Locating Free Curriculum and Professional Development Resources April 16, 2015

Automated Speaker - The broadcaster is now starting all attendees are in listen-only mode.

Michael Lesiecki - Good day everyone I'd like to welcome you to our webinar titled Locating Free Curriculum and Professional Development Resources today's April 16th 2015.

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Michael Lesiecki - This webinar is brought to you by the Centers Collaborative for Technical Assistance with additional support by the ATE Collaborative Impact Project. We gratefully acknowledge the support by the National Science Foundation.

Webinar Details

Michael Lesiecki - Let me tell you a few webinar details there's not many today, for this webinar you'll be in listen-only mode using your computer or phone. We hope you'll ask questions just fling in those questions via the question window and we'll get to them as the time allows. And this webinar is being recorded, so all registered attendees receive a recording link an we'll post the PDF of the slides as well so you'll have both on those PDF's today you'll see today there's a lot of embedded links a lot of embedded URL's so you'll want to take a look those things as we go forward.

Poll

Michael Lesiecki – Let me take you forward now and ask you a question about yourself so I'd like to know your affiliation and let's go ahead and launch our poll here and please click on the radio buttons you could see the choices you declare you're involved with an NSF grant, or with a TAACCCT grant or both or neither. So it's an easy question I see everyone is typing in furiously that's good, I'll give you just another moment to look at this. Okay so I'm going to go ahead and close the poll and now we'll take a look at the poll on the screen pretty interesting about equal amounts both involved with NSF and the TAACCCT grants, some both and a number of people who are not directly associated with those which is excellent because I think the information that we have today really works for everyone. Alright now let's get back to the screen, close the poll, okay just a moment folks.

Untitled Slide

Michael Lesiecki - And there we go thank you for your patience. It's my pleasure today to welcome our presenters and you could see myself there on the right Mike Lesiecki, I'm the Director of the Maricopa Advanced Technological Education Center headquartered at the Maricopa Community Colleges. Joining us today is Anna Kolliopoulos, she's the Assistant Director & Co-PI for the South Carolina Advanced Technical Education Center of Excellence that's SC ATE in South Carolina. Also joining us Kris Frady, Kris is the Director of Operations for CA²VES and she's associated with the Clemson University's Center for Workforce Development joining Kris is Doctor Ginny Hall, she's also at that Clemson center, she's their Director of Digital Learning Technologies. So it's quite an interesting panel that we have today that we're ready to go with.

CA2VES and the Clemson University Center for Workforce Development

Michael Lesiecki - We're going to start with the folks from CA2VES and Clemson again Kris Frady and Ginny Hall. Kris I'm gonna go ahead and change the presenter over to you here it comes and then the

it'll be up to you to take us forward. And just click accept you screen Kris, there you go we see your screen so take us forward.

Clemson University Center for Workforce Development

Kris Frady - Good afternoon everyone thank you for attending this afternoon we're looking forward to sharing with you some information about locating curriculum and professional development resources work that we've been doing at Clemson University Center for Workforce Development and also through our NSF ATE center CA2VES. We are located in Clemson, South Carolina which means we are headquartered at Clemson University here upstate of South Carolina and we specialize in researching developing educational resources particularly digital educational resources and today's presentation we're going to take a look at an overview of CA2VES, what we do in CA2VES, our role the DOL TAACCCT grants and then a couple of other components of that such as UDL, the instructor toolkit and then also online and open learning resources.

Interactive Poll

Kris Frady - One of the first pieces we want to do is to do just a quick poll just to get everybody engaged in today's presentation. I am going to switch this ever to different screen here in just a moment and you can do this from a cell phone where you can send a text and if you don't have time or don't want to participate in the poll that just fine too. It's just kind of a fun interaction here you can text the code that you see here on the screen, makes this a little larger get that out of the way 37607 and you'll text the code you see here to make your vote or you can also go to this website here and then you'll just enter in the code numbers, though you'll either enter this as your text to number and this is your code. We like to do this number 1 so that you can interact a little bit with the presentation. Number two because this is a free resource for you to use in your classrooms, or in your meeting or in your conference presentations its polleverywhere.com and it's just a really good way to get some quick interaction again it's a free resource so we wanted to be able to provide you with a way for you to interact and then a tool for you to take home with you after this. So I'll just give you another moment here so you can take a look, I see a couple of answers coming through and as you can see the answers automatically calculate as the voting is occurring. So it's just a fun tool, I've enjoyed using that in my classroom before, the students loved to watch it change, like I said at conferences as well, meetings when you have a large group of people you can collect some feedback very quickly. We can see here that the majority of folks interested in resources today are the open educational resources which, is the topic the webinar, so you guys in right place.

Workforce Development & Higher Ed

Kris Frady – I'm going to share with you a couple of statistics, and these statistics explain to you why we're doing what we're doing and the importance of what we're doing. This particular slide here was created by the Lumina foundation and if you look at this green line on the bottom this is the trajectory the United States in post-secondary educational attainment and that can include anything from a certificate that is industry-recognized, any type of certificate, a two-year degree, a four-year degree or beyond. So when we talk about post-secondary education it can include all of those different things. According to research we believe about 60 percent of the jobs in the United States will require post-secondary education by the year 2018. So if you take a look at this graph what you'll notice is that by 2019 we're at forty-four percent if we continue to follow our current trajectory, we need to do some things to be able to change that number one because we want to offer educational opportunities to our citizens, but number two because this is part economic development. If we don't change the type of education that we have here to meet the needs of the jobs that we have here that we begin to lose their jobs this is a really important aspect for what we do a Center for Workforce Development, its part

economic development initiative. So what we need to do is we need to move towards this red line here the Lumina Foundation has set some benchmarks for us that make it a little bit more attainable to jump up to that 60 percent by 2025. What this means is that we can't keep doing things the way we've been doing things and we need to introduce new methods into our educational systems and way that we're doing things and technology could be one of those things, it could be one of those disruptive technologies that can help us move this line of educational attainment this green area to this red area.

Effects of Technology

Kris Frady - This is also an interesting slide that I like to put just to show you some of the quick affects of technology, the way we teach today can impact the very future of learning. Integrating this type the technology that you have in your classrooms has more far-reaching implications than just the four walls of your classroom. You can see here on this slide some things like being able to adjust student performance levels by using technology. In our University collaborations are predicted, students being able to customize their own degrees rises in additional partnerships.

Center for Workforce Development

Kris Frady - Just a little bit quickly about the Center for Workforce Development for those of you who are involved in NSF ATE Centers we're a conglomerate of a lot of different things and you're probably familiar with of have heard of I hope CA2VES which is our NSF ATE center and we focus on auto and aviation technological education with virtual eschools which is primarily digital learning tools and virtual reality. We also have here a couple of Department of Labor grants we're working on three different rounds and then we have Economic Development Administration Center and then we also work a lot with private foundations Duke Energy being our largest at this current time. We're made up of about thirteen different funded projects here a CA2VES and the Center for Workforce Development and we're part of Clemson's Land grant mission, we're a land grant institution here if you think why is a four-year college focused on technological education and working on two-year educational initiatives it's because it's part of an economic development initiative and commitment Clemson has to the state and this region and being able to provide additional tools that can support additional economic development initiatives.

Mission

Kris Frady - This specifically is the new mission of CA2VES, we were just renewed for another three years and we provide research center resources and evidence-based leadership for two-year colleges and the broader ATE community, by designing and developing state-of-the-art virtual reality-based modules that support automotive and aviation technician education. And in addition to that we extend more into advanced manufacturing.

<u>Goal 1</u>

Kris Frady - We've got four goals at CA2VES. The first is to facilitate and accelerate distribution and implementation of digital learning tools. We're doing that in a couple of different ways, we're integrating some of the TAACCCT curricula into technical education programs, taking some of the tools we have from some of the prior rounds and being about to put them into some of the platforms such as EducateWorkforce, I'll show you here in a moment that's our dissemination tool. And then we want to be able to asses that use that feedback and enhance some of the existing curricula that we have.

EducateWorkforce Website

Kris Frady - Real quickly here I'd like to show you a little bit about the EducateWorkforce platform. This is a platform that we've created specifically for technological education if your familiar with the MOOCs then that Massively Open Online Courses, this is something that has a similar format, it's not specifically a MOOC but it does show you kind of some of the basic structures and set up if you're familiar with something like an edX we used the Open edX platform to design this. Here at the top you see we have some different information within this course here for Safety, we have 8 different courses out there that are aligned with MSSC which would be your Manufacturing Standard Skills Certification industry recognized certificate. Soft skills, basic electricity, basic measurements those type of things the courses can be found out there. Right now I've got us in a manufacturing safety course and at the top here were in the courseware area I can also check my progress you'll see in just a moment here that we have multiple different types of assessments and so as a student I can track my progress or if I'm an instructor implementing these tools I can track the students' progress. We have eBooks in here, that are created in kind of PDF format where students can go in and access their some of their text, that they don't have the actually textbooks that they lug around. We also have created some interactive iBooks and ePubs that are similar to that type format. And if you come down here this is a module that we have you see the works divided into about ten different modules within each module we have multiple sections in here safety at facilities, I'm in a certain section and you can see we have different videos here, and as I play this video and you can see here how when the video changes so does the highlighting this is something that helps with our ADA Americans with Disabilities regulations also provides multiple means of ways for students to engage with our material. We'll talk a little bit more about how we design things and the way we do things but just to give you a quick overview. These are some of the on time assessments we have, when you select the assessment it gives you immediate feedback so that you can understand your answers, different kinds of assessments you have in here, we have some drag and drop, some things that are more interactive then again you can check your answers and you can review the results immediately and it provides instant feedback to aid students with their learning processes. We have introductions and summaries following the old education actions tell them what you're gonna teach them, teach them, tell them what you taught them. So here's our introduction, here's our conclusion, we've got assessments and different types of things that wrap up student learning and then we also have some specific instructor tools and instructor dashboards again so that instructors if they choose to implement this within their courses can also keep track of their students in their learning. And again I'll tell you a little bit more about our learning design because what we've done with this particular platform is the exact same design we've given to all the technical colleges that we're working with in developing some of their online learning resources through the DOL TAACCCT grant.

EducateWorkforce

Kris Frady - When you come back to this presentation later you'll notice some links in here this will be a video where you can go back through EducateWorkforce and see some of those tools.

Goal 2

Kris Frady - Goal number two we're designing and developing digital curriculum, E-schools, virtual reality and we're doing this for hybrid and online environments, it's important for me to say at this point that as a four-year institution we don't deliver any of this technological education. We provide these resources all of our partners and two-year institutions, nonprofits, government agencies and so forth that then to take this information and deliver it, which is why we have it developed modularly and by sections so that just parts and pieces that make sense, that fit in to what they're currently doing

can be used. Just a quick view, I want to show you some of our virtual reality and this will be one of the last times I switch screens on you, I promise. I wanted you to be able to see it live.

Virtual Reality Demonstration

Kris Frady - We used Unity3D so anybody can use this virtual reality with a simple plugin on their computer and access to the Internet this is something we modeled after the BMW plant here in Spartanburg, South Carolina and we worked with Ergonomics experts to identify some major hazards and you can see we have a virtual environment where students can come through and they can view different aspect of the plant and they can also tag various safety violations in a gaming environment. Another type of VR we have right here you can see the Vernier calipers, we have lots tools such as CMC machines, milling machines and of course here you see kind of a simple tool of the Vernier calipers, where students can go through and manipulate things in an online environment we recognize that you can't replace the hands on learning especially when you're doing things in advanced manufacturing, but what we hope is that this increases student accessibility to practice, learn some of these things prior to getting into expensive equipment and also hopefully can reduce the time they actually have to sit in a classroom or lab so that they have help when they get in and actually have the time spent on the equipment.

Goal 3

Kris Frady - Goal number three is increasing the diversity and quality of the advanced manufacturing talent pipeline through sustainable pathways. We do recruitment campaigns, we work with high school teachers and guidance counselors as well as parents focusing on particularly underrepresented populations in rural areas particularly here in South Carolina we have quite a few areas that need support that are classified as rural areas and that's one of our focus. Again we do professional development we also focus on diversity for professional development and we are also going to be holding here in the next three years a Southeastern CA2VES workforce summit, we hope to bring together stakeholders to discuss some of the issues and needs of advanced manufacturing, automotive and aviation workforce.

Goal 4

Kris Frady – And the final piece here we do research, so it's important for us to make sure that what we're implementing is research-based and so as we create some of these new tools and these disruptive technologies, are they affective, are they changing education, and so being able to go in and look at some of these different research projects helps us to determine how affective we are in what we're doing, does it need to change, does it need to be something new or is this something affected we need to disseminate more broadly.

Advanced Technological Education Center

Kris Frady - This is going to be the new home for the Center for Workforce Development we're pretty proud of this and if you're in our area and I noticed on the signup sheet that some of you folks let's look pretty close in North Carolina we would love to have you down here this is something that the EDA is partnering with us to build and through this we're gonna to be creating new learning tools, we'll be providing equipment and expertise to technological education across the United States. This is a building that's being built for our partners to stimulate economic development and job creation again will create virtual reality and apps, work on some analysis and multi-disciplinary research out of this building which will be on Clemson University's campus.

Universal Design for Learning

Kris Frady - So that gives you an overview of what we do in CA2VES and now down to the good stuff. So I want to talk a little bit about the open learning resources and the way we designed them but before I do I think it's important to give kind of a quick primer of the Universal Design for Learning. This is something that grew out of the American for Disability Act and a way to make learning accessible to all students, it's important because we have variability in our learning so they did a lot of research on the brain networks and said you know there's three primary networks that come into play when you are teaching, learning, and engaging in education. This first one here the recognition network think about this how many you are visual learners or auditory learners or tactilers we all learn different ways. If we were to be able to show each other our different types of learning we probably would be divided pretty evenly into thirds between those three areas. So as instructor and good instructors do these things automatically but it's always good to bring this mind, but as instructors we need to be mindful of the way present our information. Is it being presented in a way that first of all if I have a disability, a learning disability or a physical disability that I can still access the material and if I happen to be a more auditory learner am I getting the opportunity to get the information that way. If I'm more visual, am I seeing those types of things? So it really brings to mind the importance of ways to present the information. This second area right here the strategic networks the house of learning think about your preference again ask these questions we'd probably be divided pretty equally about how many of you prefer taking a test, click multiple choice, true/false take the test and be done that's your best way to convey your knowledge. Some people may prefer to write an essay, some people may prefer a report or a project, we all like to express our learning in different ways and it's based on some of the strengths we have as learners. And so as instructors again we have to be mindful of the different ways we provide our students to show us how they've learned and what they've learned whether they be formal or informal that's another component of Universal Design for Learning. The last part is the affective networking, why I am learning. If you think about back in those day when you took Calculus remember that person in class who just loved calculus and was motivated for calculus and you all really just hated his guts or her guts. Well this little green part of their brain was flashing; they were very motivated in that particular course. And so for us as instructors how do we get that same motivation and passion for our students and also teach them to be expert learners so that, that this implied content of our course can carry over and they can learn how to be better learners in their future courses. So this is all well and good and how do you do this.

Untitled Chart

Kris Frady – One thing that the CAST UDL group has put together is a checklist. Just really a quick summary of the checklist there are lots and lots of components, lots and lots of information you see down here there's a website cast.org or the udlcenter.org where you can get much more in-depth information. But just real quickly go through these again the multiple means of representation and some of the things that you can do for multiple means representation you can pre-teach vocabulary, you can highlight key terms, use multiple media such as videos, pictures, virtual reality, simulations, etc. make sure you're providing students with multiple ways to get information. In this middle area here the multiple means for actions and expression examples of that you can do some 3D models, you can do CAD drawings, virtual manipulatives, interactive web tools or quizzes, these are all different ways that students can communicate what they learned to you. Another thing that you can do that is part of this multiple means of expression is teach your students goal-setting, you can give them prompts or models, checklist or other rubric and types of instructional design tools. In this last piece multiple means of engagement, one of the best things you can do here is to provide learners choice, I can choose to do different types of assignments or if I'm a learner that needs additional

support then I may choose something a little bit different so throughout your course being able to provide different types choice for perceived challenges, for timing, for the content that they choose. Also designing authentic activities is important here as well that relate to the field study that may be going into or authentic workplace type of activity and then you can provide opportunities to teach these students how to become expert learners where they have personal responses, self-reflection, evaluation you can give them charts, rubrics, and other types of tools such as that and again this all grew out of the American Disabilities Act. So again it is also looking at ways not just to teach our students on how to learn better but it's also providing multiple means for access that everybody can access learning equally.

DOL TAACCCT

Kris Frady – So in the DOL TAACCCT programs for Workforce Development is helping to design and develop new curriculum and redesign existing curricula in doing that what we've done is creating an instructor tool kit with templates, we also provide some information on UDL, Creative Commons, ADA, where to get OER resources and tools. So we've really been the consulting arm that's helping some of these veterans from the field from industry who are now teaching in some of our two year college classrooms to understand what our pedagogical practices in creating a course particularly an online course.

Learning Design

Kris Frady - In learning design we have system wide involvement where we've included lots of different points of view from two year college, for K through 12, from industry and we've created what you're going to see as a curriculum learning packet.

Learning Design

Kris Frady - The first piece we have is the instructor toolkit we've broken this into or we ask instructors to break this into modules and topics helps them to think through the length of the course at this point we also try and help teachers and instructors think reusable learning objects, so when you're dividing things into modules and sections how can you do so in such a way that you can take and reuse that, so for every course that you teach you don't have to create new materials and design.

Learning Design

Kris Frady - The next thing that we have is the one-page module summary you can see on here, you can list the goals, for each individual module, topics covered, this is also a time for students, or for teachers to start to think about the types of assessments that they're going to put in. Recognizing that you need lots of different types of assessments if you begin with the end in mind when you think about your objectives which would be really your framework for design that helps you bench mark some of your evaluation and your quality in your course then you can also think about how am I going to assess those not necessarily always through traditional multiple choice, true/false tests or an essay what are my different types of assessments that help me get to some of these multiple types of expressions. And then labs, tools, materials, prerequisites those are all things that are also part this.

Learning Design

Kris Frady – This is the biggest part of the toolkit and this is what we call the open text in here we have several different components that we've designed through different educational research pieces. You have again your traditional basic teaching tell them what you're gonna teach them, teach them, tell them what you taught them. So in that one we start with the introduction and in the introduction you have objectives we try and span some of the different multiple levels of the Bloom's taxonomy in doing

that and trying to get some of the higher-level thinking skills as well such as your analysis, synthesis, evaluation types of things. We create orienting questions and that we use as a pretest strategy it's something that instructors can use to understand what type of existing knowledge the learners bring. And then we have the introduction as an activating strategy where we can scaffold here's what you know about this information now let me connect it to something new and then you begin into the learning from there. Under the primary course content you can see we've used some standard typology and heading orientation which you see kind of in a blown up image here so that way it can indicate students in to readers, written materials, we encouraged then to use a variety of different images we have different resources how you use images and ways that you do that and then you have your conclusion and in your conclusion you have things like your key concepts, your key terms, your glossary and again your further study which also provides some choice for students as well. The last piece here is an assessment guide, this is actually a pretty neat tool because in the assessment guide it gives lots of different STEM research types of assessments to instructors that they can quickly build from these particular templates and it's going to be things like template for directed paraphrasing, a one-sentence summary, sequencing events, comparing and contrasting ideas, doing some vindiagramming, explaining and ordering processes, you can do more summative types of evaluations. We have one in here for putting new knowledge to work, so it's provided to situation new learning in an authentic concept and context for the students so that way they can apply some of the procedural knowledge that they have earned through this module in a work-related type of task.

Learning Design

Kris Frady – This is just a brief supplemental presentation template and with that just again helps with the multiple means of instruction or representation and they don't necessarily have to incorporate a recorded mini lecture but if they chose to and use some of the PowerPoint this particular template that is consistent with what you saw back here in this particular open Text and make sure that things are consistent across the boards.

Learning Design

Kris Frady - And then the final pieces we've provided is a checklists that we've gone through lots and lots of what we feel like are the UDL, I'm sorry the DOL requirements for incorporating UDL, Creative Commons, ADA and other types of requirements into an open-learning course. And we've consolidated that into a checklist. So from that instructors can go through and complete this checklist and work one-on-one with our DOL Program Manager who then can help them understand okay this part isn't present here's some resources where you can go get that. This part is really well done so the instructors self-grade and then they work one-on-one with our Program Manager that helps them plugin in some of those other components.

Learning Theories

Kris Frady – And then the learning theories that we use Universal Design for Learning of course online learning and incorporation Open Educational Resources and really its a social constructivist type of approach where we try to ensure that we have authentic learning activities that are drawn from authentic context and with that, that helps to the learner to recognize the importance of the context within their learning development in the modules that are being presented.

<u>Activity</u>

Kris Frady - At this point I'm going to pass the presentation over to Ginny and she's gonna walk you through some of the activities and some of the different online learning resources that we have available that we'd like to share with you.

Dr. Ginny Hall - Good afternoon everybody, so what we would like to do is share with you some open educational resources as well as some cool tools that instructors can use in their classrooms to enhance the learning process and in each of the sections that we have here, we have an activity but for the sake of time what we're gonna do you is I'll ask you a question that you see there on the screen as well as the other two you and if you would as were kind of going through the apps that we're gonna cover in more detail if you could also type what your favorite education app is in the text area and then what we can do at the end of the presentations is actually look and see if you mention any that we did not mention that we can add to this for future presentations but also do a little research and make sure that we include that in any topics that we cover. So here is our first section we're going to talk a little bit about mobile applications for the classroom and you will get these slides and each one of these slides there are links...

Mobile Applications for the Classroom

Dr. Ginny Hall - To provide you information about each of the apps what we'd like to do and take a look really quick at the bigger lists so that you can kind of form your thoughts on your favorite education app that may be on this list or may not be on this list and what we like to do is go into a little bit more detail on a few that we found to be most helpful in the classroom.

Air Sketch

Dr. Ginny Hall - The first one is called Air Sketch and there are two similar ones to that including Vittle or ShowMe you can always click on those links when you get the presentation to learn a little bit more. Air Sketch I think is unique because you can actually project a PDF document or any other kind of document up onto a screen and walk around the classroom with your iPad so you're not actually stuck behind the projector and you can mark on the screen itself as you're going through the lesson.

<u>iAnnotate</u>

Dr. Ginny Hall - iAnnotate is another one that this really interesting you can actually mark on different types of files including Word documents, PowerPoint presentation, as well as PDF documents and you can highlight the text, you can add comments, you can grade papers on this format if you want to. This would be especially helpful in online learning situations but also in the traditional classroom settings.

StudyBlue + Evernote

Dr. Ginny Hall - And the other one that we wanted to highlight of the initial list that we provided is StudyBlue. StudyBlue is just a take on traditional notecards but a step above because you can actually place pictures with your text to add a different level to the learning process you can also couple this with the Evernote application and sync the two together. By combing the two apps you can actually create flashcards in StudyBlue from your Evernote notes. So it's a really cool tool very handy for the learning process.

Activity

Dr. Ginny Hall - The next activity that we have here as we go through some the e-text open educational resources that we found to be really helpful if you could also provide some that have been helpful to you in your class or in your grant experience.

Open Educational Resources – E-Texts

Dr. Ginny Hall - So open educational resources or e-text the open refers to text books being released under Creative Commons or a similar Open License and in a lot of cases instructors can take these

resources and actually customize them to fit their course needs by either remixing them, editing them or adding their own content into the existing. There's a lot of books and the links that we've provided on this slide, so you can go and explore and we also have provided materials such as activities, assessments, rubrics and so forth that you can explore and see if they fit for some of your instructors or for you and your classroom. In addition to in classroom materials you'll also find some instructor training materials and resources.

Activity

Dr. Ginny Hall - And the last activity we wanted to know your favorite open educational resource website. So as we're going through some of the web sites that we found to be helpful if you could provide us with some information what's been helpful to you that the great.

OER-Open Educational Resources

Dr. Ginny Hall - So on left what you'll see is an open OER, open educational resource repository list, those links are gonna be helpful to you because it'll help you find some high-quality online course content and this is at the high school level or higher education and advanced placement courses. What these books do is they help to lower the cost of a traditional textbook in a lot of cases a text books from these open educational resource sites cost no more than thirty dollars and they're usually a good bit less and their quite high quality for them being free provide faculty with a lot of open quality resources to work with. You'll also find textbooks, syllabi, course activities, reading, assessments, interactive simulations and even research on open educational resources. On the right you're gonna find links to open educational resources in addition to just basic textbooks and syllabi, activities with these links, you'll usually find content related to rubrics specifically quality matters and some other very good quality rubrics and well tested. And you'll also find information about locating open educational resources and reviews about open educational resources so that you can read about them get to know them before you use them in your classroom.

Skillscommons

Dr. Ginny Hall – The last thing we wanted to share with you since we have worked with Department of Labor TAACCCT grants now working with round two is the repository that was developed specifically for the placement of those materials. It's called Skillscommons.org and when you get the slides click on that link that's provided and register for Skillscommons and then explore the many grant projects and learning resources that have currently come from round 1. Round 2 will be submitting not to long from now. So you'll see the number of resources increase in the near future.

Organization

Dr. Ginny Hall – So that sums up what we wanted to share with you today. Okay I'm gonna go ahead and hand the microphone back over to Mike so that he can take the next steps.

Michael Lesiecki - Well thank you very much Ginny you know what before we switch presenters I got a couple questions I just got to ask there are several people that have been typing in and early on in the presentation they said where do we get all these things and are they free? I think you addressed that later on in the presentation that these open educational resources in fact all the ones you've talked about today are they all free?

Dr. Ginny Hall – The open educational resources that we just whenever are completely free, so the links that we've provided there are definitely free. I am going to hand the mic over to Kris to talk a little bit more about the CA2VES materials that we discussed earlier the presentation.

Michael Lesiecki – Okay.

Kris Frady - In addition to some of the free resources that we've shared there with the CA2VES materials we have a lot of materials that will be widely freely available one we're working with another ATE Center FALTE if you guys are familiar with that it's called Exploring Advanced Manufacturing and that's one that we're pretty excited about that will be coming online this summer and it will be widely available. There will be modules from 8 courses that are widely available and then there will also be some closed modules as well and we'd be happy to get anybody additional information on that if they would like.

Michael Lesiecki - Kris you mentioned you're a consulting resource, those I would guess are not free how does that work?

Kris Frady - Well we've done it in a variety of different ways we have lots of resources that we can share such as some of these types of presentations and so forth and then as far as having a live person come out and do a speech or professional development with your team on the very first slide and I'll go back to that you have our contact information you can just shoot me email at frady, we would love to you broaden our network get to know you all better and serve you guys. (Back at the Clemson University Center for Workforce Development slide) because we are again a resource for technological education so please do be in touch with us and the easiest way to get us will be email me right there at frady@clemson.edu.

Michael Lesiecki – Good we see that there. I think that's the best thing because this is a complex issue right there's all kinds of stuff out there and what you offer, I think is very unique because you know here at the Maricopa Community Colleges we've also talked with you at Clemson about some of your ability to do things together and so it's been a very good discussion. I'll just let people know that you're easy to work with. Can I go to another question Kris, this is sort of an awkward question, I don't know if I'll do it but I'll say it anyhow, this ADA compliance stuff does anybody check?

Kris Frady - As far as from the Department of Labor?

Michael Lesiecki – Well, I don't know I mean people have talked to me and they said gee you know it's I wanna make sure my stuff is ADA compliant and I'm pretty compliant I'm not even sure if I'm 100 percent compliant, I wonder if there's someone out there that does compliance checks or maybe is that part of your grant I don't know.

Kris Frady – We don't specifically check for the ADA, we do try to provide resources that help the colleges to be able to check for their compliance and to beware very various issues we certainly don't certify to that point but we do try to make folks aware of those types of things. There are a lot of different stories in the news particularly there was one with EdX recently where they're going to be modifying their code base to make sure that they are more fully ADA compliant. So there are cases where you have folks that think they're ADA compliant and they have found out that they need to make some modifications and I will pass the mic to Ginny here she answered the question specifically to you what's happening with in the DOL TAACCCT in case that was where that question was coming from as well.

Michael Lesiecki - I think so that's an important question that'll be our last one now but I'll let Ginny handle it so go ahead and hand the mic to her.

Dr. Ginny Hall - So this will just be an experience question more than an actual hand down from the Department of Labor. Recently we submitted all the materials for the assist grant which was our round one grant that we assisted with and the only complaints that we've had from that is when instructors go in to the repository to actually use some of the materials that were developed they go in assuming its ADA compliant 100 percent where we were only required to meet it as much as we possibly could which we did and practically everything we could to meet that, in a lot of cases it was not a hundred percent. So you may just get emails or feedback from people that are coming in and wanting to use your materials and are wanting you to take some extra steps when it comes to compliance but beyond that I'm not sure that there is a check system built-in, we haven't heard of any yet.

Michael Lesiecki – Now one of our colleagues on line though is mentioning in the window in the text window that in fact they do check and there appear to be fines and so I think that's worth looking into more carefully. Another colleague from ATE central who were gonna talk about in a minute reminds us that there's a number of testing organizations out there that you can work with us often student services at your own institutions might be able to provide testing for compliance so I think those are good to things, either professional organizations or maybe right in your own student services area, I hadn't thought about that so I think that's a good suggestion for us.

Dr. Ginny Hall – We actually in the materials that Kris was telling you about the templates that we provide the instructors the checklist actually includes reminders on what to look for as far as ADA compliance is concerned and within each Technical College they decide based on their uploading process for their online schools what's required and usually it's the entire 508 list.

Michael Lesiecki – Yeah, yeah okay well I think at this point you know timing looks perfect for today we're gonna switch gears were gonna talk about we've had a lot of interests in curriculum and resources now the other side of the coin is faculty professional development rights where does that come from, how do you access things like that so let's see how good and thank you Chris and Ginny let's see how good Mike is at changing over the presenter screen, so let's see what happens here let's see if he gets it right ok just a moment folks we'll get this going. Okay everyone let's see, Anna I'm gonna go ahead and move forward and introduce you again.

South Carolina Advanced Technological Education Center of Excellence (SC ATE)

Michael Lesiecki - There you are Assistant Director and Co-PI for the SC ATE Center in South Carolina, Anna you ready to go?

Anna Kolliopoulos - I'm ready to go.

TeachingTechnicians.org

Michael Lesiecki - Good okay there's your slide TeachingTechnicians if you build it will they come?

Anna Kolliopoulos - Yes thank you Mike and thank you Kris and Ginny, they're a tough act to follow but I'll try. I'd like to talk about teachingtechnicians.org all grant awardees will make the journey from initial concept to development of content and delivery to the target audience this is what we call the build it phase. At this point grantees want others the come use the product or their work, will they come? Well teachingtechnicians, next slide please Mike next slide please.

TeachingTechnicians.org

Anna Kolliopoulos - TeachingTechnicians was created to meet this need the need to disseminate faculty development and professional development opportunities. Teachingtechnicians is part of the South Carolina Center of Excellence and it's funded by the National Science Foundation, next slide please.

TeachingTechnicians.org

Anna Kolliopoulos – Teachingtechnicians.org connects event providers to those seeking faculty or professional development. Events are a product of project initiatives offering low or no cost faculty development. And Teachingtechnicians work connects them to educators who are seeking content, knowledge and skills or new teaching methodology, next slide please.

TeachingTechnicians.org

Anna Kolliopoulos - Now let's take a look at a screen shot of Teachingtechnicians.org here you can see that we have both on site and online events which are posted. We currently have over 2000 registered users on Teachingtechnicians.org and we've had over 1200 posted events since the initiation of the site. We've seen significant growth in the last year or so in webinars, so you can see we have onsite and online events, you can post and event and you can look at our event archive, next slide please.

TeachingTechnicians.org

Anna Kolliopoulos – Now let's take a closer look at Teachingtechnicians.org, who are the providers? Well our first provider is NSF ATE grantees those are projects and centers that are creating faculty or professional development opportunities. Second we have other providers who are in the STEM or ATE community and again they're providing faculty or professional development opportunities and this is this is an opportunity for the TAACCCT grantees; they could be putting their events into this prospect and communicating to our multiple users. And what does Teachingtechnicians provide to these event posters they get free marketing which many grants do not have any budgeted amount for dissemination, so it provides a free tool for you to post your event, reaching over 2000 registered user and connecting yourself to STEM and ATE educators. I would like to highlight that we have a searchable database of archived events and this is very good source of research for new, existing or potential grantees. You could go into the archives look at events that have been posted, find opportunities for potential partners or advisors by heard or even be able to do a gap analysis of what is not being provided and maybe you can meet that need that is not being met by other programs, next slide please.

TeachingTechnicians.org

Anna Kolliopoulos - And who are the registered users? Well registered users are High School STEM educators, their faculty, administrators within the community college STEM and ATE community and they're looking for free or low-cost faculty development and must note that providers are providing free or low-cost development in many cases even providing participant support money to help participants get to the onsite or hybrid event. Let's look at this and we have online events and we have in that category many webinars also and we have on site events. Many providers are also creating a hybrid which may have multiple sessions online and then they convene in a group, bring everybody to a group to do some face-to-face activity. So we have all combinations, next slide please.

TeachingTechnicians.org

Anna Kolliopoulos- Now getting started is very easy, whether you want to post and event or become a registered user, simply create an account. After you have created an account you can post your event

and you'll begin receiving emails for event posted the previous day, these emails will keep you informed of faculty and professional development events to meet your need and those of your grants, your project, your college department or colleagues, next slide please. Next slide Mike.

TeachingTechnicians.org

Anna Kolliopoulos - In addition to the faculty development events that are posted on Teachingtechnicians.org there's also a vast wealth of resources available, and I'm not gonna go through all of these at this point but I encourage you to go to our site and look through the different links and you can find a vast variety of resources that can meet your needs. 1 I will go down in more detail on is our Proven and Promising Practices, next slide please.

TeachingTechnicians.org

Anna Kolliopoulos - One key resource is a proven practices which house a compendium of research. The compendium of research is a collection of peer-reviewed work and STEM and technician education that can assist existing and perspective PIs develop their research justification for their current or future work. Educators can learn, benefit and leverage proven strategies I encourage you to look through the over 330 research papers and articles that are part of this compendium research, next slide please.

TeachingTechnicians.org

Anna Kolliopoulos - TeachingTechnicians.org is part of our South Carolina Center of Excellence and also the Mentor-Connect project is part of that South Carolina Center of Excellence. And like CA2VES Mentor-Connect has just received notification that they are funded for their second phase and we're very excited that. Mentor-Connect is designed to expand the NSF ATE program to community colleges new to ATE. Mentor-Connect provides face-to-face interaction with the assigned mentors and technical assistance for writing a grant proposal for the NSF ATE small grant for new institutions, new to ATE. One thing you'll notice and I don't know if TAACCCT will follow that, NSF has big titles for things. Mentor-Connect has an intake process, each fall with the deadline in October, I recommend that if you're interested in this process you go to <u>www.Mentor-connect.org</u>. One other thing I'd like to note is that Mentor-Connect does have an intake process where mentees are matched with mentors but also on their site they have a library of resources that are available to anybody who is interested in developing a grant proposal, they're open and available to anybody who is interested not just or those in the program, next slide please.

TeachingTechnicians.org

Anna Kolliopoulos - This concludes the presentation of TeachingTechnicians.org, I want to encourage anybody who had any questions about the South Carolina Advanced Technological Education Center, Teachingtechnicians or Mentor-Connect to contact me or visit us online and on all three of our site thank you very much.

Questions

Michael Lesiecki – Anna, its Mike I thought your comment wondering if the TAACCCT program had long titles, well I guess we can look at the title at the program itself that might be a starting point that's a little joke there. Oh you know what struck me is you have this proven practices thing on Teachingtechnicians did you say there's 330 resources? What sort of things are there?

Anna Kolliopoulos - There are white papers, there are proceedings from conferences that have gone through a peer review process to be submitted, there are research document it's a variety of publications, articles, papers, various publications.

Michael Lesiecki – How do I search them are they indexed or do I just browse through them, I'm fascinated by this.

Anna Kolliopoulos- You know they're a searchable database, so you can browse through them, you can search based off of keywords, so their I also being relatively new to this on NSF ATE program found its almost overwhelming you do a little search, you research one of these documents and you start on a journey and exploration that is really interesting. I know very few people have time to just do idol research but it is there are some really interesting findings the body of the Compendium research.

Michael Lesiecki - Well thank, you Anna there's a of couple more questions in the chat window but what I think I'm gonna do is talk a little bit more about how you get to the broad spectrum of ATE resources.

ATE Community Resources

Michael Lesiecki - Folks let me highlight this for you on the screen it says ATE Community Resources, now all of you will be getting this slide deck and you'll have those links that you can follow up on but look at some of the things here, there's a of course the ATE centers that focuses obviously on the ATE centers themselves, ATECentral has some resource archive and a bunch of others things, I'm going to tell you more about that in a moment and many of us in the evaluation world well what I mean by that is if we're working on proposals or projects evaluation is an increasingly important thing EvaluATE, the center there provides a ton of resources, Anna mentioned Mentor-Connect, so those are new to ATE program, and support this is limited in a way limited thing but many resources and be available there and of course you mentioned Teachingtechnicians Anna so thank you.

Want to get your hands on more ATE Resources?

Michael Lesiecki - Now about this ATECentral do you want to, I like this title, want to get your hands on more ATE resources? Well the people that run ATECentral their background I know they won't mind me saying this is in library science, they know how to curate a great resource collection more than 6,000 ATE resources. In general these are free in a few cases they will point to other resources which may have a cost associated with them, there's professional development things, I heard learning objects mentioned today, there's a ton of learning objects in there and importantly there something on the second bullet called information hub so that's designed for you to comment and look at all things I know our group here has looked excessively at the social media resources we're always struggling with how to do a better job with social media so we've used that there. And then the map that directs you on to all of these centers, projects.

Stay in the loop with ATE

Michael Lesiecki - Stay in the loop with ATE turn your eyes to the bottom of the screen ATEcentral.net/intheloop so that's a cool URL that allows you to keep up to date with what's going on for ATE a lot of the ATE projects have newsletters you can decide to subscribe to them, there's an event calendar, a lot of stuff there of course in today's world it seems like there's so many things but that is the focal point of where you can begin and today we heard from CA2VES and Clemson some much about manufacturing resources a ton of other things highlighted at ATECentral.

Join us in Portland, OR!

Michael Lesiecki - Now let's talk about professional development opportunities beyond curriculum, this conference called the High Impact Technology Exchange Conference now going into its six-year will be in Portland Oregon this summer last week in July you can see the dates there, in last year in Chicago there was 591 attendees so think of this as about a six hundred person conference, as you think about the place to go this is the single most impactful place that community college educators can network, find out other information, share ideas so I'd like to encourage you to do that.

Register for HI-TEC and TAACCCT Convening

Michael Lesiecki -And there is a special opportunity associated with that conference following the conference there will be a convening of TAACCCT specific technical assistance you see at the very bottom of the screen there Friday July 31 as well as during the conference itself there will be a track that focuses on TAA and TAA interesting issues so you can see that link there highimpacttech.org/registration will lead you right into the thing to register for this site and that event on Friday is free by the way.

Join US- All Webinars 3 pm Eastern

Michael Lesiecki - Now at the series the CCTA webinar series which you're in today, two more coming up in the near term May 12 Planning for Sustainability and June 18 more ways of ensuring effective business engagement boy that first webinar business engagement was just a ton of people there a lot of questions all kind of things going on so let's keep an eye out for that as we move forward. Now folks as you exit the webinar today if you look at your time clock we're right at the right point in time.

Contacts

Michael Lesiecki - You might want to contact some of the presenters today Kris Frady gave her email frady@clemson; Anna Kolliopoulos you can see her Florence Darlington Edu there; Ginny Hall at Clemson, myself Michael Lesiecki at gmail.com. Ginny I guess no Kris has got the easiest one, so everyone will automatically write to her. So today I'd like to again thank you for being part of this there was a ton of questions on the ADA compliance, lot of ideas that came out here I think what I'm going to do here is officially end the webinar but we're going to talk just a minute about a couple ADA questions that came up. So those of you who have to run away go ahead this officially ends our webinar, we will be sending a recording link and the slides. Let's wind up today with a few tailing questions Kris, Ginny if you'll come back on off of mute one of the questions I had him out did you imply that there are ADA requirements for text materials? That was one of the questions that came in from the audience; I wasn't sure about that myself.

Dr. Ginny Hall - The question is for written text like printed text materials?

Michael Lesiecki - Well it just says for textual materials, now I wonder if they meant printed or online I'm not exactly sure to tell you the truth.

Dr. Ginny Hall – There's some basic pieces like when you're online being sure that you have high contrast with your text colors, there's some things with typology, you need to be aware of as far as ADA compliant goes, tagging well tagging pictures...

Michael Lesiecki – He means either type. He says that the in the chat window either type.

Dr. Ginny Hall – There are guidelines for it yes for either type.

Michael Lesiecki - Okay alright, so we gotta pay attention to those and one of our attendees have said that there's a link, I wonder how I could show that link, I might be able to do this let me give it a try that talks about standards, wonder if I could possibly capture this so I don't know you know I wonder about the you know this whole issue of sustainability not sustainability but rather accessibility, how much we should worry about it I guess from looking at your resources you have guidance for instructors on how to think about this thing that seems like good ideas so. Alright I'm pasting it in, there it is I actually managed to do it so you can see this link on

w3.org/standards/webdesign/accessibility, I know here at our project we have a lot of web things going in so thank you for submitting that. Okay or just another thing is put in W3C into Google a bunch of things are gonna come up. Ok thank you Kris, Ginny, for coming back on for that little bit more about things I'd like to encourage everyone there was a number of questions specific ones, I would encourage them not to contact you Kris through your frady@clemson address. Alright friends this officially concludes our webinar.