Leveraging Grants to Achieve Mutual Goals
January 21, 2016

Michael Lesiecki - Good afternoon everyone it's 3 p.m. Eastern Time on January 2nd welcome to today's webinar Ann Beheler please take over as moderator.

Ann Beheler - Ok it's actually January 21st instead of January 2nd, but thank you very much Mike. I really appreciate the opportunity to facilitate this webinar with our presenter Dr. Celeste Carter; she's a wealth of information and a very important person in the NSF ATE program because she's actually responsible for it, so next slide please.

Webinar Details

Ann Beheler - You will be in a listen-only mode in case some of you weren't on a few minutes ago when we first started talking to you about this. Please do ask your questions by the question window we will stop in not exactly the middle but toward the end of the presentation and take a few questions and then we have a whole question and answer session at the very end and we are recording this webinar and you will be sent a recording link. Next slide.

Brought To You By

Ann Beheler - Again, this is brought to you by the National Science Foundation through a grant to The Centers Collaborative for Technical Assistance it is supported also by the ATE Collaborative Impact project and we've got the information regarding the specific grants and helping fund these activities below. Next slide.

The CCTA is Led By

Ann Beheler - The Center's Collaborative is led by five National Science Foundation Centers and the five are listed there. I'm Ann Beheler, I'm representing the National Convergence Technology center then they're the SCATE Center in South Carolina, the FLATE Center in Florida, the Bio- link Center in California and the MATEC center network resource center based at Maricopa Community College in Arizona and Mike is with that group. Next slide.

CCTA Purpose

Ann Beheler - Our purpose originally was to respond to a request from the Department of Labor to the National Science Foundation to have the ATE centers provide technical assistance to the DOL grantees. The thought was that NSF had been in business for over 20 years and had centers with-well we would hope we would have centers with best practices. We think we do and we were wanting to share with the Department of Labor TAACCCT grantees and that program had actually only been in business for about three years at the time. We are providing some coaching, convenings, some best practices and peer-to-peer learning and next slide.

CCTA Activities are Relevant for

Ann Beheler - Everything we do is relevant for just about anyone that is associated with workforce related programs either through the Department of Labor or National Science Foundation or even if you're just running a workforce program at a college somewhere within the country. Next slide.

Deliverables

Ann Beheler - Our deliverables are typical as of what we're doing today the webinars and teleconferences and they are archived. I would suggest that you look at this site and you will see that they are archived. Also we will be creating some other online media including videos and transcript as we go along. Next slide.

Deliverables Continued

Ann Beheler - We will also invite people to regional discipline specific conferences and we're working on best practices and we're also hosting a convening that we will talk about a little bit later in July. It'll be the second annual convening for the TAACCCT grantees right after the Hi-TEC National Science Foundation conference which this year is being held in Pittsburgh Pennsylvania. Next slide

Poll #1

Ann Beheler - Now we're down to a poll. We would like to know what you're affiliation might be. Please choose what tips you- we'll give you a few minutes and Mike you'll need to let me know when we have the results. (Pause)Interesting we have a lot of people in this one who are affiliated with both National Science Foundation and the TAACCCT grant very interesting and we also have almost 20% that are affiliated with neither DOL nor NSF grants. That's very interesting. I don't know that that necessarily changes what we present but it's very interesting for us to know that.

Presenter

Ann Beheler - Now I would like to without further ado introduced Celeste Carter she's with the Division of Undergraduate Education at the National Science Foundation and she has lead for the Advanced Technological Education program which has a specific program under the NSF that focuses on technician education. Celeste take it away. Celeste I'm not of hearing you if you are speaking.

Michael Lesiecki - No we're not hearing Celeste at this point Ann. I see her checking her microphone, she just mute and unmute it so hold on just a second.

Ann Beheler -Ok.

Michael Lesiecki - All of our audio checks went fine just a moment ago.

Ann Beheler -Oh my.

Michael Lesiecki - That's ok just hold on for a second. Celeste just check not only the microphone icon but your Mac may have gone onto mute as well. Thanks everyone, hold on just a minute while we regain audio connections with Celeste. (pause) Celeste there's one other option if you're hearing me that you could call in by telephone if you go up and click on the telephone icon (pause-music tones). So thank you folks for your patience we're just waiting to regain audio connection.

Dr. Celeste Carter – Ok how did that work?

Michael Lesiecki – Oh that fine.

Dr. Celeste Carter - I'm not sure what I did but I'm glad I'm on.

Michael Lesiecki - We're just happy to have you.

Ann Beheler -We're very glad to have you and as Mike says this is a live event.

Dr. Celeste Carter - right, right. What I started saying before when you couldn't hear me was welcome to everyone it's a real pleasure to have everyone online listening and watching this webinar so I just wanted to start off with that and Mike if you could go right on to the next slide.

NSF at a Glance

Dr. Celeste Carter - For those of you it looks like there is a significant number that have worked with NSF before, but there's also 20% who haven't worked with either Department of Labor or NSF since I'm at NSF I wanted to give you a little bit of a snapshot of what goes on here. Pretty much we're an agency that is in business to make awards based on proposals that are submitted that go through the merit review process. Couple of points to look at -I'm not sure if my little icon comes up but the amount of money, NSF is actually one the smallest federal agencies we're about 7.2 billion dollars which sounds like a huge amount, but it's not. It always seems like we could use more money. We do use merit review and I'll talk a little bit about that and why it's so important one of the other things to look at is the funding rate of proposals submitted to NSF and over the entire agency it's about 22%. So it's a very, it's a competitive, it's similar to any other really any other organization you would submit to, its a pretty competitive process the ATE program tends to be a little bit higher but it depends on the area in which you submit. The other thing to notice is average annual size of the NSF research grant across the agency it's around $170,000. I'll get to the amount of money for ATE projects and you'll see that we actually have a pretty healthy program and the annual project award is $300,000 a year. So the program and so we have got a great program and so let me move on to the next slide.

Fiscal Year 2013 Funding Rates

Dr. Celeste Carter - Ok so this is just to give you an idea this is just within the Education and Human Resources Directorate and in that directorate there are four divisions including the division where I work which is the Division of Undergraduate Education and I'll probably apologize right now because I've been here for a while now and you just start talking in acronym so if I start talking in acronyms just type messages and say, "Hey slowdown and explain it" but this just shows those four divisions Graduate Education, Division on Research and Learning which is the K-12 division, Division of Undergraduate Education or DUE which is where a ATE and some of the other programs I'll tell you about are housed and then Human Resource Development is where the program's force a historically black colleges the tribal colleges are there people with disabilities those are the types of things that are there but this just gives you an idea of the number of actions that we process and then the number of awards so you can see the overall FY 13 if you looked across our director the funding rate was about 18 percent but in our division of undergraduate education we were at 21% were kind of right in there with the with the overall NSF rate so- Mike if I could have the next slide.

http://nsf.gov/div/index.jsp?div=DUE

Dr. Celeste Carter - Aww this didn't get fixed. Ok so imagine that those red boxes are going move up a little bit. Obviously this didn't translate too well when my power point got moved in to the CCTA template. The four things I'd like to talk about one is Advanced Technological Education or the ATE program the second is Improving Undergraduate STEM Education IUSE which is the acronym for that IUSE, the acronym for that is I use or I U S E and then the third one is the NSF Scholarships in Science Technology Engineering and Math Program or the S-STEM program so those are the three I'm going to highlight today you can see there's lots of other programs there sometimes when I'm talking to people

from community and technical colleges I will also mention the Robert Noyce Teacher Scholarship program that's one you might look at because there are two and four-year partnerships in that program for producing teachers with a disciplinary degree in one of the STEM disciplines and getting them all the way through credentialing in to the classroom but I figured we probably didn't have a lot of time today. So we can go on to the next slide.

Advanced Technological Education (ATE) Program

Dr. Celeste Carter - So this is this really is what ATE is about. The ATE program it was a congressionally mandated program in 1992 and the focus is really the education of science and engineering technicians for high technology fields congress's idea was we need to keep the United States globally competitive and that this program looking at entry level technicians going into these high technology fields was one way to do it and they very carefully thought about and placed the emphasis on community and technical colleges. So within this program there are three tracks there are projects, centers and a track op called targeted research on technician education and I won't talk a lot about that although if you're interested please question me. The funding goes from $150,000 per year up to over four million overall three tracks one of the great things about this program is that you can support grades seven through 12 two-year and four-year institution so you can really talk about career pathways and I know that's a that's a big deal kind of across the united states right now. Another hallmark of this of this program is that community and technical colleges must be in leadership roles this does I know one of the questions that came in was do you have to have a four-year partner no you don't the partner that you really need is industry so if you are at a two-year institution you have a strong industry partner and you know that that you are going to be developing program or curricular materials in response to or in partnership with that industry and that the students are going to have to the competitive for entering that industry that's a that's a great proposal. We do have the proposal deadline for this year's October 6th 2016 we got a great time to start working on a proposal in fact can I have the next slide.

ATE Projects

Dr. Celeste Carter - So here is the, just talking about projects, projects can go up to a maximum total over three years of $900,000. There is a track called small new to ATE within projects that and that's for institutions that either have never come into ATE not necessarily any other program you could have had a different award in some other directorate or division or even somewhere else in the Division of Undergraduate Education but you haven't come into ATE or you haven't come in within the past 10 years and the funding rate there tends to be much much higher than the overall funding rate, I think our funding about 60% of the proposals that came in in this last round that came in October of 2015 and a great resource for you even if you're not going to go for small new to ATE, but you're new to writing proposals for NSF is to check out the Mentorconnects site that's listed there www.mentorconnect.org. This is a special project specifically developing resources for those small new to ATE but in the meantime they also have resources that really are helpful to everyone. If you are if you are small new to ATE you can actually apply and you can have a face-to-face mentor that works with you on crafting a proposal. The last one in there is a is a new effort within the ATE program called ATE Coordination Networks and I put it in this one because my thought was is for some of you that have Department of Labor awards now they're going to continue for a few years maybe one of the things you might want to think about is linking up with some of the existing ATE projects and seeing how you could leverage your successes with the ATE successes through one of these coordination networks and it's really an effort to bring people together you know to talk about what you're doing, why it's important, what what influences you will have on the other partners could be industry people in there as well there could be professional societies it's it's kind of an open very open area this point with the program. If I could have the next slide.

ATE Investments

Dr. Celeste Carter - Just, this just gives you an idea this is getting a little bit dated now, this is from the ATE 20 book which is available online this just gives you an idea of the different industry areas that are covered under the ATE program and you can see it it's got a large component in manufacturing and engineering technologies but that's that's not all that's done right. We've got information and security; we've got micro and Nano technologies, bio and chemical technologies, and lots of Agriculture ones came in this year. Lots of precision agriculture and environmental ones came in so so and then there's general advanced technological education which could be kind of anything larger could be a combination of these areas what about the infusion of computer science into some of the manufacturing areas things of that type or how do you provide really good professional development efforts for faculty that are not well versed in some of these industry areas. So that gives you just a snapshot of what goes on within the ATE program, if I can have the next slide.

Academic- Industry Partnerships

Dr. Celeste Carter - I wanted to keep this on in just to give you guys everyone an idea of what happens with those business and industry collaborations. So this is what the ATE principal investigators reported there is a survey everybody fills out every year. So fifty-five percent of them information about workforce needs from their industry partners; general support could be everything from coming and giving seminars providing internship sites for students that type of thing, 22 percent helped developing actual program content that could be everything from a person really working with you as a faculty person or sometimes some of the industry sites will open up their sites to do a dacum analysis a skills gap on what's missing in the curriculum given what an entry level technician does and then twenty-one percent received financial or in-kind support and this this actually goes everything from donation of equipment all the way up to millions of dollars supporting some of the center's and projects within the ATE, so may I have the next slide please.

NSF Scholarships in STEM (S-STEM) Program

Dr. Celeste Carter - So that's that was real quick on ATE, I am going to jump to NSF scholarships and STEM or the S-STEM program and I put this in every time I talk to anyone from a community and technical college and I think you'll see why when you think about how many of you would raise your hands and say we have academically talented financially needy students on our campuses. I think we all do. This is a program that's actually supported through h1b visa fees so all of those companies that claim they could not find a qualified person in the United States and they buy a visa to bring someone in from another country that money goes into a pot and this one program that is supported with those funds. This is one that where strong proposals really develop programs for cohorts of students and mentor students, support them and it can actually go all the way either through entering the workforce or going on to graduate school the next deadline for that is May 16th of 2016 and hopefully that light blue address on the bottom the URL you'll be able to see a little bit, that was another the slide kind of slipped but that'll that'll take you to the site. I wanted to do a little bit more about this program so I can have the next slide please.

S-STEM Strands

Dr. Celeste Carter - This program was substantially revised recently it use to pretty much be all of them almost all of the money went to student scholarships and anybody who was working on this if you got an S-STEM award you were kind of doing it out of the goodness of your heart because you really wanted your students to succeed. Now there are there are two strands even in the Strand one it's a five-year award only 60% goes to scholarships it gives you forty percent to do things like looking around and figuring out what other things you could do to support your students may be making sure that there is

mentors around, maybe doing you know a specific course on how to succeed in a STEM area there's a lot more leeway there and then the strand 2 the design and development, a single institution it can be up to a million dollars over five years again with 60% scholarships and then you can also work together regionally and do multi-institutional consortia those awards go up to 5 million again 60% scholarships you can have any kind of combination if you're doing a consortium so it could be two and four year partner's maybe you want to build a really strong transfer program this might be one way to do it and it could be two year that it's an associate you finish an associate degree needed to transfer the four-year could continue to support the student all the way through masters or even a PhD so it's a much broader program these days and it's definitely well worth looking at have the next slide.

IUSE Program (NSF 15-585)

Dr. Celeste Carter - I apologize for the slide is a little weird looking but this was a program called Improving Undergraduate STEM Education and I haven't figured out a better way to how to present this, there's basically two tracks in the program you can see one is Engaged Student Learning and one is Institutional and Community Transformation and this is a program that is kind of emerging we use to have Transforming Undergraduate STEM Education Program and before that it was Course Curriculum and Laboratory Improvement names change but a lot of times the the the scope and what we're looking for changes a little bit but not too much. So Engaged Student Learning there's two tiers there's a small and a large scope you can see that the dates there and really Engaged Student Learning is pretty much what CCLI or TUSE the other previously named programs use to do. What do you need to do to update courses, are you coming in I kinds of use this example a lot cause I remember somebody at my own institution that had not updated anatomy and physiology in twenty years so you can come in and say you know here's a program in cell biology, cell and molecular biology and wow I just heard about crisper and some of these other really kind of new advanced techniques and I really would like to implement those and get those into my course and this is what I think I need to do and the reason that the need is there is because students are going to have to know about these things when they go out and want to get jobs or want to go to graduate school. So so those are that's pretty much Engaged Student Learning. The Institutional and Community Transformation comes from a program we had called Wider and again you can see there's a small and a large scope the idea there is something got developed at some point in time that we may be each one of us would say is a best practice and were a single faculty how do you actually disseminate and get other people to adopt and adapt what you see as really truly a best practice and that goes everywhere from maybe just across the faculty in your department and maybe it could go for that larger scope all the way to really transforming your institution and maybe maybe you can show or convince people that problem based learning and active learning is really the way to go and there should be much less emphasis placed on standing up in front of your podium and going through your PowerPoint slides similar to what we're doing here but but that's that that might be an example of of looking at an Institutional and Community Transformation. So again I think it's the broadest program we have this is one where if you if you're not doing something that fits into ATE or not at entry level technical education but you got broad ideas about how to improve your one of your STEM departments this might be the program to look . Ok my I have the next slide.

Research Collaborations with SBIR/STTR Phase II Grantees

Dr. Celeste Carter - One other thing I wanted to mention which I actually didn't have on that red box thing on that DUE site and this is this is an opportunity lot of times I think a lot of us know that providing research experience for students early on is one of those things that can truly have the light bulb or the fire lit within a student so this is something that's from the Small Business Innovation Research Program SBIR and STTR is technology transfer that's another part of it this is this is only available to community cut for an SBIR Phase two so a company that's gotten around one of funding from NSF and they've

progressed and they now have a round two of funding so that have progressed just pass that initial start-up phase they can ask for $40,000 per year and most of that money goes to the community college students and teams could be a faculty and a team of two or three students that do research for the company either on the company's site or it could be if you've got enough of the needed equipment then it could be within your own lab at your institution. So this is something that there are several people that have taken advantage of it and have it it's really really worked very very well for the students and it's it's pretty underutilized one of the things you do need to do is is use the NSF.gov website to find out where these phase two grantee are and then I have one person who just said hey the way I did I just found a list of them there were five or six around like my college and I started cold calling they didn't know about this program they didn't know that they could get forty thousand dollars they didn't know they could work with with the community colleges so this was a real opportunity for it was a win-win on both sides so I wanted to bring that up as well ok can I have the next slide.

Proposal Writing Tips

Dr. Celeste Carter - I think that was a very quick view we're going to shift now to proposal writing tips but how about does anybody have any questions about those programs or was there one you wanted to ask a question about that I didn't talk about.

Ann Beheler – Celeste I have some questions actually some were submitted yesterday and today there are kudos from Thaddeus Stevens College of Technology hardly recommending MentorConnnect for both resources and mentoring so thank you for that and I thought you'd like to know about that.

Dr. Celeste Carter –That's great!

Ann Beheler - I know you are very supportive of MentorConnect but with respect of some of the other questions that came in we categorized or actually Mike categorized them yesterday yet here's one verbatim, "I'm a DOL grantee if I applied for an NSF will my DOL grant count at leverage or will it be seen as duplication? "

Dr. Celeste Carter - Ok it's a great question if you write a proposal and you say I am DOL grantee I I'm I didn't get as far as I thought I would with Department of Labor funding and I just think this is the greatest thing that's ever happened at my institution I really need to keep going so please give me more money. When that goes through the merit review process which is based on two criteria one is the intellectual merit of the proposal and the other are the broader impacts it typically doesn't review well. Okay so how would you crafted it so it would review well you could say I'm a Department of Labor grantee I've started some things and over the course of developing a cybersecurity program working with industry and regionally I found that there were some critical challenges and opportunities that I didn't anticipate here are here they are you know bullet list 123 this these are still needs as evidenced by what my industry partners are saying and I would like to leverage when I started in DOL but move into these new areas these new opportunities that have come up because I got that Department of Labor funding that's going to reviewers are going to really sit up and take notice of that so yes your leveraging Department of Labor award but you're not just saying hey you know I need some more money I want to keep going with us please give me more. You're saying there's real needs and new opportunities sort of like I used to love it when my students would say you know we did this experiment and we had one question we thought we were addressing and now we have 15 we'd like to address and I'd always say isn't that great you're never going to be out of a job because there's always more questions to be asked. So crafting a proposal for NSF leveraging DOL would be saying which of those fifteen questions that came up are the next ones on your list that you would like to address.

Ann Beheler – Ok, if anybody else has any other questions you can type them in or follow-up questions you can type them into the window. The next question is, are NSF grants scored like DOL grants or how are they scored?

Dr. Celeste Carter - Ok so intellectual merit and broader impacts every program and there's also the NSF grant proposal guide which is when I say read the proposal on award policies and procedures guide which is in front of you right now. The grant proposal guide is the first part of that it gives you an overview of the merit review system so intellectual merit you know what is the true intellectual merit are you are you sort of that answering one of those really important questions that came up are you sort of pushing the envelope is there a real need for getting some more information in this area for developing new curriculum or a program that would be are you qualified there are a lot of aspects that fit in there in intellectual merit and then broader impacts any educational proposal has broader impacts or impacting a lot of times ourselves, faculty, other faculty were certainly impacting our students having one of these awards certainly impacts our institution so those are the kinds of things you would think about as far as broader impacts go. You absolutely get feedback all of the reviews and we have anywhere from 4 to 6 reviewers reading your proposal and writing a review that addresses those two criteria when we are doing something we will release those reviews verbatim to you just with no persons affiliation right for confidentiality. So you will actually get the specific words that someone wrote. You will also get what we call a panel summary we bring reviewers in and each proposal is discussed and one person on that panel is capturing notes on what people were discussing so somebody could say boy you know I think this this this proposals really is really worthy proposal it could be strengthened if they did one or two things and so you'll see things like that in a panel summary and so you get all of that plus you get if depending on how it reviews and the review ratings go from excellent to poor generally excellence and very goods are going to go right forward toward funding. Goods, fairs and poor's it's much more difficult to make a case for funding a proposal that is rated at low but those are the kinds of things that you will get back from the National Science Foundation. You can also always call pretty much let's say you get declined which is I've gotten declined you always figure who in the world did they have reading my proposal but if you put it away for a few weeks and then pick it up I used to I used to go back and go well you know actually they were pretty spot-on I really didn't talk about that I was sure it was in that proposal but when you read it again after you know they were right it wasn't there you can always call or email one of us the program officer who acted on your proposal and you can talk to us about it. We're open for that were also opened before you submit this is things you don't get to do with the Department of Labor you can be talking to us right up to the time you submit matter of fact I spend most of the day on submission day on the phone with people at that point it's not generally how do I craft a proposal its I'm having trouble with Fastlane or grants.gov it's actually much worse than Fastlane but anyway you can always also submit a 1 to 2 page synopsis of your project ideas and will give you feedback on it so I think there's a there's a lot of things that are different between the National Science Foundation and Department of Labor but I think bottom line from both agencies as we want to fund the best proposals that come in.

Ann Beheler - Thank you Celeste, let's hear your proposal writing tips and then see if we have more question.

Dr. Celeste Carter - Okay alright so I put these first two bullets on there because a lot of times and all of us any program officers is going out doing an out reach similar to this webinar about every other slide could be did I mention how important it is to read the program solicitation and oh by the way did I talked about that grant proposal guide it's really important thing to look at. These are your instructions they tell you they tell you about the kinds of things that you can write for, because I mean sometimes as

I mentioned ATE may not be the program for you might want IUSE so you want to be careful with that. The grant proposal guide gives you a lot of guidance on what should your margins be, your font type you know are we are we strict with our with our proposal deadlines that's actually something that's changing this month we've always been able as program officers somebody calls the last minutes is all my gosh I'm so sorry but our whole you know my computer just crashed or I lost all my documents it's going to take me another three hours to you know to get this uploaded we still accepted we on a case-by-case basis could review that, NSF is no longer going to allow us to do that at five o'clock or 5:01 the window will close for submission on proposals so that's definitely something to think about ok but let's go on with proposal running tips Ann, Mike if I could have the next slide.

The Program Solicitation

Dr. Celeste Carter - So there's a program solicitation here's Improving Undergraduate STEM Education they all look like this you find it by going to NSF.gov there's a Quick Links tab up in the upper right corner and you want to go to education and that'll bring you to the site that'll give you those four divisions that I talked about earlier you go to the Division of Undergraduate Education and you'll see that list of all those programs in this case you were clicking on the IUSE program and this is what comes up it'll give you a brief synopsis of the program and then it'll said do you want to download the solicitation or do you want to open it and it's gonna tell you about the program, it's going to tell you about restrictions, institution eligibility, what the what the budget requirements are, all of those types of things and also it will also give you program a program director contact information so that's where you're going to find some of our emails. So it's really important to read it carefully, so if you go to the next slide.

NSF PAPPG

Dr. Celeste Carter - This is a screenshot of the proposal and award policies and procedures guide and it's got it's got this big long name because it actually has two books in there, the first one when you're crafting your proposal is the Grant Proposal Guide the GPG the second part is let's say you got all excellence and a program officer contacted you and negotiated you actually got an award letter you need to know and your institution needs to know how to actually manage the award so the award and administration guide or that second part AAG gives you all of that information. So it's something I guess I'd say downloaded it and keep a copy for yourself and also go give it to your financial people because they're going to want to know some of the things that there. Next slide please.

Advice from a Program Officer

Dr. Celeste Carter - So this is from one of the program officers who actually started ATE program Dr. Gerhard Salinger and he said he pretty much said he said if you if you can address these five questions you're gonna have a pretty good chance of having a really competitive proposal. So the first thing is you've got a specific need that you're going to address I don't know let's say a Boeing just opened a plant next year Community and Technical College and they came to you and said we would really like to partner with you do you have a program that's gonna turn out aerospace technicians for us and you say well gee no we don't but how many technicians a year are you going to need well maybe they say well maybe 150 a year you've identified specific need and maybe your institution wants to go forward and develop a program the other thing you're gonna wanna do is really have an idea on how you're going to address that need, so you want measurable goals and objectives. It could be your gonna Boeing is gonna to allow you to go on site and identify all of the critical skills and competencies that one of their entry technician entry level technicians would need to have then you're gonna have to develop curriculum, then you going to have to get it approved by your curriculum committee all of those kinds of things you want to have that all mapped out. You also want to be able to present to reviewers that you the PI and

your project team actually has the expertise to carry out your plan so let's say you don't have anyone on your faculty that knows anything about advanced manufacturing or building an airplane you might have a real problem there convincing people that you've got a team that's going to be able to carry this out so you would have to think about that. You want to talk about how you're going to know if you're successful that's really your evaluation and assessment plan how are you going to measure it you know it's it's pretty easy to say well I'm going to develop course your gonna know you're successful if you developed it but you might also want to know how successful is that course in terms of student learning and in terms of ultimately maybe the student completing a program and getting a job so those are some of the things that would come in there. And then the last part is every single one of these awards is funded with our taxpayer dollars accountability and transparency is a big deal in the federal government and it trickles down into everything that I do here at the National Science Foundation and really if you think about it in terms of hey you you got even a few pennies of your own money that you pay in taxes to do this project how are you going to tell others about that project what the outcomes were what the results were why why other people maybe want to adopt and implement something that you developed. So those those are kind of five critical questions to think about in fact the next slide.

More Advice

Dr. Celeste Carter - More advice, do your homework there is a page in an NSF proposal for references I always ask people you know face-to-face I'd say okay raise your hand if you give students an A if they did a research project report and turned it in and when you got to the references page it said none and you know pretty much you guys can guess what people would say. People will turn in and its lot of work to craft one of these proposals they will turn in a proposal and when you get to the references page it says none so you want to you want to really think about what's happened with in the area that you say you have a need even within with what TAACCCT has done with what ATE has done with other institutions have done how is that impacting your project where you going from what other people have done. You can contact other PIs don't reinvent the wheel you know the the project that comes in and says no one on the planet has ever thought about developing an associate degree in cybersecurity we're going to do it is that's not gonna review very well. The other one we have mentioned MentorConnect, MentorConnect is housed at the South Carolina ATE center which also has the website teachingtechnicians.org. ATEcentral this our portal and digital library and at this point in time people are archiving all of the materials they've developed with ATE central so it's a great place to go and look for materials that have been developed see whats around your area of expertise and then also they have notices on upcoming workshop different interest in conferences different things like that. All of the ATE centers have their own website which is ATEcenters.org and if you're kind of a little iffy on that whole evaluation and assessment one of the centers that supported by ATE focuses on evaluation it's the Evaluate center and then finally don't forget NSF.gov there is a ribbon across the top of every page and one of the tabs says awards you can go in there and you can type in anything you want you know any and you can find out what NSF is funded in that area. So those are those are all references and resources for you to take into account as you craft your proposal, next slide.

New Performers

Dr. Celeste Carter - Bear with me I know this looks a little strange but one of the things that will happen is let's say you were one of those you submitted a proposal and you were one of those proposals that when it went through the review it actually got let's say five excellents so boy there's a program officer that really thinks this was and reviewers that really think this was really great and they want to the program officer wants to put this forward as a likely proposal that ought to be negotiated and then awarded. Ok so that program that program officer is gonna do two things the first thing is you're gonna hear from the program officer usually with any questions and concerns that arose during either the

panel review or as the program officer themselves read your proposal so it could be oh let's think back to that PI expertise you feel that you really need to hire somebody that has the relevant expertise but all you did was put in to be hired well a program officer might say maybe you've kind of look around and you have a person in mind not that this would hold you to this that you had to hire that person but if maybe you've got somebody in mind it would be nice to see a CV to see what their expertise is or if you're really if this goes forward with an award maybe you've already worked on an announcement to hire somebody could you show us that announcement so those kind of questions will be coming from a program officer at the same time if you have either never received the award you haven't had an award within five years or this is another part of NSF that's called cost analysis and audit resolution everybody at some point in time has to be reviewed by that area of NSF that cost analysis and audit resolution. So the program officer were going to send your proposal down to the division of grants and agreements and this is probably a good place to say as a program officer I've never made a single award, I make recommendations to award division of grants and agreement are the people that actually make your award. So your new or you haven't been reviewed the division of grants and agreements is gonna send your institution a new performer package and pretty much the new performer package is something that is very serious its going to ask your institution not really you the principal investigator but maybe all your financial people hey we really want to know what your written policies and procedures are for tracking time and effort of your employees , faculty and classified staff all that, we want to see that. We also want to see all of your accounting procedures how do you keep your books if your institution is maybe a little lax filling that out and says oh we just kind of do it this way or you know we don't actually have a written procedure it's just kind of policy that this is how we carry it out and they fill that out and then send that back to the division of grants and agreements at that point in time that division is going to send it to these people in cost analysis and audit resolution they actually have authority over all of us if they say hey we think this institution did a really good job they have all the policies and procedures needed and they can actually handle federal taxpayer funds they're going to give you a thumbs up and the division of grants and agreements is going to send you an award letter. If they say no even though you got all excellences the division of grants and agreements is going to decline your proposal and then they're going to set up a basically kind of a webinar with WebEx where they're going to tell you what happened and why. But it's devastating right you got all excellences you were figuring everything was going to go through and your institution certainly isn't going to be happy so you really want to pay attention and get your financial people and your administration to pay attention to that new performer packet. That's one of the things that MentorConnect can really help you with so that's why the slide is in here and I wanted to take some extra time to go over it so I can have the next slide please.

10 Ways to Write a Proposal that won't get funded

Dr. Celeste Carter – We often do an outreach PowerPoint that's called basically fatal flaws 10 ways to write a proposal won't get funded so I'm not going to read through every single one of these but you know there are certain ones where assume the program guidelines have not changed or just ignore them so you read through and it says the budget for an ATE project is 300,000 a year over three years your total budget should not exceed 900,000 and you come in at 1.4 million that isn't going to look very good you know another one is assume your past accomplishments are really well known I mean NSF might have funded them or it could be TAACCCT award that is influencing the proposal that you are now writing be sure that you let people the reviewers know what the results and outcomes were from the previous funding. Another one is that template letter the grant proposal guide specifically says you cannot submit letters of support so the kind of thing where you get you know all of your local industries to say oh we think you know this guy's really great got a great program we really support it don't submit those, but if your industry or and or another partner is going to say this is a really worthwhile project and the activities that I commit to do are and maybe it's an industry that says I will support 3 to 5

students a year in internships those are the types of things that really carry weight with reviewers and with program officers if it's a template letter and you get you attach 15 letters that are all identical except for the logo at the top reviewer will not take those as being anything other than space filling you've really added a lot of pages to your proposal and they really don't like that very much. So those are some of the things you want to think about, if I could have the next slide.

Questions

Dr. Celeste Carter – That's it, questions?

Ann Beheler- Celeste we have not had any other questions entered. I have a couple though one is can I pay my own salary from NSF funds?

Dr. Celeste Carter –NSF you want to look at the grant proposal guide. The grant proposal guide says that you can request two full summer months of support for faculty. ATE, the solicitation if the solicitation says something different than the proposal guide, the solicitation trumps the proposal guide because of the teaching load at community and technical colleges we realized that two summer months may very well not be enough time so if you are running workshops, you are developing curriculum you can ask for some number of course release time and that can get translated into some number of months academic months and yes you can get paid so you can definitely get paid with NSF funds.

Ann Beheler - Ok one other, can I apply for a NSF grant on my owner do I need support of my institution?

Dr. Celeste Carter – You're going to need the support of an institution usually it's your institution when NSF makes an award the award isn't made to you the principal investigator is actually made to your institution. So let's say you're at an institution you get an award and then you get a better offer or your moving for whatever reason you may think well I wrote this this is my award I'm gonna take it with you can only take it with you if your institution allows you to do that so there's some things again check out that grant proposal guide it's got a lot of information in it.

Ann Beheler – So, I'm going to go on and move to a few other slides and then if we have more time.

Michael Lesiecki - Ann?

Ann Beheler – Yes

Michael Lesiecki - I'm sorry to interrupt, there is a couple of questions in the question page I think we're ok to take one or two more.

Ann Beheler – Well ok, I'm not seeing them.

Michael Lesiecki – Do you mind if I do it?

Ann Beheler – Ok go ahead.

Michael Lesiecki – Celeste this has to do with what you were just talking about on the new performers criteria does that apply to each program separately for any NSF awarded in the five-year window so in other words if you get it for one is it good for all of them?

Dr. Celeste Carter – So well if you haven't had an NSF award in five years and it could be anywhere within the agency, so maybe you applied for something in biology directorate or in chemistry and math whatever, if it has been five years since your institutions has had an award you will automatically go through a cost analysis and audit resolution review but it's much less stringent I don't think they send you the new performer packet they just send you some questions saying hey do you still have all of these things in order and have you updated any of them things along that line.

Michael Lesiecki – Ok, under what directorate is the coordination network?

Dr. Celeste Carter – It's actually part of the advanced technological education program so it is under the Division of Undergraduate Education you will find spread across all directorates it's in quite a few of them they have things called research coordination networks so I will just flat out say I stole it from the research directorates, and made it applicable to advanced technological education program.

Michael Lesiecki – Ok, so we going to erase that comment from the recording, just kidding here's a good one what's the time frame for receiving a response a yes or a no from that date in October that you submit.

Dr. Celeste Carter – Ok so we have guidelines that we adhere to we are suppose to have processed 80% of the proposals so the people have heard things the yes or no within six months of submission so you got from October to about April. That doesn't mean everybody is gonna hear right there's another 20% I am always pushing people to keep working you know keep going get those questions out if it's one your thinking of recommending make sure you move things. The latest, every once in a while something will happen last year there were a couple who didn't get their new performer packages on time there are people who submitted more than a year ago that are going to get award letters very shortly and they know that you know they have received apologies for not having gotten a little more timely way but every once in a while things will get held up we try and do the majority of them within six months.

Michael Lesiecki – Thank you how does the NSF feel about international collaborations and what type if f they will fund some what type of things would they funding probably keep your answer somewhat short.

Dr. Celeste Carter – Right, there is an international division here one of the things I would do would be to go and talk to those people about what they're interested in funding there are efforts that support international collaborations so I would say it's worth maybe crafting that two page synopsis and sending it then I can find out additional information for you.

Michael Lesiecki – Ok good, I know you are very open to questions, thank you for that one last quickie one it's a technical one, as staff can you fund administrator who administrates that program?

Dr. Celeste Carter – Yeah I think if you justify it yes you could request funds for administering it.

Michael Lesiecki – Good and before I turn back to Ann Beheler, Celeste just want to let you know and all the participants that there will be a link to the recording and the slides of this presentation that will be sent out to all registration all registered attendees back to you Ann.

Ann Beheler - Thank you and I'm sure we'll fix those two slides that slipped through somehow next slide please.

Join Us – All Webinars 3pm Eastern

Ann Beheler - I want to talk about what coming up. There were a couple of questions about financial management and I'm going to give you a teaser on February 10th we have Celeste back with us and also Rashawn Farrior from the Division of Grant and Agreement they will be presenting a session on information regarding the financial management and great management for a ATE grant recipients and even if you're planning on proposing a grant and haven't gone through it yet I think it's probably good information. We at our center did go through a monitoring visits from DGA after having been funded for a few years and having several different grants and it's very helpful if you have your financial house in order let's leave it at that. We had no finding which is awesome, but we have done a lot of work and our business office has done an awful lot of work to ensure that, next slide.

Join us in Pittsburgh, PA

Ann Beheler - Ok we'd like you to join us in Pittsburgh July 25th through the 28th there our HI-TEC conference. The first two day is our pre-conference workshops and the next two days are actually the conference itself. This is primarily NSF conference the NSF centers actually put this conference on and last year we had several of the TAACCCT grantees actually present and then just for you if you go to the next line.

Register for HI-TEC and TAACCCT Convening

Ann Beheler-On July twenty-ninth we will have a TAACCCT specific technical assistance session that it's free. Last year was our first year to do it from 8:30 in the morning to shortly after noon we had three different sessions we were very pleased the CCTA puts that on and we were very pleased we had a hundred and fifteen people actually register and we had a hundred and five attendees which is actually fabulous for percentages of people that actually can attend or attend after they register so you are invited and there is the registration link that registration link for the HI-TEC conference will also have a place there where you can register for the TAACCCT technical assistance portion and Dr. Carter has agreed to present one of the session that we will be providing this year and all also Cheryl Martins from the Department Labor will be there.

Q&A and Contacts

Ann Beheler - So here is Dr. Carter's contact information. One of the questions was can you contact a program officer, yes yes yes. I will tell you they will not write your proposal for you, however they are a wealth of knowledge and they are very very approachable and very easy to ask questions and they do like to see that two page summary to respond to your idea. Celeste do you have anything else? Mike anything else?

Dr. Celeste Carter – I don't think so just to say thank you again.

Michael Lesiecki –One last, yeah we can go ahead now officially end the webinar for those who want to leave were perfectly on time but there is one little question for those of us that might be interested Celeste does the NSF define STEM disciplines the same way as other agencies or do they include disciplines in the social sciences?

Dr. Celeste Carter – Social sciences are definitely included we actually have a social and behavioral science directorate within the National Science Foundation.

Michael Lesiecki – Perfect I know that was of interest to large group of audience on here today.

Dr. Celeste Carter – If you follow anything about the National Science Foundation for the past couple years you will know that that directorate has come under fire from congress recently questioning whether or not whether or not I should be within NSF and the people the NSF director and deputy director absolutely stand up and say yes it should be there.

Michael Lesiecki – What do those congress people know anyhow, sorry I didn't mean to say that.

Ann Beheler -Their funding up Mike.

Michael Lesiecki – Yes and thank you Ann for moderating today and Celeste it's a real pleasure to have you on board and just loved your comments today you gave a lot of insight into what makes success at NSF I appreciate that.

Ann Beheler- Thank you very very much!

Michael Lesiecki – Everyone that officially ends our webinar for today. Again we will be sending out links to the recording. Thank you see you at the next CCTA webinar, goodbye everyone.

Ann Beheler –Bye

Dr. Celeste Carter – Bye bye