintendo.

MARK BARLET: With the Switch, we at least have the HORI flex controllers. It's the PlayStation that is the most difficult right now. As for disability and mapping that to a particular platform, that's not how people work. People want to-- Andy, people want to play what their friends are playing on the things their friends are playing on.

ANDY WU: It's just about finding the solutions for that console and that system. We do largely steer. We don't get a lot of inquiries and help people with PC gaming, but largely, it's mostly the Xbox, PlayStation or Nintendo Switch. They're loyal to it. They won't really migrate.

And it's about cost, too. You invest a lot, heavily, into one console. And it's about buying all those games for another console because it might be, I have the tools that-- largely, we're trying to help people with what they already have, so.

MARK BARLET: And the motivation of why someone wants to play. So again, we're about combating social isolation. So Andy, how many times are we helping brothers and sisters, a brother with a disability? So it's, what's the family have?

ANDY WU: Yeah.

KELLY MAHONEY: And would you say it's mostly big-name game development studios that are working on accessibility? Or have you seen this in some indie game development? This question comes from Sarah.

MARK BARLET: The indies started it. The reality is, when I-- how we got where we are is, I never told a sad story. I always advocated and talked to game developers as, people with disabilities are a market. We have money, and we want to spend that money on services.

And the indie developers were the ones that picked that mantra up quickly because they were looking for a market differentiator. They were releasing a game in a really crowded space. They were releasing a game against a thousand other games that came out that month.

And so the indie developers were ahead of the curve of the AAA studios because they knew that if they spent some time working on accessibility, they could have an interview with the Washington Post, who noticed this. And they could become that market differentiator in a really crowded space. So I think the indies are probably ahead of the curve, or were ahead of the curve for the longest time over the AAA studios.

STEVEN WEITZ: Yeah. And of course, it's worth noting that *Celeste* is very much an indie game, so-- among others, obviously.

KELLY MAHONEY: So in addition to working with game developers and gamers with disabilities, does AbleGamers also work with game publishers to incorporate these accessibility features into games? And then, a two-parter there, do you work with these publishers to provide options, not to necessarily have point and click controls, but to move content by a sequence of button presses or things like that? This is another question from Cammy.

STEVEN WEITZ: So I would say that we work with both publishers and developers in different capacities, and it's going to cover everything that was talked about there-- point and click, button sequences, et cetera. So one is through our training, through APX training.

We have various publishers who consistently send a large number of developers through our training. So you mentioned Activision Blizzard earlier. Embracer Group sends a bunch. There's some high-name publishers that are sending a bunch through our training.

And so getting that training allows developers to identify those different areas. Or maybe they have sequences of button presses that might be difficult, and they can find ways of allowing the player to do more with less. That's one of our patterns to allow them to simplify that.

And then the other way that we work with publishers-- and, of course, developers who work under said publishers-- is through our evaluation services, and player panels, and the various other things that we do through user research. So we have developers submit a build of the game which can be evaluated. We have a series of evaluation services that we offer, or we have them contact and contract with our player panels, which are a group of about 400, 500-- give or take-- players with disabilities that we have contracted to work with developers.

We have sensitivity readings that we can provide as well, to make sure that it's not just that things are accessible, but they're also being represented in a proper way. And then, of course, we have a little more nebulous consulting services, which is that, if we don't do something that you want us to do, we might find a way to do it.

KELLY
MAHONEY: Great. Thank you. Honestly, a lot of the questions we've gotten people are looking for recommendations, game recommendations, from you. So we have one-- are there any open-world games you can think of that are the most accessibility friendly? That's from Rochelle. And then, from Mia, do you have any games you would recommend for young kids? Did I stump you?

STEVEN WEITZ: No. No, no. I'm trying to think. There's a lot of options out there. Open-world games inherently have a few extra benefits going for them because there's a lot of playground spaces that you can go in to practice things and kind of improve at them.

But in terms of just sheer accessibility options, if I'm not mistaken, I do think the newest *Saints Row* probably has the most for an open-world game specifically, the most accessibility options. So that might be a decent one to check out.

What was the other side, children friendly?

KELLY Yeah, young kids.

MAHONEY:

STEVEN WEITZ: Trying to think off the top of my head what would be considered a kids game that would also be friendly.

KELLY Someone in the chat has recommended *Journey*, *Flower*--

MAHONEY:

STEVEN WEITZ: *Journey* is great.

KELLY Those ring any bells?

MAHONEY:

STEVEN WEITZ: *Journey* and *Flower* are great ones. They are. The only reason why I didn't bring those up is that they don't have the abundance of accessibility options. So there is some things that are inherently accessible about them. But like, *Flower*, for example-- *Flower* is all about manipulating the wind so that flower petals can blow in different directions.

And unless I'm mistaken-- and please, someone correct me if I'm wrong-- I don't believe that there are control remap options in *Flower*. I would need to check. It's been released so many times. It's possible that one of the newer-- I haven't played it since the PlayStation 3, so it's possible that there have been settings added since then. Great games. I mean, don't get me wrong. There's a lot of great games I can think of. But in terms of highly-accessible ones--

KELLY MAHONEY: Great. Narrowing the focus, I guess, a little bit-- with VR becoming bigger, what are some accessibility considerations that should be kept in mind when thinking of VR games? It seems that was a hot-button question.

MARK BARLET: [INAUDIBLE]

STEVEN WEITZ: Oh, there's a ton. Personally, I love VR. I use VR for exercise on a daily basis. But it is horribly inaccessible for most things. We have had a few developers come through our training that work specifically in VR, and so there is some interest there.

What's frustrating about VR is even some of the relatively quote unquote "simple" things that you find in flat games-- traditional 2D games-- like captioning still has not been standardized in VR. Like, you get some instances where the captioning is locked to a 3D environment, where you have to look to a specific place to see it. You get some instances where it's locked to the bottom of the screen, which can actually trigger motion sickness in some people, if things are fixed while other things are moving around.

You have the solution where it's fixed, but then you turn, and it kind of stays behind and then catches up, which works OK. But even in those, there's not a lot of settings for size, font, color, background color-- the standard caption options in there.

And then on top of that, just the simple fact that VR relies so heavily on body movement means that it's inherently going to be inaccessible-- at least, certain games are-- for a wide variety of people with physical disabilities. So it's a new world. It's a new space that there's a lot of potential and opportunity for accessibility in. But it hasn't, unfortunately, been explored too thoroughly.

MARK BARLET: I will add, it is a technology that has come to the realization that accessibility is important sooner than any new technology in the past. Keep in mind, I don't think the iPhone was fully considered accessible until the fifth generation of it.

But we've been working with-- and there's XR Access out of Cornell, and that's several years old. And we've been working with Oculus. We did an event at Oculus four years ago. So from a technology perspective, while it's pretty inaccessible, I will say, it is a new technology that is talking about accessibility far sooner in its lifecycle than we've seen in the past.

KELLY And sort of expanding on that even further, what are your thoughts on the accessibility of-- I'm going to use some acronyms, for those who might not be familiar, and then I'll elaborate on them-- MOBA, Multiplayer Online Battle Arena games, and MMORPGs, Massively Multiplayer Online Roleplaying Games? Do you have similar feelings about those as well?

MARK BARLET: I'm a big MMORPG fan, and that's where I started my entire journey around accessibility. The very first change AbleGamers was able to get was a colorblind setting in *EverQuest II*. That's how old we are. And so it really just depends on the developer. I don't play MOBAs at all, like never have, so I couldn't talk to the accessibility on that. But we're trying to make games accessible, not genres of games accessible.

STEVEN WEITZ: And ultimately, it comes down to the same things. So a game is a game. And even though there are different genres, different types of games, ultimately, it comes down to the same things you need to consider. What players are doing to input controls in the game, how they're getting the information back out, and then moderating aspects of challenge.

I did see-- just as an aside-- the chat popped up someone recommending *Super Mario Odyssey*. Again, I love *Odyssey*. I think it's a great game, and we do use it for play alongside as an example in our class. So from that perspective, yes.

But from the rest of accessibility, unfortunately, it's quite lacking. Most Nintendo games, unfortunately, are quite lacking. There's not a lot of customization for controls, not a lot of things you can customize for presentation, things like that. So for general accessibility, unfortunately, it falls a little short. But it is still a great game, and it's a great play alongside example, for sure.

KELLY Great. I have one more really good question. And of course, I just lost the tab on my Zoom screen. Let me find it again. Andy, maybe this one, you could close us out here. Do you have suggestions for players who have gaming-related disabilities, such as gaming-triggering migraines or carpal tunnel? How do you typically approach that?

ANDY WU: Migraines, I haven't had a lot of experience with working with people related to that. But carpal tunnel, certainly. I think carpal tunnel is a repetitive strain injury. So the more you use it over time for a long period of time, it often can exacerbate the issue.

Finding a good balance between rest and then also different tools that might be available. I don't know specifically off the top of my head, but I mean, if it's translating a button press or a rest-- a button press over time, if we can move it somewhere else so you can push it with your foot or you can push it with the other hand. It's about finding where you have not pain, basically, if that makes sense. Finding other parts of your body that can take over the function that you're having difficulty with is how we generally like to approach it.

And so avoiding pain and building in rest, I think. So I think carpal tunnel, if you play for two or three hours, I think I would be apt to develop some sort of carpal tunnel symptoms. So it's about helping people understand what their bodies are doing in relation to how long they're spending in games.

There's a lot of-- we provide the education. It's really about that peer-to-peer. So we have people on our team that actually help with that because they have lived experience of some of those disabilities. And I think that's really valuable in helping people understand that, because they've gone through that similar situation, so.

KELLY Fantastic. Well, unfortunately, that is all we have time for. But thank you very much, Mark, Andy, and Steve, for
MAHONEY: being here today. It was wonderful to learn from each of you, and I know everyone in our audience really appreciated your insight. And we did also post a link to the AbleGamers charity donation, if you would like to support them Thank you all once again for coming

MARK BARLET: Thank you. And thank you for the support that 3Play Media gave to the organization. It means a lot to us.