

Vicki Sipe: Welcome to the ALCTS Exchange. This event celebrates the 60th anniversary of ALCTS. I'm Vicki Sipe, president of Association for Library Collection & Technical Services. Otherwise known as ALCTS. This is a very exciting moment for me and for the organization as we launch a unique professional and engagement experience. The ALCTS exchange is the culmination of over a year of discussions and experiments. We began with a desire to find a fitting way to celebrate the diamond anniversary of ALCTS. It needed to be a forward_looking, a thought_provoking program that would build off of our strong program in professional continuing education. Through the efforts of many people, the ALCTS Exchange has grown in to all of that and much more. We hope that the exchange stretches the boundaries of online engagement and information exchange in ways that you will find enriching and rewarding, and we hope that this event will raise your expectations for what such an event can be and will encourage you to further experiment with methods for engagement. Today we are grateful that we can celebrate our Diamond Anniversary by sharing this event with the hundreds of participants joining us, as individuals and in groups via live stream connections. Welcome. And thank you for joining us in our celebration of ALCTS.

The Exchange will offer four live stream sessions and many continuing conversations over the next ten days. Each session features a unique theme that is relevant to today's library collections and technical services, and fits with the Exchange's broader theme of embracing the past, building the future. Now, in addition to the live stream, we have plenty of content available on the ALCTS exchange Web site. Please engage with the Exchange via the Web site and take advantage of the content there between the live stream events. We also want to encourage you to tweet about the exchange using the twitter hashtag ALCTS X17. That's ALCTSX17, but there will be more about that in a moment.

Now, we have a lot of great programming planned for today, and I need to move things along, but we really must extend our thanks to a few people before we begin. . We would like to thank our sponsors for their generous support of ALCTS exchange. Our heart_felt thanks go out to Wiley and to the ExLibris Group for their support of this ALCTS Exchange. We really truly appreciate your support. I'd also like to thank members of the ALCTS exchange working group and the ALCTS staff, all of whose names are displayed here. These folks have made this event possible. Their creativity, energy and dedication have created this new method for engaging with our colleagues on issues of professional interests and concern. I'm grateful to you all for your service and commitment to ALCTS. Thank you.

Now, joining me today and welcoming you is the chair of the ALCTS exchange working group, Karla Strieb. Karla.

>> Karla Strieb: Thank you, Vicki. On behalf of all of the members of the Exchange working group, my thanks to all of you in attendance for joining us today. It's been my pleasure and a singular honor to work with the ALCTS staff, our ALCTS leadership, the working group members and all of the amazing folks who have prepared presentations, sessions, lightning rounds and posters for the exchange. I've been waiting for us to start today's conversation for more than a year now, and it's just a thrill to be

joined by hundreds of others in an exploration of our shared professional concerns and opportunities. I, too, have a little bit of housekeeping here so that we can all have a good experience with the exchange.

Information about the code of conduct for the ALCTS exchange can be found on the event Web site, which has the URL up here. The ALCTS leadership, the ALCTS office and the ALCTS exchange working group all feel strongly that the event should be a comfortable and welcoming environment for everyone in attendance. Harassment or intimidation of any kind will not be tolerated, and if you've been a witness to or recipient of any kind of behavior that you believe violates the ALCTS code of conduct, please contact Keri Cascio, the ALCTS executive director at either the phone number on the screen or by E_mail at kcascio@ala.org. And that contact information is available on the exchange site with the code of conduct.

Just a reminder that all the exchange participants will be muted during the event. So please make use of the chat box if you have questions you want to ask or comments you want to share with presenters. There will be plenty to do when the ALCTS exchange is not broadcasting in the live stream. You're invited to check out the discussion forums, look at `pre_readings` or `pre_work`, take surveys, or make use of discussion guides created by ALCTS exchange program developers. Additionally, the Exchange posters will be available for you to view at your convenience throughout the duration of ALCTS Exchange, and this we'll be having our poster sessions, so take a look before then.

One of the forums offers you a chance to introduce yourself and meet your fellow registrants. So if you haven't been in there already, go in and see that many folks have already said hello, but there's room for everyone to chime in and get to know each other. All of this content is available on the ALCTS Exchange Web site once you've logged in as a registrant. And if you're a part of a group registration, your group leader can tell you how to set up an individual account so you can access the registrant site.

You can join the conversation about the ALCTS Exchange on twitter, and the ALCTS Exchange has an event hashtag that Vicki mentioned. I'll just say it again. It's #ALCTSx17. Feel free to share your questions, comments, insights and ideas using the hashtag, and the twitter stream is showing up also on the Exchange Web site. So you'll be able to see it there. If you encounter any technical issues or have a technical question, you can start a private conversation in the chat box with Learning Times technical support. And you can also contact them directly by E_mailing them at help@learningtimes.com. And we have several folks standing by to help deal with difficulties people might be having.

So now that the housekeeping is done, let's get on with the show. Today's theme is "New Roles, New Work Flows," and so in today's programming, we'll start to explore how we can think about our work and our roles in new ways. How we and our `co_workers` and colleagues can look ahead and look

around us to bring fresh perspectives and fresh urgency to growth and change, both personally and for our organizations.

So in that context, I'm super excited to have the honor of introducing Dr. Mimi Ito at our opening keynote speaker. The whole Exchange is focused on taking our profession and our organizations forward in to a digital future. Dr. Ito's work focuses on the learning practices and experiences of the young people who are or soon will be the users of our libraries and who are also our future colleagues and co_workers. As we look ahead, where better to start than with a conversation with an expert in the anthropology of technology use.

Mimi Ito's biography is on the exchange site, which you've heard me mention several times, so I won't repeat it here, but I will say that she is a distinguished faculty member at the University of California Irvine, and among many other roles, she is the research director of the digital media and learning hub. Be aware that our keynote presentation will end at 2:10 eastern daylight time, but in the course of the next hour, we expect to have time after Dr. Ito's remarks to have approximately 15 minutes of questions and answers. And so that's what you'll use your chat box for, to ask questions.

So with that said, Dr. Ito, thank you so much for taking the time to talk with us today about digital learners and young people's social and cultural worlds.

>> Mizuko Ito: Thanks so much, Karla. Well, it's really exciting and a pleasure to be here for this very cool new effort in online and connected learning, so I'm looking forward to our hour together.

I wanted to start just with a personal story from actually my home life and a conversation I had with my daughter a few years ago when she was __ just after she started her freshman year in high school, and she came up to me and said, you know, Mom, I'm kind of interested in, you know, learning how to play guitar. She had been playing viola for many, many years, but as a teenager, she had been developing more interests in popular music, and was interested in an instrument that would let her pursue those interests. Now, she had just started high school, so I looked at her, and I said, honey, you know, you really are pretty busy, and there's a lot of new stuff to learn in high school. Are you really sure you want to pick up a new activity right now? And then she says, you know, it's not that big a deal. We already have a guitar. I have, you know, friends who know how to play. I'm sure I can just pick it up. And then I turned to her, and I said, honey, you know, it's not that simple. We're going to have to get you a teacher. You're going to have to take lessons. You're going to have to practice. You know, is it really something you want to take on right now?

So I get the sigh. I get the look. And she goes, Mom, that's what the internet is for! So it turns out that she's already been online watching YouTube videos on, you know, how to play guitar, and has already picked up the basics on her own. So what was interesting to me about this exchange was the fact that even though I consider myself a pretty tech_savvy mom, and I study what kids do on the internet, there was a really wide gap between her assumptions about when and how learning happened

and my assumptions, where, you know, I had assumed that learning happened in, you know, a particular way, that you had to have an expert instructor, that you needed learning to be structured and sequenced in a particular way, and she is this kid who has grown up, you know, in a world that always had the internet, and where whenever she has an interest or something that she wants to pursue, she just assumes that learning resources and access to __

>> Mizuko Ito: Well, it wouldn't be a webinar if you didn't have some kind of technical glitch. So I'm glad we got that out of the way.

But yeah, I was saying, you know, my daughter, you know, she really just assumes that, you know, whenever she has an interest or something peaks her curiosity, that learning resources, access to experts would be at her fingertips when and how she wants to access them.

So our institutions of education were really founded in an era that was, you know, more along the lines of the assumptions that I had about the fact that, you know, in order to gain access to specialized knowledge, expertise to instruction, that, you know, we needed to rely on particular modes and institutions of learning versus, you know, kids who are growing up in today's much more networked, fluid world of connectivity and information.

So the question, I think, that is in front of us today is really the question of how can we best support young people who are growing up in an era of absolute abundance and access to information and to social connection, an era that's really quite different from the one in which our institutions of knowledge and learning and education were founded. So today I'll start by giving a quick overview of, you know, some of our work and my colleagues' work around kids these days and how they're engaging with media, how that is leading to a kind of culture clash with our established and traditional ways of doing things within education, and then finally, some thoughts on, you know, this model of connective learning that I've been developing with, you know, research and practice partners that have emerged from the MacArthur foundation's digital and media learning initiative, and some of the work that we've been noodling on about how we can turn, you know, this culture clash, or this changing landscape of learning and information, knowledge into an opportunity.

But first, I wanted to ask your indulgence in doing something a little bit different to get us started. I know this is the kick_off session for this conference, so I also like to get you all engaging online. I was hoping that __ oh, do we have an audio problem again? I see some questions in the chat.

Are folks hearing me okay? Maybe you can raise your hand if you're able to hear me.

We lost audio again. Oh, we're back? Okay. We're back now.

Okay. So I wanted to take, you know, to ask if you all would indulge in engaging in digital youth group quiz, and it will just be a simple sequence of, you know, just three questions about, you know, how kids are engaging in digital media today, and I will pose a question. And I know some of you are in a group

setting. I know some of you are connecting individually, but hopefully either through your facilitator or directly you have access to the chat channel. So, you know, when I pose a question, I'll give, you know, folks just a minute or two to type in the chat box, you know, your best guess, either individually or if you're in a group, you can take a quick poll in the room about what you think the best answer to the question is and post it in the chat box. And if you could resist the temptation to not try to Google for the answer, that would be great, because this is just a way of checking in to what, you know, our beliefs or assumptions are about kids these days. So hopefully this will work, and that you're ready for the first question.

So the first question is: What percentage of Americans aged 16 to 29 read a book in 2012? And this can be a book in any format. It can be an eBook, a physical book, but what's your best guess as to the percentage of Americans in that age group who read a book based on data from 2012.

We're seeing some numbers come in. There's a range from 15% to as high as 85%. 30 to 50% range. Maybe a few more seconds to type in their best guesses. Some of you may be familiar with this research. Okay. Are you ready to see the answer? According to Pew, 83%. And this is based on Pew's research with libraries and young readers about young people's reading habits. And, you know, this number was a big surprise to me, too, and I think when we think about kids these days, we often assume that they aren't engaging in traditional formats, traditional literacies, so I thought that this was actually a really great reminder of how even as young people are engaging in, you know, all sorts of new media, different kinds of text formats, that they are still also continuing to engage in more traditional kinds of literacies as well. And this is backed not only by, you know, the Pew study, but, you know, a range of studies that have looked at young people's reading and writing habits. One of the most notable was a series of studies that Andre and Karen Lunsford have been doing out of Stanford looking at their college students and their reading and writing practices. In their study of college students and their writing, they've discovered that with the advent of new digital types of formats, the volume of writing, not surprisingly, that young people are engaging in every day has increased pretty dramatically, but the thing that, you know, may be surprising to a lot of people is that actually, you know, the shift to digital forms of writing has not actually changed the error rates in terms of college students' writings, that the nature of the errors have changed somewhat but the number of errors that young people make in their writing hasn't changed so much. And that, you know, the big difference is that in today's landscape, writing tends to be much more social and participatory in nature.

Okay. So are you ready for the next question? Next question about digital kids is really how much time do teens in the U.S. spend with media. So age group is aged 13 to 18, and the media, it includes music. So think of that when you think of your answer, but it does not include media and computer use that has to do with school and homework. So your best guess.

Okay. So we're seeing a range from 2 to 3 up to 8. I'll give you a few seconds to make your best guess. We have folks from all over, and also internationally, which is really great. It's nice to get locations and institutions.

Okay. Oh, 12 hours. One of the higher guesses. So are folks ready to see the answer? So the latest survey on teens' media use done by Common Sense Media last year pegs it at about nine hours a day, which is a pretty high number. And in the years since these kind of survey research has been done, it was done by Kaiser prior to Common Sense picking up these surveys, you know, this number has been increasing steadily. You know, and this is really what has been changing. It's the fact that young people are, you know, not only accessing information and entertainment through digital channels, but also because so much of their social communication is happening through digital as well, that this total volume of media engagement has been going up year by year. Now, it's really easy to look at this and say, well, wow, young people, they're totally immersed in media, but common sense actually did a survey after the survey of teens and tweens about the parents of these same teens and tweens, and they actually found that the parents were engaging with media at a slightly higher rate than their children. So it's very important to keep this in perspective that this is a phenomenon that isn't just about young people, but is also about people of all generations these days as well.

Okay. Last question. So this is really about teens and online friendships. So for teenagers aged 13 and 17, and this is as a percentage, so what percentage of U.S. teens have made new friends that they met first online? What's your best guess? These numbers are pretty high. A majority of people seem to think that the majority of teens have probably __ oh, some numbers, percentages, that are lower. There's a pretty wide range here in terms of the guesses. As high as 90%, as low as 15. Few more seconds for folks.

Okay. Are you ready to see the answer? This is, again, according to Pew, their ongoing work on teens and technology. So this is a really interesting one, because I think in general when I ask people about this question, people assume a slightly higher number than what teens report in terms of the number of friends that they've made online. I find this extremely interesting because when we first started our work with teens and social media and online use, which our first field work was about ten years ago, you know, the majority of young people were really using online media like __ back then it was MySpace and text messaging to connect with people who they already knew in their school and their local community. And there was kind of a stigma attached to young people finding friends, connecting with others who they didn't know in their local community. But this has really shifted in the past ten years, where you see now in this recent survey from Pew that the majority of teens now say that they have met people online first, and that some proportion of those people who they've also gone on to meet them in person. So this idea, this stigma about, you know, making online friends has really been fading over the years, and it's clearly, you know, a trend that is moving in that direction.

So thank you all for participating in the digital youth quiz. Everybody's a winner, and I really appreciate your, you know, good humor in engaging with this.

So the question in front of us is really now that young people are living these very connected lives, what happens when they encounter our institutions of education, the physical infrastructures, the formats through which we've historically educated young people?

Now, sometimes young people do things that we really approve of, like, you know, setting up Facebook study groups or setting up wikis where they do shared note_taking, accessing, you know, online resources like the environments that you all __ so many of you are responsible for curating. But they also do things that we may not be as thrilled about as educators. So they might go to rate my professors.com to check out who are the hard graders so that they can screen for them before they decide to take the class. They may go to, you know, these many online services where young people can download ready_made essays if, you know, it's an assignment that people have encountered before, or even commissioned essays to be written for them. And then, of course, my latest favorite, are these services that will take an online class for you so you don't have to bother with getting that "A."

Now, the problem we have here is really this question of, you know, now that the kind of exchange of knowledge, the peer_to_peer communication, the open networks that the student __ we really can't be in the business of playing whack_a_mole and trying to prohibit this free_flow information that's happening at the peer_to_peer layer. So we can look at this environment and lament how social media is eroding our cherished ways of doing things, our established ways of vetting knowledge, or we can also look at this new ecology of open communication and exchange as an opportunity for learning and something that we might actually be able to support and leverage in productive ways.

You get these kinds of problems like these cheat sites, these essay download sites, when learning is really disconnected from meaningful inquiry, from genuine problem_solving, when it really is just about getting a grade or putting a line in a resume or transcript, filling in the blanks in terms of, you know, answers that the teacher already knows. So this is really the challenge that we're facing as educators is really to say how can we look at today's environment and really think about our own instructional practices, our ways of educating young people in ways that are responsive to these new environments.

So we know that when young people start school, in elementary school, they tend to be bright_eyed. They tend to be eager to learn. And this is, you know, surveys that Gallop does about student engagement. It really shows that over time, the longer that young people are in a schooling, the less engaged they are with schooling, and by the time they reach our institutions of higher education, you know, the vast majority of young people are actually fairly disengaged.

This is research that was done by one of my colleagues at UC Irvine, Richard Arum and Yosef Roska where they conducted research, and students in college actually followed them out after college, but they found that, you know, based on, you know, assessments they did of fairly high order, sort of critical

thinking, writing skills, the kinds of things that you expect young people to be learning within their first few years of college, that, you know, almost half of young people showed very little learning and gains on these assessments within their first two years of college. So, you know, that's a pretty challenging result for those of us who are in institutions of higher education.

You know, the gap __ the engagement gap, that tension between in_school and out of school learning, the fact that young people find, you know, lectures to be boring and they find the stuff outside of school might be more engaging, you know, this is a tension that is certainly not a new tension, but, you know, in today's environment, where the world outside of the classroom has changed so dramatically, this culture clash is getting even more intense.

Now, we have an opportunity, obviously, here for new technologies, the online world to deliver, you know, content that is more, you know, personalized, student_centered, demand_driven, and also at a lower cost to learners, whether it's through, you know, these open online platforms or other kinds of resources that are more customizable to learner interests. I'm really curious to know, actually, from this group what kinds of online platforms that you personally have used for your learning or professional development, if that's something that you would be willing to share within chat, I'd be really interested to hear from library and information professionals if you yourself have, you know, availed yourself of MOOCs or used YouTube or any other online resources for your own learning and professional development. It's definitely something that, as time has gone on, has become a much more taken for granted __ [Inaudible] __

Okay. We're seeing __ oh, a lot of YouTube, actually. That's interesting. So some MOOCs and online courses. I suppose this conference is another example. So you all are part of this experiment.

Yeah, it's very interesting. The environment has been changing so dramatically. It's really interesting to get everybody's __ for Sara, Moodle. I think we are all starting to become more accustomed to building our sort of professional __ our personal learning networks in ways that are much more fluid, customized to our schedule, our needs and so on. And, you know, this is definitely a trend that is moving forward really rapidly. It's interesting times, where there is obviously a ton of opportunity, but it's also challenging and confusing, often, in terms of how our institutions of knowledge and learning have been structured, because it is challenging a lot of our fundamental assumptions about how education should be packaged and delivered, how it's being disrupted by digital and online. The most obvious way, you know, area that people talk about disruption is obviously in the content area where we're seeing a shift from textbooks to digital, interactive and online forms of content and content delivery, so many of, you know, what folks listed in the chat were, you know, these formats that rely on these more interactive, multi_media, electric_type formats that are moving online.

You know, the other aspect that's changing rapidly is the change of instructional setting now that you have the ability to bring in so many different kinds of content into the instructional setting that go beyond the traditional lecture format, whether that's blended, hybrid, fully online type formats for

learning. And then the final layer __ the final layer that we're seeing a lot of shift is in the credentialing. So we're seeing that the __ you know, a trend towards not only the content being unbundled or decoupled from the instructional setting, but also credentials being unbundled through movements like competency_based credentials, badging and so on, and a lot of our institutions of education really were based on the assumption that, you know, content, instruction __ instructional settings or seat time and assessment and credentialing were all sort of bundled as a particular kind of package that we called a chorus or a credential program that were delivered in very specific kinds of settings. But, you know, clearly these assumptions about how educational programs are being bundled are being changed in pretty fundamental ways.

So I want to make it a little bit more concrete just by talking about a particular learner, and, you know, this is the kind of research I do is we talk to a lot of young people about, you know, how they're actually learning. So rather than taking an institution_centered approach, which a lot of educational research does, we do a lot of work that is, you know, ethnographic and from the youth perspective to understand how they are living and learning in today's digital world. So I want to introduce you to one of the young learners who was part of my study of Japanese fans __ fans of Japanese animation who are very activated online. So Dave was one of the fans that I interviews many years ago, and he had __ he developed an interest in Web comics when he was in college. He was actually on campus one summer when all of his friends had gone off, and he was bored. He went online. He found the Web comic scene, the early Web comic scene back then and really fell in love with Web comics and decided that he wanted to learn how to create them himself.

So he actually tried to switch his majors in school. He tried to, you know, figure out if there were courses that he could take, but there wasn't anything offered at his school at the time that really helped him address this interest. So he connected to an online community of Web comics creators. He checked out HTML for Dummies, he, you know, went and accessed online materials that would help him learn, and he started to learn how to create his own comics. Eventually, he got pretty good at it. He launched a successful Web comics site where he started hosting the Web comics of other creators as well, and he started to make money as a Web developer on the side while he was also doing his Web comic site.

So if you look at Dave's learning pathway, you'll see that he started with a passionate interest in Web comics. He found that the online world offered him a set of resources and a specialized community of practice that he didn't have access to within his local university setting, so he, you know, accessed a lot of online learning resources and he learned from his peers in the Web comics scene to become an expert in this new area of interest and passion that he had. Now, what was important about the internet was not only was it an environment that he was able to get specialized knowledge, connect with a specialized community of practice, but it was also the environment through which he was able to share and publish his work, to get feedback, to generate an audience, and when I interviewed him a few

years later, he was actually earning revenue through ads and through selling merchandise and was making, you know, was, you know, launching a successful career as a full_time Web comics artist.

So when we look at Dave, he's an example of what we call a connected learner who is somebody who was ___ is able to pursue something that he's personally very interested and passionate about, and together with a community of peers who share that specialized interest. And then finally, he's able to connect that passionate interest, that peer learning to an opportunity, which, in his case, was a career opportunity, but we also often look at connected learning in terms of civic opportunities, civic engagement as well as just academic advancement.

Now, the moral of the story of Dave is not that the online world creates connected learners, but that actually it's pretty rare for us to find learners like Dave who are able to connect all of these dots. We find in our research that most young people have an interest, and a lot of young people are pursuing that interest with the support of peers, caring adults, experts, often through online communities and environments like Dave is pursuing, whether that's through fandoms, whether that's through gaming communities, whether that's through sports or other creative interests, but it's actually really, really difficult and rare for young people to connect those genuine interests or social engagements they have with opportunities either for academic advancement, for civic engagement, or for career advancement like we saw with Dave. So what we find most typically is that young people's interests, they are struggling to connect their interests to environments like school, career, home and community. It's most typical that the things that kids are most interested in, that young people are most interested in, they're pursuing through some community_based programs, having fun at home with their friends. They may have some aspirations for translating their interests into a career trajectory, but often find little support in school, much like the case of Dave.

Part of the issue is that when we think about education and educational programs, we often conceptualize it as a pipeline so that a lot of our effort as educators is in pushing kids along a pipeline from elementary, high school, college, and eventually career, and we spend our time worrying about those transitions between our institutions of education. But when we interview people like Dave, especially young people who have been successful in, you know, more creative or tech_type careers that are fast_pace changing, innovation_based, we find what is actually supporting their learning is this very complex and vast network of supports and connections that span both in school and out of school, kinds of relationships and learning experiences, and of course the formal pipeline is incredibly important, but especially now with the prevalence of these more informal, out of school learning opportunities and communities, these web of relationships, these nodes in young people's learning networks is much more diverse and expansive, and, you know, in many ways, they're, you know, specialties like what Dave was pursuing, it's often very difficult for the formal pipeline to really keep up with the changing nature of the field. So the question I think that we are facing right now is educators is how can we educators and information knowledge professionals, how can we help young people better connect their dots ___ the dots between the different settings of learning in their lives and their

interests, their aspirations, their ability to find their place in the world. Now, for those of us in, you know, learning and knowledge institutions, I think ___ and this is why I really love speaking to librarians, because educators often ___ we do think of our job in many ways as building these connections, brokering the opportunities, guiding young people to resources that will help them deepen their interests, pursue new interests, but, you know, often the project of education has been framed much more about delivering content and information, and prioritizing that over the connection building or the support of interest.

I think as we transition to this much more networked world of abundance of information, then our role as brokers, as guides, as curators, of recommenders of information, knowledge, of being personal supports who really understand and connect with young people, understand what they're interested in, what the next step in their, you know, connection building should be, how do we support them to build their personal learning networks, these roles of, you know, educators, of experts, of knowledge professionals, become even more important than, you know, simply producing and sharing the content that we know is valuable.

So I think this is really the challenge and the paradigm shift that a lot of our institutions of learning, of knowledge, are grappling with right now in an era that assumes an abundance of information rather than a scarcity of information. Now, the important thing to keep in context here, or one important thing to keep in context here is that environment of abundance does look very different to people in different walks of life. So a lot of folks are quite familiar with the equity gap in formal education. A lot of people are less aware of the equity gap in informal learning, which in many ways is more acute than the gap in formal education. So this is a graph that's showing the out of school expenditures in enrichment activity contrasting the period from the '70s to 2006, where you'll see that the red bar are the wealthiest families in this country, and the blue dotted bar are the poorest families, and you'll see that the wealthiest families have tripled their expenditures in out of school learning during that period so that we're almost at a \$9,000 per child for the wealthiest families, where the poorest families have, you know, stayed at about a thousand dollars a year.

Research shows that this isn't because of lack of wanting to support their kids in, you know, these more specialized and interest_driven activities, but really because lack of resources.

Now, the greater expenditure that you see among the wealthier families is really showing how, you know, more and more young people's success in life means more than just making it through the formal pipeline in education, but really understanding ___ you know, really embracing an area of specialty, that identity of being able to be really good at something, to be able to contribute to perform, to get back in the world, whether that's in arts or athletics. Engaging with that firm handshake, that ability to have a good identity of something, somebody who has expertise is really, really important to young people's success in life, and that's why you see this growing investment in out of school enrichment. Now, you put this side by side with other statistics that are showing that, you know, the public schools are less and

less able to deliver these kind of extracurriculars to the poor families, and you'll see that equity gap is really quite tremendous. Now, we hope that all of these open online resources, you know, our libraries, our MOOCs will be able to equalize some of these gaps, especially with the advent of more free and open kinds of access to learning opportunities.

The challenge here is really that, you know, the research also shows that it's very challenging to use these kinds of open online systems as equalizers for inequity and access to opportunity. So this is research that was published in science a couple years ago that looked at the Ed Ex platform, the Harvard and MITx platforms and mapped the demographics of people who were on these platforms to the overall U.S. population, and you'll see that people who take MOOCs are overwhelmingly more wealthy and better educated than the general population. And this has been shown in other studies as well that, you know, the vast majority of people who are engaged in MOOCs actually already have degrees in higher education.

Now, it's not exactly surprising that when you throw a novel new technology in to an already stratified social field that you'll see it gives super powers to the people who are already highly educated and tech savvy, and it gives more advantage to the people who already have it.

Now, ideally, we hope that our new technologies, our online resources are going to result in this closing gap scenario where, you know, it will disproportionately advantage people from lower socioeconomic backgrounds, but in reality, most of what's happening in the online and digital space of open learning is actually more like this rising tide scenario where you're seeing that, you know, these new online resources are giving advantage to, you know, our ___ raising on both, but they are actually giving more advantage to the folks who are already fairly privileged. So I think this is really the challenge that we're facing for many of us who are, you know, purveyors of digital and online types of programs and knowledge is what can we do to not only, you know, advantage all learners, but hopefully help close the gaps between young people who have more or less opportunity already.

So the connected learning model that we've been working on is something that, you know, is hoping to address some of these issues, and is intended not only as a description of, you know, learning that we think is, you know, really helps young people discover who they are, find their place in the world, but is also a kind of design model for environments that could better support these forms of learning. You know, one caveat with connected learning is that we're not saying that all learning needs to be connected learning all the time. I mean, young people need the opportunity to just pursue interests without it being about getting ahead in life. They need to have social lives that are just about hanging around with their friends and not necessarily about learning and opportunity, and sometimes they have to learn things that they might not be interested in. But we do believe that all young people really deserve to have the opportunity to pursue connected learning, to be able to pursue something that's personally meaningful and interesting to them with the support of friends and caring adults who share that interest, and to be able to connect that to an opportunity to find their place in the adult world.

So you'll see at the, you know, the model of connected learning is really about trying to find that sweet spot, which brings together a young person's interests, their social life around that interest, and connects it to opportunity. And at the center of connected learning environments, we find that they're often characterized by three things: One, that they're production centered, that they often have an element of creation, of making. Secondly, that there's a shared purpose. So it's not simply that people __ kids are learning in order to, you know, get a grade or put, you know, something on their resume, but they're actually making a genuine contribution to a community that they care about, often working collaboratively and together on something. And then finally, you know, the connected learning environments we hope will leverage some of the affordances of today's openly connected and networked world.

So I'll close and transition to Q & A just after I give a few examples. And I would love to hear about, you know, the work that this community is doing as well of some environments that are, you know, embodying some of these connected learning principles. So, you know, I'll give a shoutout to my own institution, UC Irvine, which has developed a MOOC that is about __ centered around the popular series "The Walking Dead," but bringing in sort of math and science concepts in relation to it, so again, meeting young people where they are and the interests they already have, but connecting them to academic_type topics.

One of my colleagues, John Worth in the UK has been running an openly networked online course, PHO NAR, which is really just a hashtag. He had been running a course on digital story telling and photography at his local University but he would put all the lectures online and again it was very production_centered because it was about creating digital media, and then he added this openly networked piece where other people all over the world could participate in the course just by using the hashtag, and they could use flicker, they could use, you know, whatever sharing platform they wanted, and that people would be able to see the other kinds of creations and work that people from, you know, all over the place, all over the world, not just in his course were engaging in as part of this openly networked course. So it's a great example of the openly networked principle.

Another effort that I really love is Fem Tech Net, which is a distributive open collaborative course, where there are faculty who do study in various campus and they try to coordinate their work and their syllabus so that their students can engage with one another and they can share their expertise, you know, across different faculty as well. So it's a lot about building an open social community that transcends a particular campus around a niche topic and building that kind of social supportive community around topics that are often not highly valued within the mainstream.

And then so these are just a few examples, you know, of some of the efforts that, you know, our community in the digital media and learning initiative and the connected learning community have been pursuing that are part of these principles of, you know, connected learning, trying to leverage, you

know, today's open online resources to better connect young people to young people's interests and connect them to opportunity and academic learning.

So I'll stop there, and look forward to, you know, having some dialogue in the Q & A. Thank you.

>> Thank you, Mimi. So folks, this is where we switch over to Q & A, and this is our first time in the live stream, so I'll just go over the instructions one more time because I know some people have joined after our welcome. We can't unmute people. There's too many folks connecting from different places. But the way we'll take questions is by typing them in to the chat box, and I know you all can do it because you've typed in lots of stuff in answer to our quiz earlier. So go ahead and type your questions in, and then I'm going to read them aloud so they're captured in the recording. And Dr. Ito can hear them and let her answer while I'm looking at the questions folks are typing.

So let me start us off here by asking, equity and diversity and inclusion are core values. And you mentioned some disturbing trends and the different resources that end up going to support learners in becoming connected learners instead of disengaged learners. And so as libraries are increasingly working together, we try to shape our work so that its impact extends, of course, deeply into our immediate user communities but also more and more we think about how we can leverage that to extend our work beyond our user community, and make it more available. Do you have ___ and some of the ways that I think some of the folks, particularly in our organization work on that is by trying to connect our content to things like search engines or we create kind of cooperatively developed explanations like the digital library of America where we're taking our local work and collaborating to, you know, make it to get available to in a larger amount and to a broader audience. So what are some of the things you think you might suggest we think about in our efforts to reach and impact populations, particularly that have less resources going to support their learning, to try to avoid making the rich richer, or really trying to raise all ___ do you have any thoughts about are there strategies that we could use that might help us with that?

>> Mizuko Ito: Yeah. I mean, it's such a good question, and it's something that, you know, I've personally been really challenged with because, you know, I've spent a lot of my time studying young learners ___ you know, what young people are doing online and, you know, learners like Dave are a really good example of the rich getting richer, like these kids who are 12 years old and have already, you know, saved the world a couple times, and, you know, are taking advantage of all these amazing resources. And it is an environment where those who are really active and engaged in learning, you know, they have super powers, but it's also an environment of, you know, what happens in an environment of greater choice in general is that there's more stratification, so that's some of what we've been seeing with all of these issues around fake news and, you know, the echo chambers and so on is that, you know, greater, you know, choice means that people tend to communicate more with the people who they feel most connected with.

So, you know, we've been trying to develop these strategies, and a lot of these environments, like we've been doing work with, you know, MIT media lab scratch online community and, you know, there are all these unbelievable, you know, resources that are out there and are often free and accessible but that are really enlisting, you know, a kind of, you know, predictably, highly educated group of young people. And, you know, some of the strategies that we've been looking at in terms of addressing this equity gap, you know, one, you know, general principle is sort of to go where the fish are swimming. So it's not enough to simply put stuff out there and hope that people will find it, but really to, you know, make sure that you are proactively building connections to the communities of young people that you're trying to reach.

So just one small example, you know, we're just finishing a project that was a really fun collaboration between the young Adult Library Services group, and then the association, the National Writing Project, and then two online platforms which have a really high volume of teen participation, deviant art for visual arts, and Wat pad for writing and publishing and fan fiction and these are two platforms that my, you know, team has looked at because they're really amazing sites for youth engagement where young people are building communities in sharing and publishing and so we ran a teen challenge on the two platforms that was connected to the work of the librarians and the educators and really trying to say, you know, look, let's build bridges between these different communities so that, you know, the educators, the librarians understand the kind of amazing work that young people are doing on these platforms, but also that young people are, you know, forming relationships, getting feedback from educators and librarians, the, you know, results of the competition are being published in a book that's going to be circulated in libraries across the country. But really just about being intentional about the connection building to the environments where the young people were trying to reach are at.

The other strategy that I've seen work is really, you know, again it's a similar sort of, you know, connection building across organizations type approach, but really partnering with and working directly with institutions that disproportionately serve less advantaged learners, you know, and that is one reason why we really love working with public libraries, but there are also really interesting groups like, you know, one that I love is called JAGA study. They've run a bunch of study experiments but, you know, one of my favorite things that they do is they work out of India and they'll create these pop_up universities out of pallet racks like in the middle of rural India and they will bring in computers and networks and then they bring learners in from the local community to take MOOCs or to get on Wikipedia and so on that they really provide kind of that last mile where they're sort of providing the framework, the guidelines, the counseling for people to __ in a local community to access open online resources. So, you know, we find more, you know, when we work with lower income communities that, you know, young people, they may or may not have the physical or technical connectivity, but in general they tend to have much less fluency in how to access really high quality and high_end online resources, so those touch points within local organizations are incredibly important.

>> Thank you. That is really interesting and suggestive of some things. We have a question from Sarah Becker, who is in Arlington, Massachusetts. And so as she points out, many of us on the ___ at the Exchange today work kind of behind the scenes and, you know, we do work around creating the metadata that describes information resources, or we may be requiring resources. What thoughts do you have about how, with this kind of work, we might be helping to effect an increased connection in the ___ [Inaudible]. Any thoughts about that?

>> Mizuko Ito: Yeah. That's a really interesting question. I would love to hear from, you know, the community. You have so much more expertise on these issues, but, you know, I think more and more the work that all of the sort of online wizards are doing around sort of, you know, optimizing for findability and metadata and searches so critical, because it is really the ___ when you look at how young people are accessing knowledge and information, the first place they're going is online resources and search, and so, you know, the question of how do you get these more high quality and authoritative types of content, the opportunity, you know, visibility beyond the existing silos that young people are in, whether that's, you know, their social media worlds and so on, it's such a critically important question. And, you know, the way that, like, we've been running ___ I have a start_up non_profit that has been, you know, we do it in a very manual way where we run programs around existing youth interests like Mine Craft, and then we design these summer camps and programs where young people are connecting with mentors who are, you know, experts in the more high_end uses of the technology. And it's a very manual process for, you know, guiding young people to good and authoritative sources of knowledge but, you know, anything that you can do to increase the findability of, you know, the good stuff out there for young people I think is just a tremendous benefit, and, you know, if you can do it auto magically behind the scenes, that would be the most fabulous thing ever.

>> Yeah. We talked about automation. We ought to talk about auto magic.

We also have a question coming from Duke ___ I'm guessing there's a group. That's why it's showing up as Duke University Library, so I'm not sure who the person is behind this, but do you see informal learning or education, how do you see that balancing formal education as employers are really thinking about who they want to hire, you know, as these young people are transitioning from being just full_time learners to employees. How do you see this informal learning starting to weigh in to the picture? Do you have any insight into that?

>> Mizuko Ito: I think the balance is definitely starting to shift towards informal learning, and sort of this expectation of lifelong learning. I mean, even just in that quick, you know, poll that we did about the different online platforms that people are using, sort of, you know, they're kind of, you know, in this in_between space, and, you know, there's structured learning resources like MOOCs, and so on, but, you know, there's really no excuse for ignorance and not continuing to learn right now. So I think there is, you know, a higher bar for lifelong learning, but there's also a higher need just because, you know, the workplace demands are changing so rapidly. So, you know, I think that you're still going to see, like,

our elite institutions of education kind of doing the traditional thing, and in a way young people today have a really tough time, because they have to do really, really well on the traditional stuff, but they're also expected to, you know, have a million followers on YouTube and, you know, be doing all of this stuff informally and having amazing social networks. So we're kind of in an environment where you both have to be doing __ be really successful in the formal pathway as well as, you know, being this incredibly engaged lifelong learner to be really successful in these, you know, at least these up and coming fields.

So but I do think that, you know, there's a greater expectation now that people will be availing themselves of these more, you know, demand_driven kinds of learning environments.

>> So this is maybe a little __ take the questions a little different direction. I think you've pointed out, we in libraries have long aspired to that connector role with both formal students and informal learning, even with the same folks, and we strive to move out into virtual environments that our users are inhabiting, but I think also libraries have been maybe innovating and trying to creatively marry the face_to_face and the tangible to the online and the virtual. And I think, you know, when I look at your connected learning kind of Vin diagram there, I think about things like hack_a_thons that we do. We do maker spaces. We have gaming events, which are kind of intersecting in really interesting ways with the kinds of things that, you know, you're reporting about people using online learning. Have you seen creative hybrids of face_to_face and kind of virtual communities or activities that foster connective learning?

>> Mizuko Ito: Yeah. Absolutely. And I think the most powerful learning environments really leverage both of those. I mean, you know, the most obvious are things like hybrid classes and flipped instruction, but I think it goes well beyond that in that, you know, we __ one example that we work closely with the U Media Learning Labs, which our youth faces in libraries and museums around the country and I think the most successful have environments of sort of that local community where young people have access to their peers physically. They can do performances. They have mentors and librarians, you know, within the physical space that they can access to, but they're also, like, publishing their work and connecting to online communities that are, you know, more, you know, specialized and expansive, right, so once they level up and their ability, whether it's in music production or, you know, podcasting, or whatever, you know, the online world gives them access to a bigger platform of specialists that they can connect to, but that, you know, physically local space is the anchor. You know, the other way that it happens is kind of what we're doing today is that, you know, often we have like as, you know, as professionals, we're usually have this very distributed community of practice, as well as our local community, and then we have a range of sort of annual conferences and things like that. But the online communities enables you to, you know, have these intense annual conference, but also, you know, those ongoing touch points throughout the year with an online community. And so, you know, successful, you know, professional communities or interest communities of any kind often have the structure, you know, even with, say, a gaming community where you'll have, you know, small regional tournaments or your local community at your school who's engaging in, you know, a creative

practice. And then you'll have, you know, the online community and then these national events and so on. And it's that, you know, if you look at the structure of successful kind of specialist communities, they all have this hybrid aspect to them where there are physically local institutions but there are these national and international networks that are mobilizing more and more online. And, you know, when you can get those things working together, you know, that's very powerful.

Another example just from a more kid_centered spaces, the imagination foundation, where it was launched by, you know, this kid who was building a cardboard archive that was captured by a media artist and sort of spawned this movement but now they have a sort of structure where educators can have imagination foundation chapters in their local school and then, you know, once a year, they do the global cardboard challenge where all the kids get together and build cool stuff with cardboard, but then they share them online so there's a sense that there's this very broad and expansive creative community that they're connecting to. You know, Harry Potter alliance is, you know, a network of mostly school_based chapters of Harry Potter fans mobilized for social good and they have both, you know, local and regional and national kinds of mobilizations. And so, you know, I think all of these examples, like even if you're in a space where it's primarily about physical making or performance, you know, the ability to connect to the broader community online is really powerful for young people.

>> Thank you so much, Mimi, for talking with us today. This has been fascinating. We have one last question. We're going to copy it over to the discussion forum, so we'll try to give you a chance to answer it there online. But we need to wrap up and take our break right now. So folks, stay tuned. We'll be back, I believe, in ten minutes with our next session. So thank you all again, and we'll be pushing some information to you during the break, but this is your chance to stretch your legs and we'll see you soon.