

Open Education Resources Transcript

Presented by Dr. Steven Weiland

<https://connect.msu.edu/p2ay533tkya>

Jennifer Bruen: My name is Jennifer Bruen and I am the Project Coordinator the EDA University Center for Regional Economic Innovation Program. We started in the fall of 2011 with the support of the U.S. Department of Commerce - Economic Development Administration. This program was designed to support innovative economic development strategies that may yield high growth entrepreneurship, job creation, and economic innovation for those regions in Michigan that are most distressed.

The webinar you are about to view is brought to you from a collaborative effort with our REI Network that is now over 500 members, it is very digital and virtual as far as how we communicate. This webinar is on Open Educational Resources and is brought to you by Dr. Steven Weiland here from Michigan State. He has only a few slides but he has a lot of information for you. I'm going to turn it over to him and let him start and I'm going to move over to his presentation real quick here. If you have any questions, type them into the chat box and Dr. Weiland will address them when he has the chance otherwise you can call in and we can take them over the phone since we have a small enough group. If we do end up with a large enough group and there are feedback issues we will have to mute the phones and go back to the chat box. With that, Dr. Weiland.

Dr. Weiland: I'm old enough still to find a wireless mouse fascinating. We're a small enough group so if anyone wants to interrupt that's perfectly fine, chat text easily or if you're on the phone line that's fine too. I first want to say how grateful I am to Jen and her colleagues for the chance to do this, we started talking about this a few months ago. To be honest, I wasn't convinced the open education resources and open course ware which is what I'll really focus on here, I wasn't sure that they had the potential for workforce development and economic development. I know think they actually do so I'm grateful for her pushing me along on this in working on this report over the summer. The opportunity from the two centers and the Department of Commerce has turned out to be very fruitful. The full title of the report I wrote specifies after the colon. The three primary subjects I took up. I started with a focus on Open Educational Resources which I'll explain in a little while. It's a very large and wooly kind of category that needs some definition which I'll do in a few minutes. But I named after the colon the 3 categories in which the report is laid out. What I'll talk to you about this afternoon is organized according to the sections of the report. Next week in advance of the Summit on Thursday the report itself will be made available online and a flash drive if you're there, so you'll be able to see the whole of it.

I should say one more thing about this report in the way I've approached this. This part of the Center's project, my sense is it's a little different from others, which people reported on ongoing projects or activities they had underway that they thought could be useful in other areas of the State. Several are demonstrations projects reporting on a sort of what works basis what might be useful in economic development. In talking about Open Educational Resources I faced a very different kind of situation as most of this report is as the used to say on speck. What I did was assembled a variety of perspectives and bodies of work in different domains to configure what might be possible in workforce and economic development if we start with what's available and coming available online. This is a little different kind of research report by the end we can look ahead and imagine what might happen but right now there aren't any concrete examples that we can look at of the kind of workforce development reflecting the

uses of open courseware and what they might offer in credit. Given the speed though and the development of the online world. It wouldn't surprise me if we're less than a year away from students gaining credit with their success with open courseware and re-enrolling in degree programs at Community Colleges or otherwise or entering degree programs via the open courseware route. If someone would have mentioned that even a year ago it would have sounded impossible but such is the speed in which the OER and open courseware movements are going it's not impossible that within a year we will start to see the things I am trying to move towards here and specify in this presentation.

So, the paper takes a big step back to start and begins with an account of what has come to be called over the last twenty years or so the Advent of the Mollusk society, this is phrase that is part of virtually every report of higher education, lifelong learning, and economic development. It was introduced by the well known economist Peter Drucker. In the report I explain how he came to use the phrase and then I suggest how in some ways its has been displaced and some people prefer the learning society as the way to designate an approach to learning that goes beyond what people learn in schools, and in effect designates learning as a primary activity in adulthood that only begins with post secondary and higher education and extends deeply into working life, family life, and adult development and aging. Probably the latest effort to rename the impulse behind the Mollusk Society is an effort at the University of Illinois to designate what they call ubiquitous learning. Ubiquitous learning is supposed to signify something a little different than the Mollusk Society in so far as to recognize the advent of digitalization. You can see in Drucker's work on the subject, he really had in mind going back to school, bricks and mortar, building degrees, so on, he had some interest of course in professional development at the time for example that was provided by corporations and large organizations but he had a pretty traditional idea in mind when he talked about the Mollusk Society. In some degree people could do things on their own but he believed strongly on formal highly structured education. Ubiquitous learning signifies something very different, closer to what we see now when we use the internet, most of us are on it a good deal of the day for one reason or another but ubiquitous learning can obviously describe a lot more than what goes on in a formal class but I will get to that distinction later.

Under the heading of education and work in the digital age, we can begin with some idea of how education has been reconceived over the last twenty or thirty years in relation to work and the movement from the mollusk society to the ideas associated with ubiquitous learning. What I do in the paper is sketch in the problem of work and what workforce development means in relation to formal education. The phrase I use simply is the state we're in to signify two things, that is, the state we're in, in a general way, the general condition of things, and this is what I think gives this report some timeliness and some would say urgency, and that is the literal state we're in, is in a very weak position in relation to what's called degree attainment and workforce development. If you read the reports that have come out from various non-profit groups that specialize in this subject for the past year or so they all stress the same thing. Michigan's situation is very poor in degree attainment. Only thirty two percent of the population has a two or four year degree, this puts us 36th for 37 in the nation for degree attainment. Just to give you an idea and I go into some detail in the paper on this one, a few months ago the head of the Maryland Higher Education system in the State got into a dispute with a Washington Post columnist about the value of college degrees and he expressed some urgency and fear about the situation in Maryland with regards to the new requirements for emerging forms of work because Maryland has as it puts it, only a forty four percent the residents of Maryland have two or four year degrees and he said this is unacceptable to them, Michigan is at thirty two percent. As far as I can tell every economist and work force specialist in the State says this is the number one problem, degree attainment. So I began the report by sketching this in a larger scene in the knowledge society and business learning but I reverse that and sketch the situation in the State and I underline again the

interest that Drucker and others have had in what another writer in the subject has called structured intentional learning opportunity, that's a mouthful structured intentional learning opportunity. But the phrase is useful for this subject because it specifies that part that is available on the internet that can be affiliated with degree programs and formal education. Drucker once said that in this country formal education was one of the most easily acquired credentials, he was probably over stating it but he didn't really live to see the advent of the internet and if you apply his designation easily acquired formal education to what has happened in the last year or so in this way too you can see he was something of a prophet.

So I move from, we have covered these first topics.

The second part of the paper I move ahead with the argument that has been made to what is called the "College Pay Off". What that is all about is an effort to bring together what we know about degree attainment and lifetime economic success from individuals and I will give you a few statistics that make the point as you see it and again most reports try to make the case for college degrees. It has for the last few years been called the College Pay off, two weeks ago the Georgetown Center for Education and Work which had popularized the term College Pay Off in a new report, at the end of the webinar I will show you how to access the report, decided to change the phrase from the College Pay Off to the College Advantage, which is more directed at simple money. So now I think the phrase they prefer to use is the College Advantage. The point they made last year in a very influential report on the College Pay off if you look at the lifetime earnings against degree attainment the figures are very stark. Some one with a four year degree over the course of a working life makes about twice in income that of some one with just a high school degree. Between the two, someone with a two year degree falls in the middle. Some one with a little college has a small advantage of a couple of hundred thousand dollars over a lifetime. The point is pretty easy to see that the investment in a college degree in money, time, and effort turns out to have a significant, as the phrase goes, Pay Off. I'm putting aside here but I'll return to this, other elements of the pay off and I think these are sometimes things that escape the economist that focus on income and perhaps often ignore other advantages that comes with two and four year degrees associated with certain kinds of abilities that one might gain, some experiences in reading and writing, general education, civic knowledge, a host of things that go with undergraduate education traditionally in the US and I think this is worth some attention as we talk more about gaining a degree as equaling a pay off some kind. It's probably worth thinking what the pay off could include beyond what is returned to someone in pay for work. In any case it is worth pointing out as I do in the next section in the paper that not everyone agrees that college is a necessity and what I work through in the paper is a very public dispute between Robert Samuels, a syndicated Washington Post columnist, and the head of the Maryland system about whether a college degree is actually worth it. Now, I'm speaking to you under the offices of the University so this sounds self serving to say it, we believe in degrees and economist have shown significant economic advantages to degrees but there still is debate about whether a degree is actually worth it. It made the newspapers during the Republic Presidential Primary when Rick Santorum ridiculed the college completion agenda being promoted by the Obama Administration and the Lumina foundation and the College Board. The Obama Administration actually took up some of the work of some of the foundations and organizations trying to move, pledging to move, American college degree attainment to fifty five percent by 2025. We lag, we are now tenth in the world, at one time we were far ahead of everyone but we have fallen behind now and that accounts for what's called the college completion agenda. Even so, however much so are convinced that the utility of post secondary education whether that's for the college pay off, or high minded reasons let's say, there is a debate about whether a college degree is worth it. There are some labor department forecasts suggesting that some significant percentage of jobs, maybe as many as sixty percent over the

next decade or two, will require a college degree but those are in jobs like construction, waitressing, certain kinds of service jobs. But there are some social thinkers, economists, and others who say that for many people if that is all they aspire to do there is nothing wrong with sending them the message that it's ok not to go to college and they can prepare for different kinds of careers. So the completion agenda, the idea of the college pay off is not a source of uniform agreement if everybody talks about the workforce. What I do then in the paper is focus on a particular sector of workforce development writing, I call this work in education the Middle because there is a group of jobs for middle skill jobs that require some college education. Typically maybe a certificate or better yet an associate degree from a two year institution this is, some people call this semi professional work, it's a category obviously above working in a restaurant but below full scale professional work. This is a category that is very very important that could be influenced a lot but the availability of open educational resources or open courseware to the degree that it makes it easier for people to go into two year programs. The question of working the middle is important here. What I'll suggest later is that if in fact it turns out that open courseware does turn out to be a very fruitful way for people to get a leg up on a degree it's most likely to happen with two year institutions or perhaps an online degree. So what we call work that takes place around middle skills could turn out to be an important target audience for those of us that want to encourage people to use open courseware.

Again I'm following the organization of this report, quite detailed, longer than Jen wanted but once I started I couldn't stop. So, I finally do turn, it takes me a while, but I get to the question of open educational resources themselves. Open Educational Resources is an easy term to define; it's simply any free and open online resource that leads to learning. Now that sounds pretty casual and loose but if you browse the internet you are using open educational resources all the time. Every time you go to an educational website, if you do a Google search, Google is an open educational resource. And most of the things located on Google if you are looking for information or enlightenment of any kind is an open educational resource. If you buy a book on Amazon and you look at the reviewers comments or the other books that are recommended, Amazon turns out to be an open educational resource. If you frequent the ESPN website, that is an open educational resource, subject happens to be sports. My wife is a very serious knitter and she spends sometimes an hour or two a day on an extraordinary international site called Ravelry that's supported by thousands of serious knitters all around the world that post videos and intricate accounts of using various types of wool. I mean, people who visit the NASCAR site are educating themselves about racing. I mean the internet is filled with open educational resources so that is the definition of OER that stands behind this. Open courseware is a little different but I'll get to that definition in a minute. All of us can testify to the success story of online learning and that begins with the uses we make of the internet in formal ways, OER uses that we engage in all the time but of course we all know now online learning has become an established part of most colleges and universities, more so at the universities than traditional liberal arts colleges. The reports that are done every year that are sponsored by the **Sloan** foundation have shown a steady increase in online courses in two and four year degree programs. Last year's report said that we have now gone over thirty percent of all Americans students last year took at least one course online, some have taken more than one course online and I can speak from my own experience at MSU and sometimes I am frightened at how quickly we are moving in adding online courses. I teach primarily online myself, I teach at a graduate program and more and more at the University's MA programs are online, College of Education I think all of our programs are online now, a few maybe be hybrid programs so people still come to campus. Ten years or so I used to drive out to Grand Rapids or somewhere else or the students would come into the buildings but now very few MA students, the Ph.D. programs are still in the classroom. There is no question of the success of online teaching and learning. It is worth noting though that institutions adopt online learning very unevenly, I will surprise people very often when I tell them that

the University of Michigan for example doesn't offer any credit instruction online. So far as I can tell no one at MSU has an exact figure, we may be reaching ten percent of the undergraduate curriculum is online, credit instruction online. We have moved very quickly to move large lower division lecture courses online and every semester there are very large classes that move to online, and it's not just large classes. Given the way the budget is organized at MSU there are incentives for departments to move courses to online especially over the summer when departments can claim the income for the courses as distance learning income so that most of the money doesn't go to the general budget the way most of the on campus courses do, it instead goes to the department. That's a pretty good incentive to move courses online. So there is a budgetary strategy that has promoted online teaching at MSU. The truth is most institutions in the country are moving in that direction but not all research universities are doing that and Michigan's office is a very vivid contrast in the way we're going about this. So online learning is big and booming in every institution there are some thinkers about higher education say that the only way for American higher education to survive is go to more deeply into online learning for reasons of cost savings and access. Such an approach is associated with what is called now disruption of American higher education, that's a big subject that I can't get into here but that, is in part driving lots of institutions toward online learning as part of what some people believe is a necessary reorganization and transformation of the whole post secondary system, that's another question.

In any case, what is important to this paper, this is really crucial, now it is something that as I was working on this that past few months I realized I had to underline here because a lot of the discourse about online learning and higher education now takes place under the heading of open educational resources or OER, that category is really too big to describe what is feasible and desirable in relation to workforce development. To specify the difference I described in the paper the two worlds of open educational resources, on one side is what I described before it is informal learning everybody is doing all the time, going to organizational institutional websites everything from NASCAR to the Smithsonian institution let's say. I'm a big user in my courses of online exhibits and libraries, phenomenal resources, rich in video, audio all kinds of things. That's one category of open educational resources, in the paper, in the appendix offers a sampling of what I call the unschooled world of open educational resources, I use that phrase to signify that these are resources that are not a part of schooling or formal education, they are incredibly important, most people would say that they are the most important part of what happens on the internet in relation to adult learning. I'm not trying to push the message; I'm trying to make a distinction in what are truly open educational resources and what we need to call open courseware and that is where the potential is for degree attainment and workforce development via degree attainment it is true there is considerable workforce development in the unschooled side of open educational resources.

Before we started, Burt mentioned he is part of MSU's effort in professional development and the truth is millions of people in the country are engaging in professional development with unschooled open educational resources they are not necessarily looking for another degree or anything formal. They are learning how to do things better by watching a Youtube video or looking at a website, improving themselves using the unschooled side of the web. If some interest in the State to address the workforce problem of degree attainment, the unschooled side of OER is not going to do any good. It doesn't have any relationship to credit and credential. So, it is very important we distinguish between the unschooled side of OER and the open courseware, or the OCW, side of OER. So there is OER and there is open courseware. Open courseware is the movement about a decade old based largely at some of the most power prestigious research institutions in the country, which is one reason it has gained a lot of momentum in the last few years. But, it is crucial to have in mind the difference between the two, after I make the distinction I move in the report to focus on open courseware and pretty much give up the

OER, open educational resources, side of the question. OCW, I don't know what the right metaphor is, was a creature of OER. It developed within the OER environment, but it signifies something very different formal course based work with the potential for credit and a role of credentialing. That is what accounts now for the enormous attention that open courseware is getting.

So, in the next part of the report I look at what is available now in open courseware. Even a year or two ago I think it was easier to say that one obstacle to using open courseware was finding it. When I get to what OER and OCW can and can't do, that is potentially one of the obstacles to using them. Just because something on the internet doesn't mean it is accessibility. What I put in the report is accessibility doesn't always mean find-ability. But things are getting better, right now via the open courseware consortium and other aggregators and centralized services it is a little easier to find what is out there. In the paper I offer a quick review of the various kinds of the open courseware opportunities and I stress things that have come up just now, MIT started the movement about a decade ago and they put virtually their whole curriculum online. Although what that can mean in a lot of cases is just the syllabus, some PDF readings and some exams, but it can also mean in MIT's case full courses with video lectures, audio lectures, lecture notes, a rich array of course resources. So, MIT pioneered in the open courseware movement though their project provides all kinds of representations as what might be a course. Since then, in the last year or two, the notion of what counts as a free and open course has been refined, certainly in the past 6 months even the efforts of the major research universities to mount genuinely complete and open courses has really gained steam. The most well known representation of this style of the open course is the MOOC, the massive open online course. These courses which have been the subjects of a lot of reporting in the Times and online work on higher education are not like some of the original MIT courses where you could get by with a syllabus, a few readings, some exams and notes. The MOOC's are pretty complete courses they are designed for online presentation and are rather polished in their presentation, typically with audio, video, print resources online.

If you follow the press on these you probably know a little about Coursera which is the best known of the new for profit organizations, based at Stanford, leading in the online provision of massive open online courses. Coursera was only organized 5 months ago with a small group of founding institutions; Stanford being the leader, University of Michigan was one of the founders along with a few others. About 6 weeks ago they announced 11 new members. They are up to 15 now, 2 universities in Europe, all top of the line institutions. That is leading American research universities who have committed themselves through senior faculty members, by large, to offering massive open online courses in a variety of fields. When the movement started and up until recently most of the courses were in science, technology, and math. If you go to the Coursera website you will see that in the Fall, in the approximately 140 courses they have there, courses in literature, music, anthropology, and all kinds of subjects and again they are offered by leading faculty members at these institutions. Coursera has competition; Udacity is another for profit founded by another Stanford faculty member. MIT and Harvard have come together with the University of California Berkley to offer courses from their faculty. This is where I have to send you to the report to read the list which includes 4 or 5 other categories, some of them not associated with universities and in fact for the past few years before Stanford organized Coursera there have been dozens, hundreds, might even be thousands of courses available on the web with various degrees of completeness but some are quite complete and actually iTunesU until the organization of Coursera and Youtube.Edu were very good sources of open courseware and they still are. There are probably a few thousand sources at those sites; they are different than Coursera, Udacity, and the MIT/Harvard project in the sense that they are not centrally organized except to the degree that iTunesU provides a platform for some individual institutions to mount their courses and some institutions really dove into this like Berkley, UC Santa Barbara, a few other places, in fact

University of Michigan has many courses that were packaged for posting online in this way. YouTube has hundreds of hundreds of courses and there is a fascinating privately funded organizing in Washington called Saylor that has independently been designing and offering free online courses, fairly polished ones, as an independent business venture. It is supported by a wealthy businessman but it is actually a non-profit, they are not seeking to make any money. So, when I say MOOCs and more I underline the more, there is enormous amount of activity going on, if you look at the report later you can get a better sense of where it is. But what happened also in the last few months as the world of these courses has exploded, is that inevitably a discussion has begun of ok the courses are online and the enrollments are enormous. The MOOCs that were offered by Coursera that began in June had some enrollments of 30,000 to 50,000. I was enrolled in a course in music at the University of Pennsylvania that had almost 30,000 students enrolled in it, it is phenomenal. The most popular engineering courses some offered by Udacity have had enrollments of over 140,000. This might explain why venture capitalists are interested in this. Right now, the courses have no advertisements and no fees or anything but there is already talk of advertising premium services and the link.

In any case to get workforce development what we need to pay attention to now is courses and credit. It didn't take long as the movement gained speed in the last few months for a lot of talk to surface about the potential for credit. That was inevitable, when you see courses posted online by Michigan, Princeton, Virginia, Stanford, quite polished from some of their most distinguished faculty members people began to ask right away "I don't get it, if I take this course and do the assigned reading and some writing why can't I get credit?" Now they were prompted to think in this way because when Stanford started they started to "award" to students who completed the course successfully, in case of the engineering courses simply doing automatically computer assessed short exams they were offering students a certificate of the kind saying they completed the course. The first institution to do it was Stanford. The certificate was non Stanford letter head and there was no Stanford credit, the Professor issues the certificate and he issued probably more than 1,000 of these certificates sent online and the student could print them out and what it said was so and so completed the course successfully online and if they finished in the top 10 percent in results its said that too. It was not college credit but presumably a student could use this quasi credential in seeking work perhaps in the high tech industry. With a few certificates of this kind it is not inconceivable that a smart young student would make a convincing case to a young company saying "look I don't have a degree but I'm a wiz at these Stanford courses and they are among the best in the country." Well, it didn't take long for people to ask how are we going to recognize what people do in these courses. Right now, no one has moved beyond the certificate phase, and again we are not talking about a formal certificate of the kind that a community college or a corporation would offer, we are talking about a course by course certification of some kind. In the past few months just as the availability of the courses has increased the new prospects for assigning credit for the successful completion of courses has turned up, I won't go into much detail about this here but most of it is associated with one version or another of what is called prior learning assessment. If the institutions themselves don't want to offer credit, with the exception of the University of Washington who is part of Coursera now, none of the leading institutions involved in this have said they are willing to consider credit, in fact they have said the opposite they are not in this to award credit. So, where will credit come from? It will come from a small group of well established agencies all based in Washington who for years have been assigning credit via portfolios and testing for thousands of students who have entered institutions with credit for passing a test in history or language or math or credit for work experience of various kinds. Every institution in the country is part of an agreement with the American Council on Education some with other agencies to take credit of this kind. An institution like MSU probably only grants a couple hundred of credits a year it is a very infinitesimal part of what happens. Other institutions in the country are very hospitable to credit of this kind now

this is obviously the most prominent, in the short run, path way for students who succeed with OCW, they will gain credit not directly from institutions, at least not now, in a year who knows. In the next year or two it is more likely that credit will come from one of these agencies and the effort to do this is moving very quickly. The agencies themselves see a terrific opportunity to act as brokers between open courseware, these formal courses offered by leading universities, and degree granting programs at institutions around the country. So there are enormous advocates of this, enormous excitement, and a sense of terrific opportunity reflecting new opportunities for research universities on the institutional side but on the student side focusing on potentially extraordinary opportunities that provide access to high quality education and potentially access to degree completion and attainment. Yes, if you are thinking of this there are institutions and groups in other parts of the world thinking about degrees reflecting open courseware that is a student assembling an entire degree based on free open online courses. It would not surprise me if we see that in the next year or two, the Australian universities are leading in the movement but they have partners in a couple of small American public state colleges who are very active in seeking out students who want credit for succeeding in open courseware.

So, it is easy to see the excitement in this and how much might be possible but I included a section in the paper that underlines what OER and OCW can and can't do. It does provide a new point of entry, a way of access to and some advantage, in degree seeking and degree attainment. For individual students, this is a fascinating part of this; it provides a way to gain some real confidence in what psychologists call self efficacy in post graduate studies. That is a really significant thing. A student can have low risk experience in high quality post secondary work by taking a MOOC or a massive open online course. It offers a student a degree of digital literacy in taking a class on the web as well as what it might provide in credit. So there are some real advantages right away, but there are some things right now that are easy to over state. Right now access isn't easy in every case and there is the huge problem of credential. There is no system in place for a student to gain credit and it would be misleading for any institution to suggest to students to go ahead and take a few open courseware courses and we will give you credit, it doesn't work that way, you can't do that right now. It is hard to say, things are moving so fast that in the next six months to a year there probably will be these opportunities. I risked an italicized sentence in the report, which I probably go further than I should, saying as far as Michigan is concerned that just because there is no credit system in place now is no reason not to take this very seriously. Thinking of the way the community colleges say it if not the 4 year institutions, if there is no credit system in place now it won't be long before there is. I think the smarter institutions will start preparing for this.

I am going to skip over the next section which is about questions of how students themselves can be prepared to do successful open courseware work. I have addressed questions of readiness, which is an important factor for all institutions that teach online courses and I explain there what self assessments are like for students who have no experience in the online world but the in the next sections which I titled skills, self -improvement, and well-being that is where I try to make the case beyond seeing just mere skills and mere workforce development. I try to direct the discussion more toward what I name there as well-being, one of larger benefits of being educated in the post secondary realm. I am very determined that we not forget that part of it, it was actually good to see that Coursera is not workforce crazy and is trying to supply something like a general education curriculum, free and online from some of the best universities in the world. I name another category of workforce development in networked self-direction to try and represent the balance between network work or group work which a lot of the techno-utopians, pardon me, love to identify as the chief benefit of working online. I myself am interested in the opportunities to work by yourself in online work, so the phrase I use is networked self-direction to signify yes group work is great and can be an important part but I can't imagine a student succeeding in open courseware without being self directed, without being good at self directed learning

and happy to be able to work by themselves online. I think that is very important to underline when there is so much talk about interactivity and group work online, the key is really self direction for the students who will really succeed at this.

So the last part of this paper was influenced by Jen and her colleagues in a way I typically wouldn't be if I was sitting in my office on the campus or just doing this in the class, that is I was forced to ask myself, Ok all these new developments are in place, there are these possibilities what might we actually do to make this happen, a sort of radical thought, for someone like me I have to admit, who is largely interested in thinking and reading about these problems. So I describe in the last part how you get from the global initiatives in OER, and the OER movement, I didn't say this way when I started, really began in part with MIT but also with UNESCO in Paris and what is known as the nation of Common Wealth of Learning, that is all the countries of the British empire who have a fascinating organization, operates worldwide and is among the really big promoters of OER and more important, open courseware. So I describe a little of the latest global initiatives but I try to get back to the case of Michigan. In the next section I name 4, I use the vocabulary of the center, potential co-learning projects. The 4 are these: first is a, they should've been on the slide but they weren't so you will have to hear me describe them, is an online open courseware portal which could perhaps wind up at the center here where Jen and I are sitting, at the website, and that would be a portal that would in effect include a lot of what is in the report that I did. It would name the main sources for open courseware, describe what open courseware is, lead people to assessment procedures, describe online degree programs, and say all the things that people would need if they are going to move from individual use of an open free online course toward degree attainment. So an online open courseware portal I think could really be a useful service to people who might see some possibility for themselves in entering the degree stream through OER and open courseware. Second, I think there is a role for institutions in the state to promote readiness for online learning and the use of OCW and promoting self-directed learning that is the style necessary to succeed. I name a few very specific things that actually could be done promoting these online self assessments, and actually there is an important part of this in the Connect Michigan project. OCW is not going to go very far unless broadband continues to expand in the State, it is very important that there be continuing efforts in that direction. The third of the co-learning projects that I mentioned, this starts to get tougher now, is promoting institutional commitments to open courseware and to prior learning assessments. None of this can work if the colleges and universities in the State aren't hospitable to what credit potential there in OCW learning. This is a tough one in Michigan because we have no centralized government in higher education. To compare us to Colorado, Colorado passed a law two months ago requiring every state institution to publish its plan for recognizing OER and open courseware, it is astonishing! I mean, but they are a highly centralized system of higher education, we have nothing of that kind here. So, even if the possibilities expand every institution is on their own. What we may see is some jumping in on this, for example Lansing Community College is really prepared to do this. They have joined up with one of the major prior learning assessment activities in the State, but they are the only institution in the State that has signed up for this. I don't think it is reasonable to think that OER and OCW can have an impact on workforce development unless there is an institutional commitment in the State to recognize the potential for credit and to weave credit into degrees. The last of the four co-learning projects I name is online degree development and that is the boldest and most difficult one to move ahead with. But again, the extent to which open courseware is going to be useful will really depend on how much progress there is in online degree development in the State. Right now it is very limited and again with no centralized agency there is no way to force an institution to do more. Some institutions are very advanced, again Lansing Community College, I learned, is more than half of all the online degrees of all the community colleges in the State. There are some community colleges in the State with no online degrees, and that is hard to imagine these days when online degree development

has moved so quickly even at MSU. But there are some four year institutions for example UM Flint has moved pretty aggressively into this. If I was at UM Flint I would make a big deal of this and I would make myself a location for taking OCW, the institutions that identify themselves as hospitable to credit via prior learning assessment or ultimately direct credit are going to see some attention from students who see the potential for a leg up on the degree with 3, 6, 9, 12 however many credits they can gain through open courseware. I think it would be a smart institution which said ok we will miss out on the tuition for the 12, 15 or however many credits but we will get the rest. Who knows, Flint might be thinking of that now but I wonder with the low completion rates at places like Eastern Michigan and others it wouldn't make smart business sense to start thinking seriously about being aggressive about open courseware. So the last part I make of the four co-learning projects is the promotion of online degree development. And again the best prospects there are probably among the community colleges. In Michigan it all works voluntarily, there is not much you can do from a policy point of view in the State. I finish by asking the question how far change must go and I rely on a widely cited line from the President of Stanford, John Hennessy, who the subject of a profile in the New Yorker a few months ago. Ken Auletta, who did the piece, said what is on your mind the most, and the President of Stanford, who has a lot of things to think about, said online education. That is astonishing! He told the New Yorker there is tsunami coming and he is referring to what is happening in the online world. He influenced Tom Friedman and David Brooks who work at the New York Times that rarely agree about anything. Each of them wrote a column in the same ten day period on open courseware, on free open courseware as the way to save post secondary education. So tsunami or not there is a lot of interest in this, how far we go in Michigan, how far things go in the direction of really making a contribution to workforce development depends on a lot of other things falling into place. A good system of credit assessment and hospitality of institutions to welcome this credit but there is no question that there is an enormous amount of movement, how much we respond to it in this State is still an open question. Thank you for patience, as I do ordinarily in class, I kind of crowded out the time for questions because I was determined to speak all this through. So I will stay as long as you want or if you are going to be at the conference next week we can certainly talk there. Burt had to leave. If there is anybody who wants to say anything...

Jennifer Bruen: Thank you Dr. Weiland! I hope there are questions or comments. I think that this is probably the most hot topic as far as our co-learning plans go. In my discussion with other colleagues in my work over the summer with the various co-learning authors there was excitement in this area. I guess I have my own questions. It seems to me not too long ago and this might have been with the last Census, somewhere along the way I picked up that the State of Washington, half of their State or those that are of working age have college degrees, bachelors.

Dr. Weiland: Washington is the leader and not surprisingly Minnesota is a leader. In fact Lou Glazer, who writes very effectively on workforce problems, is a big supporter of open courseware, of degree attainment. He hasn't done much with open courseware yet but he is a big supporter of degree attainment. His favorite example is Minnesota and it is very close to Washington.

Jennifer Bruen: Is there some open courseware activity going on out there?

Dr. Weiland: No, no, no, I think all states are in the same boat now. And remember open courseware is a bigger phenomenon outside of the US than it is in. MIT's enrollments, if you can call them that, it is basically signing in like this but you can count how many people participate in the course, has always been dominated by non-American users. The same thing is true with Coursera, they started with between 60 and 70 percent international users but in the last month or two it is now at about 60 percent, so more Americans are signing up and that is because of the publicity. There were people who

were skeptical about this, about the MIT project, but they didn't see it as having any relation to degree completion. They would joke and say oh yeah most of the people who are using this are middle class engineers in Poland and New Delhi, and that is what MIT actually was looking for, it was a professional development resource. It is only recently that all of the sudden people are seeing not professional development but degree attainment as a source. Although Minnesota, Washington, other states have high levels of degree attainment at this point I can't imagine this playing any role because there is no....

Jennifer Bruen: Well they don't have the market

Dr. Weiland: The truth is, Michigan is probably a better potential market, quote unquote, because remember this is free and open, to this point at least, than Minnesota. With every state would have some increment but there, what is the polite way to say this, is much more room for improvement here.

Jennifer Bruen: You know this Montessori, self-directed learner concept, I wonder if we are looking at a generation that is where it is stemming from. I mean I am looking at the stay at home mom doing the homeschooling.

Dr. Weiland: That is very interesting. More people working at home and of course people working at home has been made possible by the computer but remember when I use the phrase networked self-directed, what I am trying to get at there is how OCW is at the border of competing images of how technology works with learning. Most of my colleagues in educational technology at MSU, they see the internet primarily as a resource for interactivity, that is students working with one another, that is co-constructing learning. My experiences and preferences send me in the other direction. I can recognize how valuable interactivity and group work can be online but my experience tells me and my interactions with the students I have tells me overwhelming that adult students value the independence and autonomy of online learning. I teach many online classes and it is never fewer than 95 percent of the students I have, if I ask them in the evaluation at the end, I don't require any student to student interactivity that's a heresy in the online world it is all voluntary. I will say would have preferred to be required to do group projects or to interact in a chat room and it never is less than 95 percent that the students will say "no, no, no, I like self paced, I like working on my own." I am convinced and this is one of the reasons I am so enthusiastic about open courseware is that there is a lot of voluntarism in it, you work at your own pace, you do what you like with them, even if credit develops I think most people will still use them as non credit as independent development.

Jennifer Bruen: We have Joel here, "Very informative, thank you. Off to my next meeting, which is not conveniently on-line like this one."

Dr. Weiland: There we go! Thank you for being here!

Jennifer Bruen: Thanks Joel