Welcome to our podcast series. Today we have with us Iris Sockowitz who is an expert in EDTech. He just finished doing two presentations at the summer conference, the Adult Education and Literacy Conference here in Williamsburg, and we persuaded him to stay for a little while this afternoon and do some follow-up questions so that we could expand on some of the concepts that he introduced to us said the luncheon speech and then his workshop afterward. Welcome.

Ira Sockowitz: Thank you for having me. I’m excited to be here.

Barbara Gibson: One of the things that I learned about Ira was that he's not an IT person at all by education and really as a career, but he is certainly an expert in the field. He started out as a lawyer and he has a pretty interesting story to tell about how a lawyer became an IT person and [he] is really working very heavily in the EdTech field particularly developing software that works well with adult students.

Ira Sockowitz: Well thank you again for having me. I loved being a lawyer, because I loved working in public policy, and I did so for about 18 years at the local, state, and federal levels. You asked me how a lawyer becomes, you know, an educational technologist and mine was not quite accidental, but one of those odd vagaries in a career path. I was in the federal government back in the mid-1990s and I was special counsel to the Secretary of Commerce, then Ron Brown, and we were doing advocacy and rebuilding of the Bosnia area towards the end of the war in Bosnia. Unfortunately, the Secretary's plane crashed and all 33 people on board were killed and because it was a very painful experience for me…I was there on the ground I had to identify the bodies and fly them back to the United States.

I chose to leave the federal government at that time and went to work in the philanthropic sector here in the DC area, but a childhood friend of mine, who's an absolute creative genius, his name is Dan Moody, had asked for some of my help in creating a children's literacy show featuring Richie Havens, the famous pop singer, called Mr. Word Wizard. But it wasn't going to work. We discovered the technology he was trying to use wasn't all that great. But he discovered the federal Ready to Learn program and came back to me and said he had a brilliant idea for a new children's literacy television show.

He met a gentleman named Dr. Michael Cohen who was a wonderful evaluator and could I help them win a federal grant? And we were fortunate enough, we wrote an excellent grant application and won 147 million dollars to make a number of products. Including one called Word World, which was a children's television show for three to five year olds that taught literacy and for which we won three Emmy Awards. But, during the course of that grant the iPhone and the iPad were invented. So we went from wanting to make linear television to
making interactive educational technologies and deepen the learning by having the interactions take place in what was now a convergence device where you could mix video audio and interactive elements all on one device.

Through that I met some folks from the MIT Education Arcade and the University of Wisconsin, Learning Games Network, and they helped advise me on understanding interactive technologies. And through working with them I ultimately became the executive director of their not-for-profit. So I helped run an Innovation Lab for a few years and my current company, Learning Game Studios, is actually an offshoot of that, because, by doing research on game-based learning, we did devise with philanthropic and federal dollars some viable solutions for teaching and learning, but as a small not-for-profit we didn't have the wherewithal to try to scale our solutions.

So consequently we chose to spin-off a for-profit company, still very much in the service of educational technology, but our goal is to reach learners at scale. And I chose to take Xenos, our mobile learning game, and focus it on an adult education population, not a k-12 population in part due to my background of working in the government and public policy on economic and workforce Development. So my passion is about helping adults get more skilled and create financial stability both for themselves and their families.

**Barbara Gibson:** That's quite a wonderful story. Out of tragedy came such an interesting opportunity that's potentially meeting the needs of millions of people around the world, particularly adults who are undereducated and who need to have opportunities to gain better literacy skills as well as life and work skills.

**Ira Sockowitz:** When we were young people working for the secretary- we were all young once- I suppose, secretary Brown implored us that later in life we could do well by doing good. And whether this honors his memory or not I really took that to heart and I am thrilled that my efforts to make money are as a result of benefiting others.

**Barbara Gibson:** I think that's really a wonderful motivation, because you're using all of your skills and all of your experience to do something that I think is quite remarkable. In our field of adult education have been thinking a lot about how we can use technology more effectively, and I think you are developing a product that will help us to get where we need to be maybe better than we ever have before. And I’m looking forward to learning more about it and finding out it more of our programs in Virginia might even try it out and see how it works.

**Ira Sockowitz:** Well again I can't thank the organizers of the conference enough for asking me to come and give a session and to give a luncheon keynote speech, because we need to both raise awareness of educational technology, but start thoughtful conversations because they are wonderful tools, but they're just that, they're tools, and we have to think about the possibilities they offer and the limitations that they have but there's no denying that technology is evermore present and viable as a teaching and learning tool.
Barbara Gibson: That's a great segue to my first question. I tried to come up with some questions that followed up on some thoughts and questions that I had after listening to your speech and your workshop, and this one is something that intrigued me. You had spoken about the promise of EdTech. You described EdTech as a constantly evolving process that started with pencil and blackboard and that is a tool, not a solution in and of itself. Can you expand on that?

Ira Sockowitz: I'd be happy to. Educational technology can be any piece of technology that serves to further teaching and learning. I gave the example of the pencil and the blackboard because at the time of their respective introductions they were radical. You know, if we hadn't had Gutenberg, where would we be? But now people think of educational technology as something separate and apart, and they're really not. There are no educational technologies of which I'm aware that are in and of themselves the answer. They are tools as part of a broader arsenal for delivering teaching and learning.

I spoke at lunch about the ubiquity of mobile phones. In adult education in particular we're constantly thinking about the busy lifestyle of the adult learner. They have jobs, they have families; they desire to gain skills and to increase their knowledge. We have to meet them where they are. So if we can deliver materials to them in ways that meet their busy lifestyle, that's wonderful. There is self-directed learning, but almost all of the research shows us that while self-directed learning is a viable option, it's not the best option. That blended learning models and facilitated learning models where a learner gets to interact with an educator are much more likely to result in educational outcomes that are both gratifying to the learner and have higher value. By creating educational technologies that are tools in an arsenal of an educator, we enrich their abilities, as well as take the affordances of the technology to aid the learner.

I’ll give you two examples. For a learner greater access and 24/7 access to tech for information content is wonderful. The technology is a pedagogical approach to delivering a curriculum. Will the learner understand the curriculum all by themselves? Maybe. But particularly at the foundational skills level, there are a lot of other barriers to the acquisition of this knowledge in these skills, and so the teacher not only becomes capable of helping the learner gain that content knowledge or those skills knowledge, but they're also there to do the important things like help with the social-emotional aspect - to be a mentor and a guide, and help the learner understand their pathway, but also the value of knowing they're not in this alone and that there is a mentor behind them or somebody to encourage them. There are so many different roles that educators play that are more than just the core content acquisition, that most of the field believes that blended learning models are really far more advantageous than just using tech-enabled tools by themselves.

From the educator side, technology-enriched teaching can be enhanced by accessing data in real time about what a learner is doing. You can be overwhelmed by data, but if it's made meaningful and it's immediate, you can not only give feedback to the learner, but as it continues to improve, an educator can devise individualized instructional approaches to aid that learner. They can make more directed interventions because they have the data at hand that says this is what that learner is doing this is where they need help, and if you're doing a one-to-many classroom, certainly having that kind of data if you've got a blended learning model allows you to do small group
instruction or individualized instruction and you will bring everybody's level up to a much greater extent. That's one of the opportunities.

**Barbara Gibson:** It also seems to me that by thinking of EdTech as a tool in a teacher's arsenal of all kinds of tools that she or he may be using, it enhances what the teacher is able to do and maybe allows the teacher to save time, to be more effective in terms of their lesson planning, because they're getting this real-time information about what their students are doing, who's learning this, who needs to move on, and who needs to maybe redo a lesson.

**Ira Sockowitz:** So let me interject the idea. You know a common phrase we hear is personalized learning. That means a lot of things to a lot of people. Just like the phrase educational technology does, but think about having a learner with different learning styles: audio, visual, kinesthetic. Think about a one-to-many classroom where you've got 20 learners.

If you can allow a learner to proceed at her own pace, you now get to focus an educators’ time on those who need more help. Where the learner who's making leaps and bounds, you can still give them encouragement, you can still check in with them, but a learner who may be lagging a little more can possibly get more of that educator’s time and attention or creation of small group as I said earlier because the data will show who's doing what.

**Barbara Gibson:** Right and that really does then become not just an educational tool, but it's an organizational tool and an administrative tool for the instructor.

**Ira Sockowitz:** That's why you'll hear me use the phrase teaching and learning all the time. Because they're two sides of the same coin.

**Barbara Gibson:** I think we don't think about that often enough in education and you know maybe we're new to this an adult ed, that we're not really looking at all the ways that we can use the many tools that are available. Whether it's cell phones their students may have; it might be software or a system that we that we have an instructional system that we buy for classroom use. We don't necessarily think of it as an arsenal of tools that we can call on it, you know when we need them and when it's appropriate.

**Ira Sockowitz:** As I said during my luncheon discussion, all too often unfortunately, instructional software is still seen as technology and not instructional material. If we can change our mindsets a little bit about that and see them as tools in our arsenal or even as supplemental materials. You know one of the affordances of educational technologies it creates extended learning time. And extended learning time in or out of the classroom means time on task, and what educator doesn't want increased time on task?

**Barbara Gibson:** Absolutely. This is a little, this question is a little different, but it was intriguing to me because you mentioned artificial intelligence(AI) several times, and I know we have different views of it. There are different definitions of it, and some of us are a little frightened by the idea of artificial intelligence, but one of the things you brought out in you presentations was that artificial Intelligence can facilitate the effectiveness of educational
technology, and I'd like you to explain that a little bit so that maybe we have a better understanding of how AI can help us to create more effective tech.

Ira Sockowitz: Well Barbara, you point out rightfully that it means many different things to many people. It can be used in a variety of ways. Artificial intelligence and machine learning can take some of the datasets we've been speaking about and make them actionable. You can devise better feedback, you can give the feedback in different ways through artificial intelligence, or you can use it to machine learning to rapidly help an educator develop a new individualized instructional approach. Let me give you one example from my own work where artificial intelligence will be very helpful.

Our product, Xenos, teaches ESL and literacy skills to adults. In it there's a social virtual world, that's our effort to create cohorts of learners. You create your own avatar and you develop agency and you go into the world, and as part of your experience it's a place where you can practice your skills in a no-pressure environment. But there's not always a clear sense of what you're supposed to do in that world or you may sign on at a time when there aren't a lot of other players, so we're creating what are known as non-player characters who will also populate that world. And because they're technically “the machine” playing along with you, we'll use for example one form of artificial intelligence known as branching narratives. So the player will interact with this non-player character but will have a full-on conversation with them, or they can be guided into activities through conversation in the game on what they can and should be doing next or where to find it in our game. It will be a full-on conversation and what we mean by branching narrative is there will be different answers or different responses I should say when a live player answers questions or queries from the non-player character.

So the ability to use artificial intelligence can be from something as simple as giving guidance inside of a game world or allowing a user to practice their interactions and communication skills and can be as deep as machine learning helping devise instructional approaches based on real-time data. It's only getting better. The other context in which artificial intelligence and machine learning can be really helpful is developing more formative assessments and the ability to give them without the user of whatever the educational technology is feeling like they had to stop and take a test.

If it's a well-designed property there are always educational objectives and whatever pedagogical approach that technology is using to deliver that curricular content, some of the versions of AI and machine learning will be able to take a formative assessment of what that learner is doing and whether it's competency-based or it’s acquisition of knowledge that can be measured through other means. If you don't have to stop and make the user take a test which feels like a test it may enhance the level of engagement with that educational technology and keep greater time on task because it won't feel so much like drilling skill.

Barbara Gibson: And that's really important for many of our students who feel as if they've failed at so many tests in their educational careers and our opportunity to help them to learn without feeling they're being tested over and over and over again so they can build some self-confidence that they can learn and then they can be in that testing environment and approach it
with more confidence and a sense of self-esteem that they may not have certainly in the beginning when they come in.

Ira Sockowitz: And, if you've defined your educational objectives well, most likely you're going to use a scaffolded format for building up skills and competencies. We talked about the zone of proximal development. If the educational technology itself can undertake formative assessments, you can start to push players, or users, both forwards or backwards, depending on the outcomes of those assessments. If you're doing well it can not only push you forward, it can leapfrog you. So, you know, one of the things, learners get bored. I come from the game-based learning world. If something's too easy people abandon the task. So you move them up fast enough that it's still a challenge to them, but it's still within their zone of proximal development, right? It's challenging but it's not too difficult so they don't abandon the task, and it's challenging but not too easy so they don't abandon the task. So you keep them engaged.

Barbara Gibson: And that's a part of what we try to do in standards-based instruction is to, you know, push them but not overwhelm them and give them that opportunity to succeed but challenge them at the same time. The next question that I have is a practical question, and I think it's something that many adult educators think about when they're considering buying any kind of educational software or educational instructional system. What are the key questions that adult educators should use to evaluate vendors and vendors’ products before they purchase EdTech for their programs?

Ira Sockowitz: That's a great question. I'm so glad you asked it. You absolutely need to evaluate what you're buying and why. First of all, what are you getting out of it? How does it enhance your delivery of educational content or skill sets? Second, what does that vendor bring to the table? Are they an educational company or are they a technology company? Do they have a clear understanding of your educational goals and objectives, and is that the basis for their product? The way we like to think about products and organizing them is you start with educational objectives, you understand the learning science for delivering that type of content, what's working, what's not. You build on top of that instructional design and then you design a pedagogical approach. For us it's a game design document. For others it could be something else. People should be evaluating products based on every one of those layers. Do they understand your educational objectives? Do they evidence that they know what the learning science is about, how to teach and how learners learn that content? Do they understand instructional design? Do you like their instructional design? Has it been tested with users? The smartest people in the room are only as smart as the users who are going to use the product, right? Have they conducted formative assessments? Do they know whether or not their product is not only capable of teaching, but is it enjoyable? Or will people abandon the task? There are a lot of different rubrics. Digital Promise on their website has a great resource on how to conduct an EdTech pilot, and I recommend people go to the Digital Promise website and take a look at that. It's really a great step-by-step guide to ask the right questions and to conduct a pilot at your site prior to making a large-scale purchase.

Barbara Gibson: And most vendors will allow you a certain amount of time to try out their product.
Ira Sockowitz: The good ones will.

Barbara Gibson: Yeah, so, and that's something to remember in your evaluation—that the good ones will allow you to try it out for a set period of time, obviously.

Ira Sockowitz: And it may come at a small fee. I mean, they're in business. They need to be sustainable, but a reasonably priced pilot is a win for everybody. They get to come in and show you the best of their wares. You get to make sure your educators can use it and have the requisite PD and that your learners have the requisite delight in using it and are capable of gaining content and skills knowledge through its use.

Barbara Gibson: I think those are really good suggestions and tips for evaluating EdTech, because I think that's something that very often adult educators are a little fearful of because it's an investment. It's a part a big part of your budget sometimes. And making sure that you're making the right decision is sometimes scary, and I think those are good suggestions.

Ira Sockowitz: It will save you money in the long-run.

Barbara Gibson: Very good suggestions for that. I have one final thing, and this is a probably a challenging question, but I'm gonna ask it anyway. What do you see is the positive and negative aspects of the proposed merger of the US Department of Education and the Department of Labor?

Ira Sockowitz: I think it's a very intriguing proposal. I think there are a number of underlying causes for it. Having read some of the documents issued by the government, OMB, the Office of Management and Budget, looks at it as a cost-saving effort in part, but also a way to get rid of duplication. It may or may not. That's arguable and that's not where I think this conversation needs to go. But they do point out, and I think there are many who would agree with this point-of-view, that it's a continuum that you are—education is now going to be lifelong and that work is part of a longer continuum of education. They're not discreet and anybody who's talked about the future of work, who's read it and investigates it really knows now that we have to train people to be lifelong learners. The speed with which technology is changing. The nature of jobs are changing. Even the gig economy may or may not require degrees and diplomas, but credentials. You may, I think I talked about at lunch this recursive loop, in the old days you went to school from 5 to 21, if you went all the way through post-secondary and then you got jobs maybe 2 maybe 3 for the rest of your life based on the knowledge you acquired by the age of 21.

That's a dying paradigm, if not already dead, so merging the departments of Education and Labor might be an acknowledgment, or more of an acknowledgement, that career pathways are forever. And there is potentially some upside of that. You know you've got a mix of titles in adult education, mix of titles through which money flows, in adult education. Some of which are purely the Department of Ed. Some of which are the Department of Labor but administered by the Department of Ed. Would it be beneficial if all those were under one roof? Quite possibly. A lot of it will be as they say the devil in the details, you know. Will adult education become the office of lifelong learning? And will that now be more tied to outcomes like employment which may not be good enough, especially for many of us who work in the field. It's not the sole
purpose of adult education to create workers. We're trying to create people who have the skills and abilities to participate in our democracy and to engage civically, as well as to get living wage-earning, family-stabilizing jobs. If the focus becomes too narrow on an outcome like employment, that's a potential downside to the merger. But a lot of it remains to be seen. The plan is pretty top-level. I think people should give it thoughtful engagement and see where the potential for it is and what the negatives could be, and if it were to go forward, how do we obviate some of those negatives by saying, “okay if we're gonna meld the two together, here's the best of what we could come up with in that?” But, I think the big upside is the recognition of it as a continuum and maybe the opportunity to slot adult learners in on a more equated basis. The amount of money that goes to K12 and post-secondary dwarfs that of adult education. Yet, there's a vast need and, as adults become lifelong learners, maybe we'll be given greater recognition to the need for constancy in adult education. You know, there's another side of it as the workforce gets tighter and tighter. You know there's a lot of emphasis right now on middle skills.

At some point if every person who's in the middle skills category got a job, there'd still be over two million job openings. So, at some point, maybe there's greater recognition that we have to start paying attention to those who need foundational skills and move them up the ladder commensurately to keep pace with our economy, maybe that is beneficial from thinking more about the employment outcomes. I don't know.

**Barbara Gibson:** I think those are all interesting evaluations and assessments of this proposal, that we don't know whether that will actually happen, but it looks as if it might be moving in that direction now. But I think you take a hopeful view for adult education and we certainly appreciate that.

**Ira Sockowitz:** Well I do and listen, I worked in public policy for almost two decades. Everybody in the adult education community needs to be a vocal advocate for adult education. Especially, you know, since some of the funding was proposed to be cut. Congress added funding to the education budget including adult education. We need to stay on top of our elected representatives to make sure they understand the importance of this both civically and from a workforce development point-of-view. If they don't hear from us, they don't know what we're thinking, and they can't act on it. Groups like the National Skills Coalition and others, there are lots of groups out there for the listeners of this podcast to get involved. But, by all means, it's a participatory democracy. Get involved. Your voices mean a lot when they're heard by your elected representatives.

**Barbara Gibson:** I think that's just a great way to end this podcast session, and Ira we really appreciate your taking that extra time to share your thoughts with us and follow up on some of the points that you made in your presentations today. Thank you so much.

**Ira Sockowitz:** Again I'm honored to participate, thank you so much for having me.

[Music]