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 Testing, testing. Testing, testing .

Good afternoon everyone and welcome to part one of the explore VR webinar, assistive technology for supporting adults with learning disabilities. My name is Katie Allen and I may knowledge translation associate at the Institute for community inclusion. Before we begin today's webinar I want to mention a few logistical points. First as with all Explorer VR webinars we ask that participants listen to today's presentation through computer speakers or headphones. If you must call and to today's presentation please mute your phones. This is to avoid broadcasting and recording any background noise. If you cannot find your phone we will -- button pressing star six will mute most phones . Second, if you experience connection issues during the webinar, first try closing all other Internet applications and logging out and logging back into the webinar. If you continue to experience technical difficulties, please e-mail me at knowledge translation at UMB .edu and my e-mail address is up on the screen . We have reserved time at today's presentation to answer and address your questions and comments. At the end of the presentation a question and comment box will appear in the upper right corner of your screen. We encourage you to type your questions and comments in this box once it appears. If you like a copy of the PowerPoint presentation you can download it now from the files box in the lower right corner of your screen. You can also find a PowerPoint slides on next lower VR .org. The road be a link after today's presentation. Please follow this link to complete the webinar evaluation. If you are a certified rehabilitation Council -- counselor requesting credit you must complete the evaluation in order to receive credit. This evaluation is worth -- this webinar is worth one CRC credit. This webinar will be archived on Explorer be are .org after this webcast. You can find information about our upcoming webinars. Worry Ford for the Center for continuing education and rehabilitation at the University of Washington will be your host for today's winner. Worry will introduce the presenters and today's webinar. Lori?

Thank you Katie and I will say good morning to everybody because it is only 11:00 here on the West Coast and the Seattle area where we are located. Welcome to our first webinar on job-driven technical technology for supporting adults with learning disabilities. I will tell you a little bit about the JDI VR -- JD-VRTAC before we get started. Before Maria and Mark take it away. They are the experts in this area. The JD-VRTAC is one of several technical assistance centers that have been funded through the United States Department of Education to provide assistance to vocational rehabilitation agencies across the country. Our center focuses on helping those agencies become more job-driven in their activities, focusing before topic areas of business engagement employer support, using labor market information in the VR process and coordinating with customized training providers like apprenticeship programs and community colleges. This particular topic is one that come out of the employer support discussion and when we talked about doing assistive technology we decided to focus on a couple of disability categories that we don't typically think of one we think of assistive technology. Generally people think of specialized equipment for people who are blind or have visual difficulties

 or perhaps hearing loss or deafness and we don't really think about things like learning disabilities, which are what our two sessions are this week or mental health disabilities which will have a couple of sessions on next month. The partners and he job-driven center besides us at the University of Washington our jobs for the future, University of Arkansas, the Council state administrators of VR, USBLN, Association of University centers on disabilities, the Council stage for the blind the center collaborative and then our lead agency is the Institute for community inclusion at the University of Massachusetts and we're so grateful to have folks like Katie and Allison with these webinars in providing support. I will not do a lot of introducing to my colleague's Harniss and Maria Kelley, they will talk little bit about the programs they are from here at the University of Washington and associate a programs but just to say that they are very knowledgeable and very experienced in this area I'm glad you're joining us as my because I know you will learn a lot. Market Maria, who will go first?

This is Mark Harniss and I think we will introduce ourselves first and tell you a little bit about how the presentation will go and then we will jump right in. My background is in special education. I've worked for many years as faculty in teacher preparation for adults who are interested in becoming special education teachers and then more recently within the last 10 years or so I've worked at the University of Washington at the center for technology and disability studies where I focused broadly assistive technology for people with disabilities both younger individuals as well as adults. And in here with Maria Kelley .

Good morning. It is morning here is Lori mentioned and I have -- my background is in occupational therapy and I have been with the center for technology disabilities specifically working with the program at Washington assistive technology act program and it's been 10 years as well for me, and my -- I were lots of different interests in regards to Aldi and also a lot of interest in regards to a T4 transition and home modifications and worksite evaluations.

Today we will switch back and forth and share the presentation

 tasks. So Maria is going to start a a telling you a little bit more about the programs because those are resources that may be valuable for you and just reminder that this is part one of a two-part series this first part we are going to talk about who are adults with learning disabilities and what are their needs and how does that tie into assistive technology and the second part which is him Friday we are going to talk more about the actual software and devices that you might consider for individuals or adults with learning disabilities. I will talk about the programs now.

I works specifically here in Washington state for the Washington assistive technology act program. Every state has a fairly funded program as well as Washington DC and are five territories. That provide statewide services for the residents of their states and territories. In regards to helping them with decision-making and selection of assistive technology. So that -- oftentimes it focuses providing the services and resources to help with employment education immunity living an independent living. The ATI program, the AT Act program can be a powerful resource for you in regards to helping your clients hands-on assistive technology. Many of the programs have free or low-cost programs for the consumers in their states. Many of them operating a device demonstration program for individuals can sit with assistive technology specialist and get hands-on experience with some of the general features of assistive technology that they're interested in trying out, and then here in Washington and many of the states they also operate a short-term device lending program so those individuals who are considering assistive technology have an opportunity to actually try that technology in various environments to see if it works for them, whether they are returning to school, perhaps that 80 may be used in community living situation so they will have and gather that information prior to actually

 also here in Washington have a device realization program where we are partnerships throughout the state in identifying to our consumers here of what we use -- activity is available to them in the event they don't have funding sources to purchase

 new AT. And we also have alternative financing through the Washington access fund as well as many of the other states have alternative financing where individuals if they are not working with state agencies to acquire there AT they can always reach out to alternative financing to determine if they can qualify for low-interest loans to purchase their devices or software that they need. And lastly we spend a lot of time monitoring our e-mail and our phone lines because we get a lot of phone calls in regards to just general information and referral, and that is a very common thing that all of the AT act programs do and it if you have entered general questions about AT to reach out to your specific programs.

And Mrs. Mark, I will just note that if you look in the links section of your browser, the lower right-hand corner you'll see that there is a link to the Explorer VR tool kit and there is a fact sheet on AT that links to the AT Act program's. In this webinar we are going to -- across the two webinars we have three objectives. We want to help you understand barriers to employment but are caused by learning disabilities, and by the end we hope that you can identify at least three assistive technology solutions to help calm say for we will like for you to be able to identify different hardware solutions and how to implement those and be able to identify what situations individuals should use dedicated literacy software versus mobile apps for reading and writing. Jumping right in, we have a say don't have a lot of time, just a couple hours across these two webinars but we did want to start with a big higher-level overview about the decision-making process for selecting assistive technologies. Obviously requires that you have some understanding of the need of the individual you are working with. Are they interested in going back to school, back to work, the specific context in which they are going to be operating. What do they need to be able to do? And then there is that the requirement for a functional assessment. What are the strengths of the individual and what are the potential deficits? And we will talk a little bit about Aldi today and we will tied into that functional assessment but we won't ask you talk about how you do the assessments themselves. After that, you need to be able to identify options and definitely in Friday session you'll learn more about potential options that you might consider. And then there is a decision-making process, which is a process in collaboration with the individual who needs the assistive technology , the organization that perhaps is paying for the technology and perhaps the setting into which the individual is going, be that employment or education. Finally or not finally rather next there is a question about acquisition and how you are going to pay for an acquire the device or software. Often there is a need for customization and training and really important piece is being able to identify whether or not what you decided to do, whether or not there was effective and if it's not, to engage in the assessment. So I wanted to lay that out for you because often people have a somewhat simplistic approach to assistive technology. They think we've got this problem, we want to fight a tool that will fit in solve that problem. It's not quite that simple. There is definitely a process you should consider working through. So now we are going to move into talking a little bit about about learning disabilities in general. Aldi is a little tricky because it is not something that you can observe, not something that you can see. And it has been defined in a very specific way. So learning disabilities really involved disorders of learning and cognition that are intrinsic to the individual. And all that means is that they are a part of the individual. Part of who that individual is. Bear not part of the individuals environment or something external to them. They are assumed to be some kind of central nervous system difference . I say that is an assumption because there is ongoing research to really understand the neurological relationship to a learning disability. That is the presumed where the assumption. They are believe to be stable over the lifespan. Not something you grow out of. Something that is part of who you are . And learning disabilities are generally defined within a relatively narrow range of academic and performance outcomes. If you look at schools, the most common deficits are always going to be in reading. The majority of students are identified with learning disabilities are students were difficulty reading but you also see students who have learning disabilities in writing and a map and we know that LD can affect speaking, listening, reasoning as well and we also note there are different types of learning disabilities coworker. One thing to talk away is that although students with learning disability's may have in self-regulatory behaviors and social perception, social interaction, those things may coexist with learning disabilities, but those things by themselves don't constitute a learning disability. In terms of how we assess them. And we also know learning disabilities Mac or with other disabilities or other outside influences. That aren't the result -- but are not the result of those conditions or influences. So an individual may have a sensory impairment and also have a learning disability but -- those two things can coworker together. And our influences externally that may result in individuals having a difficult time learning like not receiving good instruction or other kinds of things with those themselves do not constitute the learning disability or are not the cause of the learning disability. So just give you a sense for how many people there are with LD's, if you look at the 2010 program participation which is a self-report measure a US population of about 4.6 million people or 1.7% and you can see that the numbers increase as individuals age. That makes sense because as individuals age they run into experiences that test them in areas where they may have deficits. For example move further in school you need to read more complex materials, you may be more likely to be identified when you run into those barriers. These numbers are likely and underestimate. I would say that we don't know for sure what the exact prevalence of LD is for adults. The population estimates are very widely , some as high as 15% . We do know that prevalence is higher in adult education and training programs for me welfare to work programs estimate of about 25% to 35% of purchase pens with learning disabilities and program serving students who drop out, there are higher numbers. Two to three times the rate of their peers. And we also know that prevalence varies by gender. Males are much more likely to have a learning disability across the age span. And we also know that if there is by race and ethnicity so it's relatively similar across Latinos blacks and whites.Higher among multirace for example including Native Americans and lowest in Asian populations. We also know that it is related to poverty. People living below the poverty line are more likely to report having learning disabilities. Some of this may be related to the capacity for families to bring in additional resources for students were struggling to learn and it may be that individuals who have fewer resources are less likely to be able to pay for tutors for example. Perhaps more likely to go to schools with less experienced teachers and so forth. But there is a relationship between poverty and learning disability. There's also an interesting relationship between learning disability and criminal justice involvement involvement. And over half of young adults with learning disabilities report some connection to criminal justice system within eight years following their leaving high school. 52% have been stopped by place for an offense of event have a violation and as you can see nearly a third have been arrested. So for you all, I think part of what you are wanting to think about is all the pieces that are connected or potentially related to the individuals you are working with. And it's quite possible that individuals with learning disabilities were seeking jobs and the job support may also have some criminal justice involvement.

 Post secondary education is also an interesting kind of finding. We see that the total enrollment in post secondary is fairly similar. Between individuals with learning disabilities and the general population. But adults with learning disabilities are twice as likely 20 and to your college and half as likely to attend four-year college. And so it's quite possible that there learning disabilities affect their ability to gain admission into higher education and also possible that they may have not had the opportunity to participate in higher education that they would have liked.

We're about to transition to individuals with learning disability. The slightest highlighting what the planets of the students when they exit high school. And you can see that about 90% have dropped out and didn't receive a certificate or diploma. And almost 70% of them received a regular diploma while there is 12% of those individuals who received just a two -- certificate. We are looking at ethnicity on the right-hand side of the slide, you'll notice that with Caucasians there is a highest percentage of x-ray graduating with a regular diploma,

 and those cultures and backgrounds of Hispanic and blacks tend to have the lower percentage of graduating with a regular diploma and the larger percentage of dropping out. Those after high school, Mark mention this, 50% with learning disabilities have plans to attend a two or four-year college. What a fun interesting with this one is actually parents, almost 30% parents thought their child with a learning disability would have some sort of post secondary school. So when talking with the our case managers, they thought that that number was probably a bit low based on the realizations of what parents have. Transition planning, again this is information based on a 2003 longitudinal transition study. But based on this slide here, only 50% of the students reported being active participants in their transition planning. And 40% of them felt that the school alone determined what their transition goals. That is really saying that there needs to be a little but more involvement of the students in their planning of what is going to happen to them after graduation from high school. And in regards to was being involved in this as you look at the chart on the right-hand side, only 20%, 26% of two or four-year colleges are actually working with students and their transition planning, although there is a limited involvement of outside agencies and transition planning and only 75% of transition plans include some type of proposed high school services. So those numbers obviously we need to pay closer attention to in getting again those services outside of the school to be more involved.

Maria? This is Lori. Can you please read the slide numbers as you change them?

Sure.

Slide 22. 46% had regular Clement two years within living high school but only half of those working age who have learning disabilities are not actually in the labor workforce. That is a significant difference there as well. Now we will go to 23. VRN LD. Again this study was done or this is based in 2008. Largest disability categories. Vocational rehab and 32% between the ages and working with many of a case managers however many of the clients with Aldi with diagnoses that made a mark am located for them to define employment

We

 are going and and supported in the literature. Supporters like an understanding they just don't quite because that. For disclosing disability . Educating employer requesting accommodation often falls to the individual with learning disability . This isn't unique to people with it does have additional

 challenges. Many adults with Aldi public school or in secondary school. They don't feel confident about disclosing they are afraid of disclosing for a variety of reasons. And because of this the research suggests that reasonable accommodations for learning disabilities that less than one and 20 report receiving accommodations at work. To provide some supports to those comments. If you look back to the data from the national longitudinal transition study, students a years after living high school nearly two thirds of students do not consider themselves to have a disability, even if they received services in high school. So you can see be challenge their. Even if individuals don't perceive they have a disability for which they should receive an accommodation, there is a process I think they have in place to help individuals understand what their strengths and deficits might be, and what their rights are related to accommodations. It's also true that there are a number of adults who are not identified in high school were in elementary school who then struggle as they move into employment and receive an identification of learning disability

 as adults. I think many of those individuals have a challenge ahead of them in accepting got identification and understanding what it means, and in asking for help. So definitely some additional I think complexities about learning disability and employment and accommodations. I think I talked about most of what is on the slide, the only thing I would add is the last bullet, we are on slide to a six, and that bullet talks about depression , strongly correlated with learning disabilities. And you can imagine why that might be the case or at least hypothesize about why that might be the case. If you frequently struggle and the ways you are struggling are translated into your not trying hard enough, you are not smart enough, if you only would be more organized, then it can be a think certainly challenging for people to keep positive and to be motivated to -- moving to new employment challenges and situations. Now we are on slightly seven. This presentation is about assistive technology so we want to talk a little bit about what we know about ATM learning disabilities. There is not a lot of data out there but in one national longitudinal study, only about 7% of students with learning disabilities reported that they received assistive technology in school. Two tenths of a% reported having it after school. A minimal number of individuals who have assistive technology. For learning disabilities. However students who did receive assistive technology in school had higher graduation rates, they had higher rates of pay jobs and less likely to be earning less than the minimum wage. They earn more than the minimum wage. Now slide 28. When we think about technology as an intervention for people with learning disabilities, we often break it into two categories. Remediation and compensation. So these are terms that are probably familiar to you but remediation means instructional or rehabilitative technologies. Where is compensation really refers to technologies that people use as an accommodation or modification. Something that becomes part of their daily lives as they move forward in their jobs. And their lives. Moving onto slide 29, technology for remediation as I noted is generally instructional technology. It's really aimed at providing more practice opportunities , I'm going assessment, it could be instructional technologies that teach new content, so online programs, software and so forth. One thing we all would caution people about instructional technology is that ineffective strategies don't become more effective when you put them on a computer. And so you have to really think about the instructional design and the purpose of those instructional technologies. For this group, we're more interested in technology for compensation . Assistive technology that provide access to reading materials that are beyond a person's current skills, things that make writing easier and faster, software that helps was spelling, and those kinds of things. Compensatory technologies that in individual would loot use to help them be more successful in their work. One thing I will point out about technology and use is that it does change across the lifespan. So people especially in the area of reading often pushback against reading software's . Because they say if you give a child reading software then they will never learn to read. To some extent that is true and so -- or should say it is a concern that is reasonable. You don't want to offer a compensatory strategy if you think an individual will be able to develop fluency on their own. It is always true that reading without software is going to be faster than reading with software. And so attempting to move individuals towards fluency is a good thing. And so we generally encourage in early grades, K through three that the focus be on intensive remediation. Focused on high-quality instructional practices to try to move an individual towards more fluent independent reading capacity. But about the time you get the third or fourth grade, then you are really beginning to think about a combination of compensatory and instructional strategies. So still continuing to work on developing reading fluency but when you are working on learning content for example we were learning US history for example, to allow for and bringing compensatory strategies so that people and students don't fall further behind in those areas. And then when we get to adults, usually adults have gone through a lot of intensive remediation. If they are still struggling as adults we are focusing our efforts on compensatory strategies.

Now we are on slide 32. We get asked this question a lot. Prefer equally. Which is the best learning disability software? It's a hard question to answer without diving in a little bit more with asking parents or the end user's further questions, looking at who is it for? What challenges is the individual currently having? Specifically for reading? For writing? A combination? And what part of writing and reading are the barriers in? And what are they going to use it? Primarily when they are attending school or do they need access to that and doesn't need to be mobile? Does it need to be available to them as they are interacting on a job training experience? And was going to provide them? Depending on the complexity of the technologies are going to be using? Who will provide them with the training and support? So that they don't get frustrated in using the assistive technology . The goal as a AT -- AT protection are. It will not create a barrier in itself. And what I always try to redirect the user to is what product do we need to provide them that will provide them that support based on their functional deficits based on their functional issue that they're having with a specific task? And redirecting it to environment. Often times I think we failed to look at all of the environments and we use technology and it might be the case that they need more than one type of assistive technology so they can be successful in all areas of their life based on their functional deficits that they're expressing related to to there learning disability. Marquess Tommy this. It's important to keep in mind both reading and writing are very separate domains. And although as you see for those of you who will be participating in a webinar on Friday, that there is a lot of software programs out there that provide both reading and writing support. The features built into those programs can be really robust, and depending on the needs of the individual, we really need to determine if they meet all of those features or only some of those features are necessary for them to be functional. We don't want to overwhelm the user with having too many features. Because they will then be really frustrated and being able to determine whether or not they need all of those features and they probably will not want to use the product because it is overwhelming to them. So I often times keep that in mind as we introduce them to various types of technology. Now we are on to slide 35. When we are introducing technology to a person who has a learning disability we want to obviously take into consideration how is it going to be efficient in the environments in which they are going to be using it in. To they need dedicated software that is going to be on their laptop or desktop PC? When they are performing work activities or if they're going to to be in post secondary education or do they need to actually have it as a mobile application and we will discuss that's more on Friday. The difference between those two options. And again if you have somebody who as Mark said there is a correlation with people who have learning disabilities and depression and depression depending on the level of depression that they have, that affects their cognitive functioning, and oftentimes we are introducing new technology to the individual, bear in mind and be sensitive to the fact that it is going to have a significant amount of cognitive load in regards to the learning curve and be successful in using that assistive technology. For individuals to be successful in using reading and writing software , individuals who tend to have good verbal skills and can learn and operate software and are comfortable with that, software products tend to be more successful and to determine whether or not they connection use those features effectively and again that goes back to not just their comfort with using software products, and the use of technology but having a person that they can go to for technical support in the appropriate training so that they can have successful outcomes and not be frustrated with it in the long run.

We are on slide 36, we're wrapping up and when Mark said a few minutes ago when we are working with adults with learning disabilities, the primary focus really is providing them was strategies on how to compensate for their functional deficits whether that is reading and writing or a combination of . And using the technology that we will be talking about on Friday as a means of modifying and providing those accommodations it are in school or in the workplace or a combination of those environments. The key really is again focusing on function , and the future they need to be functional to improve their production, activity and function and not to give them some money features within a product that it is overwhelming to them. Giving them just what they need and growing from that. With that, where going to open this up to questions. We are on slide -- slide 37.

This is Lori and I've a question to get us started here. If I am a VR counselor and I'm working with someone who has a different disability, has not been diagnosed with a learning disability, say they have a mental health disability or something else but I am looking at their history and suspecting that there may be some learning disabilities involved, where would I send that person for an assessment of those issues ?

What I have found is especially working with adults who are transitioning to either a two-year or four-year college, that they try to go to the disability services department, but then because they haven't worked with a psychologist, that is usually the first up is that they need to be evaluated by a neuropsychologist to determine and provide some information on what they're learning challenges are. Do you want to comment on that smart?

Yes, my primary, would be that it is somewhat challenging. Especially at universities and community colleges. There are resources to pay for those assessments . And so even students who receive services in secondary and high school and elementary education, even though students who may have an IEP , universities and community colleges may not accept that diagnosis and so often I see in that transition to adulthood, that individuals have to have another assessment in order to get -- to be able to receive accommodations and services. So sometimes that can be paid for by private insurance. Sometimes that is paid for by VR. And it is -- but it is often a challenge for individuals to get a good assessment. And Maria is right, it is generally a neuropsychological assessment. And depending on where you are there may or may not be people qualified to do an adequate neuropsych assessment. Because you really want to get to something functional. And understanding of the areas where you have challenges and how that translates into your ability to work and to be successful in a work environment and it is that functional piece that can be hard to get.

I'm wondering to if there is often confusion between what might be the impact of a traumatic brain injury and/or a learning disability or maybe look at the school history to separate those out.

Yes, I think you would look at history . I think something like TBI is hard because that is often might be a self-report something who may not they remember -- someone who may or may not remember. The difficult questions sorting out to the individual receive adequate instruction as a

 younger person so other reading difficulties related to a feeling of the educational system? Or are they really related to something that is intrinsic to the individual in the way that they cognitively process information and so I think that is the challenge and that is where they neuropsych really comes and I think. Because they can begin to see patterns in cognitive function more generally.

Yes, that makes sense. I have also heard that -- I've known a couple of people who had children in school that were diagnosed with learning disabilities and the parents said I have that too. Because people my age, I am in my 60s, learning disabilities were not really a thing when I was in school and they just assume that you were hyperactive or you were stupid or whatever. So I think a lot of people my agent 50s and 60s may have had learning disabilities going to school but was never diagnosed.

Absolutely. And I think that is -- it is definitely something to consider if you have somebody coming back in two VR, maybe they have been employed, and they are performed okay overtime in a certain kind of job but they are really struggling to move into a new kind of job , really trying to delve into -- especially if they seem higher functioning like this should be able to do fine, to begin to look into those for specific learning disabilities or specific functional differences related to this in particular the reading but also to

 spatial [ Indiscernible ], definitely some research now focusing on nonverbal learning disabilities which is a tricky area, and between LD and autism in away. I don't think that there is a firm understanding of what that is. People who have difficulty with quantitative thinking as well as visual spatial thinking . So I think when you see somebody like that who seems to have an odd pattern of success and failure that certainly makes sense to consider whether LD, and you come I think begin the process just by talking about what that individual but what did they do oh, what do they struggle with, not everybody is self-aware,

 about their strengths but a lot of people are and sometimes people will tell you I don't read very fast so I have the strategy for what I have to read a lot of information. Or I am horrible at math, I can't add anything and so I have to have a cochlear. They will tip you off I think to some of those challenges they have .

I think that's a good point. It makes me think of people I have known that -- like my dad who was an engineer, and probably had reading learning disability although his generation that wasn't diagnosed at all, but work as an engineer, he always had a Secretary. The fact that he couldn't read very well or write very well was accommodated by that assistance that he got. And he found a profession that really played to his strengths and work to run some of the areas that he was not very good at .

Absolutely.

I was thinking about that when you show the slide on the prevalence, it might have been the early one, the prevalence of -- across the age ranges and the prevalence going down into later adulthood. And I was just wondering if that -- people self-report less as they get older because they have figured out how to work around it and so there limitation is no longer really a disability for them.

I think that is one of the reasons but the other reason I think it also be that they are not challenged as much as they were in school. Longer demand on reading and writing when they are in school and when they go depending on the job that they land in, their night may not be the same types of learning demands. I know from some of the men that I've worked with that they all oftentimes Landon very manual labor jobs. And working with their hands. And not having to do a lot of demands for reading and writing and that kind of career path.

I think that's a good point. I think that they often especially in adults you find a lot of self-esteem issues tied into -- whether they are identified with LD or not. But if you have struggled over time you haven't been able to follow the career path that you wanted to come and now you are back, leaving support from the yard, I think it's more and keep that in mind. It's pretty sensitive for people not being able to read well. Not being able to do that. People as adults in particular have created reasons for why that is true. And a lot of those reasons may be related to their own sense that they're not smart, they are not able to do things. And so I think part of -- we will talk more about the kinds of devices that you may consider, but part of what you are trying to do when you are thinking about technology is to help people understand what they do well and what they struggle with. And to help them think about tools that would take away the difficulty of the same thing you struggle with. And so when we talk about reading software, software that will read out loud to people, for people who read over a certain rate, those -- that's going to be slower , reading on their own. But if you are someone who really struggles to read, then you may find that really opens up doors for you, you are able to put away the challenge of decoding and you can focus on the issue of comprehension and so when I see people with LD who are accommodated quite will, usually they are really proactive about the tools that they use. They know what they can do and can't do. And they bring the tools to bear when they need them and they put them away when they don't need them. Just like we do anywhere. But I think that is what your goal list, to try to help somebody understand what they need, when they need it and how they can benefit from it. It is tricky. The only thing I want to highlight since we have a little time is what Maria was talking about in that last slide in terms of cognitive economy because I think this is something that is really important. If you're working with an adult especially in adults who hasn't put a lot of time in on the computer and maybe they are transitioning from a job that is more manual to a job that is more of a desk job, that in itself is a big transition, with a lot of cognitive challenges going out and then as you layer on top of that additional software, additional devices you have to really keep in mind that there is a pretty big learning curve for people that they are actually going to work slower want to get up to speed with the AT. And that has to be built into the process of choosing assistive technology and implementing it in a work environment. And I think that is part of white Maria focused on really identifying the appropriate technology. Don't pick the one that does everything because doing everything is worse. Because then you have to choose. Then you have to figure it all out. What you really want is the precision targeted tools that will help you in the areas where you specifically need help.

Think any of us that have been afflicted with new operating systems on our computers or new phone systems by our IT specialist can relate to that. All of a sudden you have to figure out what you are doing again and it's a live but slow. Are there any self advocacy groups for people with learning disabilities? Is is an area where people have banded together at all?

 The national learning disability Association that is fairly active, and up here in Washington there is a state chapter that is pretty active. And I believe if you go to the national LD a website that they have a link to other state resources. I know when I get called. We can questions a lot about psychologist who can do assessment. That's why refer them to. And they give information.

I guess I would say that there is been a very strong push by parents and parent organizations around learning disabilities. There is less that happens for adults. I would say we are seeing a bit more of that. But in general the focus has been on kids. And that comes from parents. So having a

 good advocate

That is consistent with my experience over the last many years as the adult system has become more aware that learning disabilities don't go away with -- one some believe school and they continue to be a challenge.

Yes. And I think that issue of transition that we touched on is pretty critical. Even if you have -- go to the best school and lots of great services. And when you transition out, you find yourself in an entirely find yourself in an entirely dissonant -- different world and if you're then moving into another school setting like secondary or university or community college, all of a sudden you have to really become your own advocate and be prepared to ask for the accommodations you need and that's assuming you know what they are. But really, take control of what you need and that's a challenge for young adults who are 18 plus, a challenge for adults were like me, closer to 50. It really is important, especially in that transition there receiving some sports from BR that that transition be supported, that the connections be made into the new setting. And the accommodations be consider. And the other thing that is true in changing across the settings, they may need different things. They may have different challenges that they are facing, so they may have technologies and in fact it would be really likely that they have technologies they used in high school settings. That would be less appropriate and a college setting so those are definitely [ Indiscernible ]

We've got a few minutes left. Is there anything else you want to share with the group before we wrap up for the day?

I don't think so. As Mark mention, this was laying the foundation about some of the barriers for adults with learning disability. And then on Friday the focus is going to be the discussion about the solutions that can help reduce those barriers and increase functional outcome.

We are excited to learn more about that. Thank you so much market Maria for this great information. And thank you for joining us everybody today. Hopefully will be back with us today, same time, same station and we will get down to some specific interventions and assistive technology that can assist people with different kinds of learning disabilities. Take care, have a good afternoon, and we will talk to and a couple of days.

Thank you .

Thank you everyone. Please be sure to take the evaluation now that it is appearing on your screen. There is a link to the evaluation a PowerPoint as well as in the links box. This will help us with future webinars and learning more about how you felt about this webinar as well as as well as whatever -- what other topics you would like to hear about in the future. Thank you for attending and please join us again on Friday for part two at 2:00 Eastern time, 11:00 a.m. Eastern time. We will see who then. Thank you, goodbye . [ Event Concluded ]