

Communities of Practice: Secrets of Successful Implementation (Part1) February 25, 2016

Michael Lesiecki - Welcome everyone to today's webinar titled Communities of Practice: Secrets of Successful Implementation today is February 25, 2016 its 3 p.m. Eastern. I'm your host Mike Lesiecki; I'll give you a brief introduction to these webinar details.

Webinar Details

Michael Lesiecki - For this webinar you will be in listen-only mode using your computer or your phone. Please ask questions via the question window and as I mentioned just a moment ago this webinar is being recorded and you'll be sent a recording link and the link to the slides. I am just now about to hand over to my colleague Ann Beheler to tell us a little bit about the CCTA. Go ahead Ann

Ann Beheler - Thank you, Mike and good afternoon everyone.

Brought to You by

Ann Beheler - Would you ok. Our webinar today is approximately offered or this sort of webinar is offered approximately once a month by the Centers Collaborative for Technical Assistance which is a group of ATE centers, it is also supported by the ATE Centers project next slide.

The CCTA is led by

Ann Beheler - There are five major NSF ATE centers that are leading the CCTA effort, National Convergence Technology Center, the SCATE Center in South Carolina, FLATE Center that is Marilyn's Center in Florida, Bio-Link and MATEC Networks which is Michael's.

CCTA Purpose

Ann Beheler - Our purpose to originally respond to a request from the Department of Labor to NSF to have the ATE centers provide technical assistance to DOL TAACCCT grants and you can see the various things that are included there. We are however expanded a little beyond that next slide.

CCTA Activities are Relevant for

Ann Beheler - Because we are providing this sort of thing to Department of Labor grants as well as NSF project and centers as well as to any work force oriented program of any kind next slide.

Deliverables

Ann Beheler - Our deliverables are these sorts of webinars and teleconferences and they are archived I'd like to point that out to you it's at atecentral.net you can look at the recorded previous webinars their on numerous topics and I suspect there is at least one of those that might be of interest to you. Also we'll have other online media as well. Next slide.

Deliverables Continues

Ann Beheler - We are inviting people to attend various regional and national discipline specific conferences and we're also working on best practices we have our first best practice on how to execute an appropriate online webinar series and that actually is hot off the press in fact it's probably actually

still in draft mode and will get that up on that ATE Center site along with the recording and we will be hosting a convening again this summer in July and we'll talk about that at the very end. Next slide.

Presenters

Ann Beheler- Without further ado I would like to introduce Marilyn Barger from the FLATE Center in Florida she will introduce the other presenters and they will be talking about various aspects of how to execute or build and execute an effective community of practice. Marilyn would you take it away. Marilyn we are not hearing you if you think you're talking.

Marilyn Barger- Ah I got it sorry. I couldn't get unmuted. Good afternoon everyone, thank you Ann for the introduction and Michael as well. I'd like to introduce Mr. Jim Hyder who has been a consultant and work with many of the ATE centers and projects for a number of years on different topics and particularly on how to work together and grow our organizations and our communities. He is going to give us a lot of background on some tips on how to do that. And Barb Lopez who's from the University of New Mexico and the research engineer there but works closely with a couple centers as well and I'll save her secrets for a little later on in the webinar. Next slide.

Poll #1 Your Affiliation

Marilyn Barger - So that's us, all of us involved with ATE grants, I'm also involved in NSF ATE grant I am also involved in a TAACCCT grant a couple of them and we want to know what our audience is involved in so if you can do this poll I think Michael is pulling it up now. Choose one of those selections. I am not sure what happens next I can't see the results.

Michael Lesiecki - You won't be able to see the results Marilyn. I'm showing 50% involved with NSF, 18% with TAACCCT, 15% with both and 17% neither.

Marilyn Barger- Ok, so that's always great to know who our audience is. Thank you Mike, next slide.

Agenda

Marilyn Barger- What I'm going to do is turn it over to Jim Hyder and he's going to take us through this first section.

Jim Hyder- Good afternoon everybody sure is a nice pleasure to share part of the day with you especially given the talk about one of my favorite topics community of practice. I was introduced to this concept at the Synergy project we have been using this as a lens by which to consider developing learning models among a very diverse audience, especially how to evaluate the effectiveness and the value that these create. I have been doing this for just about four years now. For today's webinar we will be focusing on providing an overview of the characteristics of a strong community of practice it's going to include providing a resource of how to get one started how to keep it going and growing. The highlight of the presentation are the two case studies from Marilyn and from Barb. So we are going to go ahead we have done the introductions I'm going to provide an overview on the next slide. But the whole goal of this is to that go on in we're going to be answering the questions what does community of practice like providing a definition and the characteristics for you to look out for. Your also going to be asked a question are you really a CoP and we are going to give you examples of what a CoP is versus some other model that are like present. Like I said we'll be providing two case studies from Marilyn and from Barb and lastly we are going to touch literally skim the surface of the evaluation models for communities of practice well have time for questions throughout and then we will provide our final question and closure slide. So let's go ahead and get going next slide please.

Learning Objectives

Jim Hyder- Like I said after the webinar you going to be able to define and characterize a community of practice, be able to differentiate a community of practice, a network and a project team. We are going to be introducing how to evaluate the effectiveness of the CoP. And finally you're going to have some resources. So next slide please.

What is a CoP?

Jim Hyder– So what is a community of practice? Wenger whose materials are referenced are the end of the webinar you'll have access to all of his materials via his website. He provides a very concise definition him and his colleagues say that a community of practice is a group of people who share a concern, a set of problems, or a passion about a topic and deepen their knowledge and expertise in the area by interacting on an ongoing basis. So the next slide please.

What is a CoP?

Jim Hyder– Let's pick that definition lets pick it apart and kind of look at the key phrases that are discussed. Look at those highlighted phrases here, a group of people who share a concern, a set of problems, or a passion about a topic and they seek to deepen their knowledge and expertise in that area by ongoing interactions. So the next slide kind of brings us home from my perspective.

What is a CoP?

Jim Hyder– Without passion, genuine striving for deepening of knowledge and the cultivation of relationships you're not a community of practice. I won't bother to cite the character that came up with that statement but it is true enough, without those characteristics you may not be a community of practice, you might be something else. I want to do my best Jeff Foxworthy impression and say you might be a community of practice if but I'll spare you that too so let's go on to the next slide.

Characterizing the HEART of CoP

Jim Hyder– What it all boils down to is characterizing the heart of the community of practice. Another embedded definition that

Michael Lesiecki - Jim its Mike we've lost audio on you for a moment can you double check your connections?

Jim Hyder– I'm back where did you want to start?

Michael Lesiecki –Why don't you start at the start of this slide called characterizing the heart just goes through that.

Jim Hyder–My apologies I'm sorry about that.

Michael Lesiecki –Thank you

Jim Hyder–This idea of the heart of the community of practice still involves an intellectual structural characteristic of the community practice but it also helps us to define the domain knowledge, idea of community and notion of practice. This is really important because the domain of knowledge creates the common ground, it inspires members to participate and it gives meaning to their actions and participation. This idea of participation is going to become crystal clear in the next few slides. The idea of community creates a social fabric for that learning; it fosters interactions and encourages a

willingness to share. The cultivation of relationships that I mentioned in a previous slide is just huge in this as well. As you'll see that the notion of practices is key to the communities of practice, specific focus around which the community develops. Let's go ahead and go to the next slide.

Characterizing the HEART of CoP

Jim Hyder—So it's safe to say then that attitudinal characteristics are the secret sauce, and that secret sauce remains the passion, genuine striving for deepening of knowledge and expertise, and interacting on a regular basis, cultivating your relationships. Next slide please.

Are you REALLY a CoP?

Jim Hyder— So are you really a community of practice or are you perhaps something else? Are you a project team or a network? Or are you a community of interest? I regularly hear people describing that their group or that their effort is something other than what they say they really are. So suffice it to say that sometimes we learn about what we are by comparing ourselves to what we aren't. So it's really ok to be something different or other than a CoP but when you're describing yourself as something that you aren't quite it actually makes a difference in your hearers. I just want to put out a special little note here that a social network is really a topic unto itself and that's the phrase that I actually I hear overused the most. If you want a good study on what that is, there's a good Wikipedia source down there at the bottom. Let's go to the next slide.

Networks vs. Communities

Jim Hyder— So like I said social network or network in general is the most common comparison here so this network aspect refers to a set of relationships and personal interactions and connections among all participants but it's viewed as a set of nodes or links but its affordances of information flows and helpful linkages, so in other words the focus is on the nodes and the links and what you achieve but not necessarily the relationships with the nodes. On the other hand you have the community aspect refers to the development of shared identity around a topic that represents a collective intention however tacit and distributed to steward a domain of knowledge and to sustain learning about it. I like that very subtle it's the one that focuses on intention, stewardship and sustainable. So let's go to next slide.

Project Team vs. CoP

Jim Hyder— Let's talk about a project team vs a community of practice. A project team is always driven by deliverables it's got formal shared goals, milestones and results. It needs to share and exchange information and experiences just like a CoP but the team membership is defined by the role or task. Its designated members who remain consistent in their roles or in the project remain for as long as the project and product is dissolved or repurposed once its mission or goal is achieved. I think we all have examples of what it means to be part of a project. Community of practice is more often organically created just people that are interested and hear about the community being active is usually enough to attract. The note here is that they have as many objectives and informal goals as there are members. They often defined by the knowledge of the members and the community of practice members changes with ebbs and flows as you will. Members may take on new roles within the community as interests and needs arise or more often community of practice exists as long as members believe they have something to contribute to or gain from. So let's go to the next slide.

Community of Interest (CoI) vs. CoP

Jim Hyder— This is often times another one that we don't really think of as a community but the academic materials pretty clear but they have called us out as a community of interest. A community of interest is a group of people who share information and discuss a particular topic that interests them.

It's made up of members who are not necessarily experts or practitioners on the topic around which the community of interest is formed. Now that's really key all it takes for a membership for a community of interest is just that interest. Some people profess to be experts or practitioners, but you know how that goes. It's a place where people share a common interest and exchange information, ask questions and express their opinions about a topic of interest. Notice again it's not dependent on expertise one only has to be interested in the subject. I have an interest in time Atlantic Salmon Flies, they are made out of hooks and feathers to attract salmon for fly fishing something it's something I'm extremely interesting but I haven't become proficient, I am learning how to tie these so I am a lurker on various Facebook sites and I get to comment and enjoy other people work and comment about how beautiful somebody else's work is. But since I don't consider myself an expert or practitioner I don't see much participation in this community of interest. The Cop on the other hand, this is where I said it would all makes sense, it's a group of people who are active practitioners, they don't necessarily have to be experts but it's not appropriate for non-practitioners to be in a community of practice acting as if they are practitioners. There's a level of participation that sits on the outside where you are allowed to become part of that community, but it's only as you become a practitioner that your actually part of the community of practice. The CoP provides ways for practitioners to share tips and best practices, ask questions of their colleagues and provide support for each other. The membership of a CoP is dependent on expertise. One should have at least some degree or recent experience that is formable or subject area that concerns the CoP. So on some other Facebook sites about fishing, I do practice fishing and I know enough to share experiences and even an occasional photograph of myself about one of the patches I found. I'm only bringing this up because just last night I was talking to a dear friend and this comparison came up so I figured I would share it here as well. Let's go to the next slide.

Summary/Key Phrases

Jim Hyder—So as a summary of this phase of the webinar these are some of the key phrases and concepts that you should be looking for when you hear people describe their community this is timely as we're going to go into a phase where Marilyn and Barb will be talking about their communities. Remember a community of practice you are looking for phrases such as practitioners, organic, passion, striving for deepening of knowledge and cultivation of relationships. Within the networks you'll hear words like nodes or linkages or information flows, links, linkages. All of those phrases that describe formal or structured networks. Remember the project team is always driven by deliverables, defined by roles and tasks. Community of interest is not necessarily experts or practitioners, just interesting. So next slide please.

Questions

Jim Hyder—At this point, I just want to open it up for any questions that the audience might have.

Michael Lesiecki—Jim we do have some questions, one is how exclusive is a community of practice for example you mentioned distinguishing for example between a project team can a project team ever be a community practice or they mutually exclusive?

Jim Hyder—That's an outstanding question, I tried to slip in the word maturity oftentimes your project teams become communities of practice, and they're not so exclusive if you will that there is not those points of interests where people hear about the successes that the projects are having and there should be all sorts of entrance points in to those projects so that it's not the project itself that's excluding interest or participation but it allows people in based on what they have to offer to the community.

Michael Lesiecki – In that same sense Jim can you ever assign someone to be a member of a committee? Can I assign work colleagues, say ok I want you to be a member or is a characteristic of a CoP that volunteer aspect that wanting to be that passion to be part of it.

Jim Hyder – That's interesting thing and you used the phrase assign. I like to think of it as more organic and communities of practices can clearly be led by good leadership principles but it's a lot more compromising or a lot more sharing the responsible leadership so that passion for entry. You can also convert that by saying well I have a passion for bringing good people into the community so it's really a matter of pull I would say.

Michael Lesiecki – Jim we have one more question from the audience what about the distinction with a professional learning community that almost sounds like a community of practice?

Jim Hyder – You know my instinct tells me to say in general they are very similar to each other, I would contend that it's that degree of passion and it's that degree of what everybody brings to the table because each one of those communities of learning are actually structured slightly different so again I would kind of refer to that instinct that brings that characteristic of the passion and those hearts of the characteristics that we talked about.

Michael Lesiecki – Ok Jim now on the interest of time we'll have another question break as we go forward thank you for the response those questions. Why don't we turn over to Marilyn who's going to give us a sense of what her community of practice looks like, go ahead Marilyn.

FLATE: Florida Advanced Technological Education Center of Excellence

Marilyn Barger- Thank you Mike! Good afternoon again everyone. I'd like to start out with a little bit information about our center, our FLATE center, I saw there were a lot of ATE attendees so they know about centers and project, but for the rest of you, and they might even know about the FLATE center, but for the rest of you just a little bit of background, we are a regional center of excellence in Florida, Florida is our defined region that supports our geographic area and we also have a statewide CTE system in Florida so all of our colleges and high schools are driven by a state level of framework and guidelines and programs. We are very focused on manufacturing technician education so our goals are all about getting the best technicians graduated from our two year programs and our college certificate programs and into work in manufacturing and in industrial positions. And what we did to support that was created a model that uses articulations and credentials as a social science pathway into the lead technician jobs so we have great relationships with our high school programs and with the workforce to all come together in a pathway that supports manufacturing in our state. Right now you can get this degree at nineteen of the twenty five state and community colleges that offer a technical degree that would be appropriate for a manufacturing company or industry. There are 28 colleges, State Colleges in Florida but some of them do not have technical programs at all just because of their location and their service areas so there are 25 that could ultimately be part of this group. Ok thank you Mike next slide.

Our Community of Practice

Marilyn Barger- So we have always talked about our community as a way to reach our ultimate goal which is to get to make the best manufacturing technicians that we can and this is not, I would not say this is our community of practice guess that's probably a mistake on the top of the slide. It's more of how we look at everything we do supporting that particular goal and these are some of the vehicles we use to communicate and work with each other and share so you'll see some networking support systems

in this as well as the numbers of colleges and some of our partners, some of our important partners in the academic effort of this activity. Ok next slide Mike. Next slide please.

Our Community of Practice

Marilyn Barger- Ok, this is the face of our engineering technology forum, so that core of our big community that we've grown over the years in Florida with the FLATE center is the technical educators that actually teach in the two years associate science program and the colleagues that work with them in the different institutions so that might be their Deans who have intimate relationship with the faculty and the programs as well as the faculty themselves, might be program managers, could be lab assistants, but it also includes our extended family this particular group of educators that are primarily classroom related educators meets on a regular basis but we include an extended family the people who support us in different ways. The people who sell us technical equipment and different resources for the classroom, we might call them vendors we might call them suppliers and they participate with us actively in our group in our community and then the high school technical educators as well depending on where we happen to meet. And industry partners again depending on where we meet, we have industry partners participating as well. So this is kind of the faces of our group and our manufacturing technology forum which is the official name of our, what we've come to realize is probably a community of practice, this is something we just sort of fell into I have to admit. Next slide.

Our Community of Practice

Marilyn Barger- Some of you Florida people might see yourselves in that picture. So who we are we just kind of talk about some of this but I have written it out here for you all levels of Engineering and Technology educators so a few K-12, mostly Community College and State College educators and we have some of the University and four years engineering and technology educators are part of our group. Those vendors I talked about the Department of Education representatives who work with the career tech programs, particularly the manufacturing related ones, industry partners and the k-12 educators. Alright next slide.

Florida's Forum on Engineering Technology

Marilyn Barger- So a little background about the forum, I love the word organically grown because I think that's exactly what happened to this particular group back in the nineteen nineties a group of technical educators started a meeting in response to sort of a crisis at the state level when they were trying to require a particular action from the two-year and four-year colleges to work together it happened to be on then what they were calling a statewide articulation and the focus was electronic engineering is now part of our engineering technology degree that supports manufacturing and a handful of colleges met to try to solve this mandate, this problem with the university partners but it turned out it wasn't an effective meeting of the minds and they realized that they got a lot out of interaction with each other and with the four year institutions that were. They by the way have fallen to the wayside as part of this meeting and large representation, so they continued to me regular semi-annual basis and we share a lot of information in between because we have this ongoing kind of informal/ formal meeting on a regular basis. We do move around to the different colleges in the state it's a day and a half meaning the group has no officers, no bylaws, we have no memorandums of understanding or agreements and there's no money involved no registration there is no anything it's just a gathering. We do have a chair of the group it's kind of the meeting organizer and then the local host whoever is hosting these meetings also shares in the organization obviously of the gathering. But no one of us, but everyone puts together the agenda it's quite open as soon as the meeting date gets set its open for everyone to submit topics that are on their minds are on their colleagues new way of doing things or whatever is bothering them or whatever new stuff that they want to share it might be a

project, their new program they're thinking about, it's totally open we collect all of those the chair and the local host and build an agenda from that we include anything that a local host wants to highlight when were at the meeting and low and behold a day and a half gets filled up pretty quickly. Next slide.

Florida's Forum on Engineering Technology

Marilyn Barger- So what we have grown to do is to really share a passion for the students that we're working with and the information we're trying to transmit to them and trying to make the best technicians that we can and they have found great value in sharing the expertise and backgrounds and everything that we all bring to the table in this kind of open forum and venue where we can really talk about just about anything that's related to engineering technology and other things as well. A lot of growth happens here with the different attendees, different participants and a lot of people start helping each other and not relying on the not necessarily just the folks who have been there the longest but relying on each other and sharing with each other what their needs are and what their expertise is. So we solve problems we celebrate our successes and we've grown a lot in recent years to help mentor new colleagues coming into the education system and Florida new educators and administrators. Next slide.

Florida's Forum on Engineering Technology

Marilyn Barger- So this slide just takes a step outside of that boxes and shows a little bit about the program and our kind of steady growth this is particularly the engineering technology degree are rolling enrollment across the state and a growing number of programs and colleges that are involved and then it's as college add this degree program and other industry partners the forum has grown and they ask if they can come as everybody thinks it's a secret club or something but it's not, it turns out its open to anyone, so it's become a place they want to be because they are really valuable. Next slide.

Florida's Forum on Engineering Technology

Marilyn Barger – So uh for us the kind of things that we do when we're together typical educator issues some of the topics we might address are on this slide and we won't read through all of these, educators across the country share these issues from time to time some become more important than others so I'll just let that be for another minute. Ok next slide.

Florida's Forum on Engineering Technology

Marilyn Barger - Next slide Mike, and I can honestly say we do have a big passion for what we do together and what we share and for each other as well everybody contributes everybody benefits and that's the reason that are little group that started out with six to eight people 10 or so years ago is now nearly 50 people show up every six months at our gatherings. Next slide.

Florida's Forum on Engineering Technology

Marilyn Barger - So these are now going through the points Jim had earlier on his definitions and characteristics. So just some ways that we think we've deepened our knowledge: sharing our programs, new processes and procedures, more about industry needs and that's from statewide point of view, reforming reforms that are in the degree we are offering, external standards, how do we track our graduates, how do we know what they're doing, our common course numbering system working with that and continuous benchmarking between programs whose doing what and what can we do to either help them or copy them. Alright next slide.

34th Forum on Engineering Technology

Marilyn Barger - Next slide. This is a nice little closing slide celebrating one of our, on the far left of the poster you can see those are all the meetings we have had through last spring and one of our leaders who retired recently celebrating his I guess successful retirement . And I think that is it for me. Next slide.

Participant Vote

Michael Lesiecki – So Marilyn, lets (Marilyn Barger speaking same time –I think we are asking) yeah let's ask folks online if they would consider your forum to be a CoP, a CoI, a project team, or a network. So folks if you will, Marilyn you can see on the side they're clicking rapidly and I think the tendency is sort of interesting we going to let it go for just another minute, folks go ahead and put in your, make your choices. It's one of the others CoP, CoI, project team, or network. That's more than sixty percent of the people have voted, let's go ahead Janet let's show the results of this poll. So Marilyn sixty percent of the reporting people think it's a community of practice and 30% a network, very interesting. What do you say about that?

Marilyn Barger - Well I didn't really understand or know enough about these particular terms until I would say 10 months ago and I guess I'm surprised about the network because I don't feel like it's a network but maybe it is.

Michael Lesiecki – A third of the people think it is.

Marilyn Barger and Michael Lesiecki speak at the same time it us inaudible

Michael Lesiecki - yeah hey Jim I was going to ask you to jump in here.

Jim Hyder – I would like to chime in here, I find it extremely interesting and this doesn't surprise me to be quite frank the idea that we even tell people that these are the characteristics of what make CoP some of the other wording that we're use to seeing and the various paradigms or lenses that we look throw we still consider ourselves networks and we all have communities, we all have some degree of interest and some of us keyed into particular goals and objectives that Marilyn emphasized. So you can see how this is going to be a mish mash of those paradigms that's why I find it so important to continually engage in these exercises where we use precise language of what makes a CoP versus a network. So I actually find these results very interesting enlighten.

Michael Lesiecki - Good comment Jim. We're going to come back we're going to ask this same question folks as we look at our next example. Janet, please close the poll. Let me bring Barb Lopez to the screen, now Barb tell us about SCME and what you guys are doing there along these lines.

Who is SCME and what do we Offer!

Barbara Lopez – Thanks Mike, I am from the Southwest Center for Microsystems education and we are an NSF-funded center, were a regional center but really we serve a larger region than our southwest area. We have participants from 26 States and over 10 countries and our participants are instructors from mainly secondary schools, community colleges and 4 year institutions but we do have some middle school teachers who are actually part of our SCME community. Next slide please Mike.

Who is SCME and what do we Offer!

Barbara Lopez – Now SCME has developed over fifty learning modules to help instructors bring micro technology to their STEM classrooms, that's what we do. These modules utilize 11 classroom kits as

activities to enhance the module topics and the learning modules are available to download for free on our website and our kits can be purchased on our online kit store. We also have YouTube channel with instructional videos, lectures and presentations on micro technology topics. SCME has also conducted numerous professional development workshops to train instructors on our modules and kits and we conduct a five-day pressure sensor workshop which allows instructors to come to our clean room at the University of New Mexico and manufacture a micro pressure sensor. We have transferred this process with the help of our community partners to cut clean rooms at the University of South Florida, to the University of Michigan, North Dakota State College of Science, Salt Lake City Salt Lake Community College in cooperation of the University of Utah and Chippewa Community College. And now SCME is venturing into a virtual training ground with our hands-online Academy. So next slide please Mike. I kind of want to emphasize that you know as a center our goal has always been to educate and bring micro technology in order to you know kind of produce more technicians but what we really have become over the years is a pretty strong community with instructors who are passionate about bringing STEM concepts to their students in so many different ways and I think we offer a very unique kind of venue and then a unique method of bringing our STEM concepts to these instructors.

SCME Hands-Online Academy (HOLA)

Barbara Lopez – So with his hands-online academy we are kind of trying to reach more people. It's a venue where we can train teachers and develop a broader learning community. It's pretty new we've launched our first course on February 1st and this course is new to us and its entitled Career Pathways for Micro Technology and other courses that are in our hands-online academy series are listed here. Where a new courses is available each month through July. HOLA as we like to call it allows participants 24/7 access to any of the online courses for asynchronous study, for reference and for use in their classrooms and these courses are free of charge and participants will be provided with educational materials needed to teach STEM concepts using micro systems applications. All but one of these courses utilize our kits and participants are given the opportunity to receive this kit free and then we show them how to use the kit throughout the course. After going through the course and the corresponding kits, instructors can request an online session with an SCME coach and during this session they will receive one-on-one coaching to answer questions and ensure that our participants are ready and comfortable before introducing any of the course materials, or activities or kits to their students. Next slide please Mike.

SCME Active User Community

Barbara Lopez – Did you get that, next slide.

Michael Lesiecki - I'm sorry Barb, but our system is a little slow today do you see it now?

Barbara Lopez - I don't not yet, actually here we go.

Michael Lesiecki – I'm sorry for that, thank you.

Barbara Lopez – No problem. Just get nervous making sure that you guys can still hear me, I don't want to be talking to nobody here.

Michael Lesiecki – No you are good.

Barbara Lopez – Ok good. A little bit about our community we have an active user community and this community consists of users who have participated in a workshop with us or if they purchased a kit from

us or if they actively engaged with us in any way over the past eighteen months and currently we have three hundred and sixty active users in our community and this number is actually growing daily because of our hands-online academy. There are currently 75 total HOLA hands-online academy participants from 21 different states and eight different countries and sixty of these participants are brand new to our community, in that they have never actually attended one of our workshops or purchased a kit from us in the past. Most likely these folks are frequent downloaders from our site we haven't been able to track or contact in the past not sure about that, I'll do more research on where our new users are coming from in the future. But this online venue has given the SCME Micro Technology Community the opportunity to share and learn from other participants from many locations worldwide and with our hands-online we use a discussion forum for many of the course assignments which allows the participants to share what they know, what they do in their classrooms to teach STEM concepts and also to learn and network from each other, from other teachers all around the world. Ok next slide please.

SCME- User Community

Barbara Lopez – all right there are several different modes of participation for a community to engage with a lot of user overlap with these modes. So participation in one area most certainly and frequently leads to participation in others. Our users can simply be website visitors or YouTube viewers and at the current moment we really have no way to track these participants we can communicate to them via our website and YouTube channel. But our other modes of participation would be our live workshop participants, our kit purchasers and our hands-online participants. Now these groups we can communicate with and assess their immediate applied and realized values for members of our community. We'll touch on that in just a second of what these values represent. But we assess these values using a thorough evaluation plan which allows participants to engage and communicate with us and on how our community has benefitted them. This also gives them the opportunity to offer improvements and share best practices on how they have implemented micro technology into their STEM curriculum. And now with our hands-online asynchronous courses we are hoping to receive more frequent feedback as well as foster an even more vibrant working community with our SCME participants. Ok next slide.

Community Case Study- Ivy Tech

Barbara Lopez – Ok, I'm going to give you a couple of examples of our community participation, one very active participant in our community is Andy Bell from Ivy Tech and he basically took what he learned from our workshops and our kits and he expanded on them. He had his students build an Arduino UNO module to interface with a modified pressure sensor model from our pressure sensor model kit and he then had his students write LabView code to interface with the model to characterize and calibrate their macro pressure sensor. He also enhanced our dynamic cantilever kit by building and applying custom strain gauges which he had his students draw on using silver ink and his student again wrote LabView codes to interface with the cantilever. He is doing a lot to make our stuff even better. Next slide please.

Community Case Study – Dublin Institute of Technology (DIT)

Barbara Lopez – Another example of how our micro technology community has been helping each other evolve their STEM curricula is a relationship with the Dublin Institute of Technology in Ireland. Now in January last year we received a large order from DIT for all of our kits and I happen to be living in Dublin at the time so I was able to assist DIT first hand in training and implementing our cantilever and pressure sensor kits into the DIT Engineering Technology curriculum. Then last summer DIT paid for Bill Reddington from Dublin to fly to Albuquerque to participate in our five day pressure sensor workshop and he has now referred us to several of his colleagues at DIT and others in Germany and England and

now we have seven other community participants from Ireland, Germany, and the UK as a result of this relationship with DIT. So next slide.

Participant Vote

Barbara Lopez—That's a summary of SCME who we are, what we do and what our community is about.

Michael Lesiecki—So let's take a look Barb at that same question is SCME as you presented it most like a community of practice, community of interest, project team or a network. You can see off in the right panel people are rapidly voting and folks make your decisions think about it a little bit I'll give you just another 10 seconds or so to make their decision. And I noticed Barb you said you just happened to be living in Dublin not everybody gets to say that, sounds pretty cool will hear about that another time. Ok just another moment give a couple more people a chance to vote there we go, thank you very much ok Janet I'm going to count down from five and then would you show the results of the poll please 5, 4, 3, 2, 1. Now there's a spectrum of answers for us Barb, and Jim, and Marilyn, I've got a third and a third more or less of CoP and network but also some people who saw this as a Community of interest and a project team. Barb what's your take on these answers and I will ask Jim to chime in too.

Barbara Lopez—Well I'm no expert on the definition of what these four represent but you know if you were to ask me generally I would actually say we are all four. I mean we kind of are we do all of us have passion for what we do we have passion for educating with STEM topics and we work closely together in lots of different so maybe Jim can offer some more insight into that.

Michael Lesiecki—Go ahead Jim.

Jim Hyder— I find this result a little more shocking than the first one. Frankly, I expected to see something quite similar to what Marilyn received for FLATE. One of the big differences that in my opinion that drives SCME up is the way they do their evaluation and continuously try to cultivate that community of practice. By the same token that's something the PI has always acknowledged they want to strive to do with continuous improvement. So I think as if we had offered this poll again after I explained some of those terms that Barb used, I wouldn't be surprised if this bumped up a notch to look more like a community of practice. So that's actually a pretty good transition if we could go back to the slides.

Michael Lesiecki—Go ahead and close the poll Janet.

Questions

Jim Hyder— And in a huge interest of time here I'm not going to spend very much time on this at all, it's probably it's only little webinar in how to talk about evaluation. But if we could go to the evaluation slide.

Evaluation of CoPs

Jim Hyder- Suffice it to say that this is the 30 foot overview of evaluation. Communities of practices need to be evaluated differently than an event, standalone events. Kirkpatrick methods without going into too much detail go through the various stages of how an event went. Whereas, the value creation based evaluation goes through the five levels of evaluations and it's more of a continuous ongoing getting a finger on the pulse of the community if you will. So let's go into the next slide and I'll just break down some of those terms.

Value Definitions

Jim Hyder— Immediate value it's precisely what did we get directly from this event or activity. It's the same that you would get out of Kirkpatrick survey but it's that immediate count of say like a workshop for professional development for instructors who you're teaching down to use modules just like SCME does. How many people participated in the event? The potential value is when you ask them what's possible because of the experience in that example where we just put them through a workshop let's say we had 10 people participate and you ask well how many people are going to use it, eight of them say they use it. At that point that's where a lot of our serving stops to be quite frank. Applied value is that what potential values actually converted to value in terms of output and outcomes in terms of your logic model. It's when you actually ask people you follow up and say hey you said you were going to use this material six months ago did you? And from there let's say six of them come along and say yeah we used it then you follow it up with well what kind of impact did you have, that brings us to the next slide.

Value Definitions

Jim Hyder— That's the realized value. It's the value of the applied value if each one of those instructors have an impact of a hundred students you have gone ahead and exponential impacted that module or that innovations outcomes and impacts. Last year there's a word missing reframing it's the what that we change about ourselves and/or how we do about business. Please don't confuse this with the highest level of evaluation, the realized value is the highest value the reframing is its own question it's always good to know not only what you changed but why you changed your method of doing business. It helps you to tell your story mainly for what we do tell our story on the next proposal. So let's go ahead to the next slide.

References

Jim Hyder -This is a must-have resource if you're going to start a community of practice it's from that Wenger-Trayner website. If you're starting a community of practice this is a neat little roadmap to go ahead and use. Go to the next slide

References

Jim Hyder - This first reference that has the website on the second bullet this one is invaluable as well I have literally read this more than ten times over the last four years and each time I read this it has new nuance or new insights for where I am on my walk in a community of practice. I highly recommend this reference, the other two are just good references to review once or twice to become more familiar. So in the interest of time here, next slide, I think we are going to close it out.

Have We Met the Objectives?

Michael Lesiecki –Jim if you don't mind, let me let people contemplate this question while we go to a couple of questions. That sound ok to you?

Jim Hyder- Absolutely.

Michael Lesiecki –So we'll leave that poll up while we're talking so people can say did we meet the objectives in today's webinar. Let me ask this question Marilyn, let me turn back to you a lot of questions came in during your session on the FLATE forum of electronics technology forum that you created now we loved the idea that there's no rules no memorandum of understandings none of that stuff but people were asking in the question window and online, who supports this I mean there was food at this event someone has to do communications where does that come from. Call it infrastructure.

Marilyn Barger - So that actually comes from within so for the meeting that chair, we do have we sometimes call them a permanent chair and the local host as a chair those people do kind of the organization and sometimes that is supported by and a lot of times the senators staff support some of that. But it's really not because most of the logistics actually happen by the hosts college. So at event at a meeting someone when the meeting is running which means we have somebody who's chairing the meeting and saying you know now were going to do this and this is what we submitted for agenda items, somebody volunteers it's really a popular thing to do is to host the ET Forum we have a lineup of people who want to do that people want to show up in news space and stuff so that happens using a meeting when and where it's going to be at the next the time and then that college picks up a lot of work for that hosting. Now the food use to be an issue but we've convinced our vendor friends and support us to do that, they set up tables they spend time in the forum, actually in the meetings with us and then they have on display their new equipment and stuff then they all pitch in and we get the total amount of lunches for the lunches and breakfasts and we divided by however many people can come and so there's no money made and there is no money over spent the colleges don't have to they just pay exactly for what we need and by dividing it up and there they were quite happy about that is usually about 150 bucks per participant in that part of our activity, so that's actually worked really well for us we've kept it out of college trying to gauge money or having to deal with other kind of paperwork for collecting money or trying to keep it so that it's not a money-making event. So we don't get carried away with that part.

Michael Lesiecki – I like that last idea of going to our industry cause all of us at community colleges know sometimes it is an issue of a finding the dollars or the approvals any how to do these food functions. Thanks! Barb quick question for you if you had to say what is the one thing that you do the best to encourage this large community you know this national community what is the one thing that works the best, is it communication is it sending materials what would you say if you had to give a short answer .

Barbara Lopez- Short answer I think what I've noticed so far is to kind of forge this community is continuous communication between the instructors that are involved in our community and that certainly with our workshops they kind of all meet with each other they have gained relationships because of our workshops, but now with our hands-online and with our online venue with these courses they can do that without being at the same location. So that's really helpful to be able to just say hey you know how did you implement this into your chemistry class kind of thing. Communication with each other.

Michael Lesiecki – Cool, I was guessing you might say that.

Marilyn Barger – I'd like to jump in just say that's exactly the same for us, it's really important to have the opportunity to share with each other and you know just get to know people and know what they do best and then be able to develop your own relationships where there's an opportunity to do so to share what they're doing and ask questions more freely and learn.

Michael Lesiecki – That's good point Marilyn. Your know folks were right at were perfectly on time if you'll hang on with us for just about to more minutes. Janet let's see the results of the poll Jim you're a brave man asking people so blatantly whether they met the objectives or not. Let's see what they said, holy cow 94 to 6 not bad Jim.

Jim Hyder- I'll gladly accepted that.

Michael Lesiecki – Alright what I'm going to do at this point is turn back now to wrap up today's event to Ann Beheler and Ann would you tell us a little bit about what's coming up.

Join Us – All Webinars 3pm Eastern

Ann Beheler – Yes, happy to do so I enjoyed this presentation greatly today my group is going to do the follow on to this the convergence technology center and we call ourselves the network actually even though I think we're really a community of practice. We were involved with Jim and others in the synergy project, where we were talking about how to share our innovations were broadly and one of the things I learn was that what we were trying to do with basically a hub-and-spoke approach where the center had all the good stuff and we were providing it to others and what we've realized over time now is that we have a colleges across the whole nation that had matured enough that we have a mesh Network where everybody helps everybody and so if you're interested in how that works March 24th is the date. Next slide.

Join us in Pittsburgh, PA

Ann Beheler - And then this is all really then I'm going to say we have HI-TEC in Pittsburgh on July 25th through the 29th but then we have a convening of our group talking about similar topics to those that we've covered in the webinar and others on Friday the 29th that morning that is totally free to anyone who wants to come we will be in Pittsburgh and we welcome you to come to HI-TEC as well as to attend the TAACCCT technical assistance convening, but again it's not just for the DOL TAACCCT grantees it's for NSF grantees and any others that have workforce programs that could benefit. Next slide.

Webinar Survey

Ann Beheler- Alright we're ready for the survey thank you Mike I'll turn it over to you.

Michael Lesiecki – Thank you very much. Folks this is a prompt let me know that as you log out today a survey will appear on your screen as you could guess that helps us gain support from agencies like the National Science Foundation helps us also improve as we do this webinar series. I wanted to take this opportunity to thank our presenters Jim Hyder, Barbara Lopez, and Marilyn Barger, Marilyn organized this event and of course Ann Beheler for joining us as well. I'll make one final comment today I couldn't resist noticing that one of our attendees is representing a large project that is focused on STEM guitar that's the name of the project and I just wanted to ask Jim if you thought that was a community of practice you get it Jim STEM guitar practice that's the joke there, so.

Jim Hyder - I have absolutely I've had the privilege of helping them to evaluate via another project some of their effectiveness and whatnot and they are clearly a community of practice.

Michael Lesiecki – Despite my little joke there I have to admit I as I look around our community at things like STEM guitar and other ones there are some really cool examples of communities of practice. Friends that officially ends our webinar discussion today, excuse me I've got to actual go back to the slideshow again, my problem there. So thank you for attending today's webinar on communities of practice secrets of successful implementations again you'll receive a recording link and the slides to this webinar. That officially ends the webinar, thank you attendees, participants and presenters you can just go ahead and shutdown systems, colleagues Jim, Barb, Marilyn, Ann thanks again for attending, goodbye everyone.

Jim Hyder – Thank you Mike.