



Good Morning everyone. I'm going to give it another minute before we start, as I see people are still joining right now, so we'll give them about another minute to, let everybody get in. Do you have a chance, please put your name, your position, your college in your email, in the chat.

Okay, we'll go ahead and get started. I don't want to waste your time. on this Friday morning. My name is Alan Braggins. I'm the statewide director for advanced manufacturing, hosted at Chaffey college in the city of Rancho Cucamonga, although I work out of the InTech Center in Fontana, California. The CADENCE grant that we have is through the governor's office of planning and research. This grant is in department of defense grant and the grant is actually hosted at California's Online Community College District, also known as Calbright College, the online community college.

I want to introduce my co-host this morning. That is Salomon Davila and Salomon is our project director for the CADENCE grant. He'll be, probably one of your main sources of contact if you decide to be one of the participants in the grant, because he does all the behind the scenes paperwork with the interns and with the externships and everything. So, Salomon's a really good guy to have on your list of contacts. Without further ado, I'll get on with it.

CADENCE Overview of CADENCE Grant

Funded by a U.S. Department of Defense, Office of Economic Adjustment grant managed by the California Governor's Office Of Planning and Research

15 project components executed by a consortium of community, industry, state agencies, and educational institutions which are organized into four deliverable groups: Business Assistance, Workforce Development, Outreach & Engagement, and Strategic Alignment.

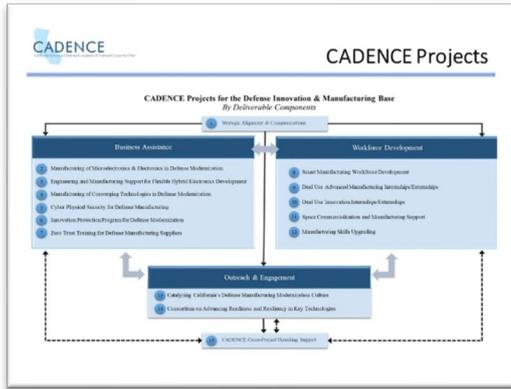
The grant was funded by the U S Department of Defense Office of Economic Adjustment. We received a \$275,000 grant, and we're using that to give, \$8,000 stipends to 10 community colleges for their faculty members to do an externship.

I'll get into that in a couple of slides later on down. But, in addition to that, we're using that to pay student interns. We want 20 student interns across the state. Each one of them will work approximately 75 hours in the internship at a rate of approximately \$15 an hour say approximately because we're still working out the fine details with the foundation for community colleges. We have a set amount that were awarded in the grant.

Project nine will focus on placing manufacturing faculty into employer sites so they can, number one, see current technology and use number two, possibly learn new tricks of the trade and number three, bring that technology back to the classroom. So, I'm hoping that, everyone out there is looking for it to go to the employer site. I did say manufacturing faculty, and I want to clarify that, in our eyes that's anyone who works in a manufacturing related discipline, which could be someone who teaches Autodesk or, fusion three 60, because those can be used in manufacturing. It could be someone who teaches cybersecurity for, the internet of things, because that does apply to manufacturing. Our open we're open to a lot of different faculty disciplines. We don't want to limit it to someone who teaches CNC or someone who teaches welding. It's open to everyone who could work in the manufacturing industry.

CADENCE Focus of CADENCE Grant

CADENCE project activities will focus on supporting California suppliers in the defense innovation and manufacturing base who are involved in the advancement of specific key technologies or supply chains including microelectronics, fifth-generation (5G) wireless technology, cyber, space, artificial intelligence, and fully networked command, control and communications (FNC3)



This is an overview of the cadence project, the 15 different projects that make up cadence, six of them are with, for business assistance. They're headed by CMTC and, one of our, organizations in San Diego, they're doing that part of it, the workforce development part, which is the part that our grant falls into. We actually have a sister grant, project 10, which is handled by Chuck Easton, the statewide director for business and entrepreneurship. It is hosted out of Solano College and Salomon's also the project director for that project. That's why I say Salomon's running these two projects, in synchrony. The third area is outreach engagement and that's being handled by two organizations down the San Diego area and the over it all is the Governor's Office of Planning and Research, and they oversee the entire grant.

The challenge that we got from the department of defense was dual use capabilities in the innovation ecosystem. We know that a lot of technology exists out there and we teach a lot of that technology in our community colleges, but not all of it makes it to department of defense manufacturing. What we want to do is to take those technologies back to our classrooms, to teach it to our students. In turn, have the students go out and do internships and eventually become part of the workforce that helps support the department of defense.

The second challenge given to us was an access to a pipeline of skilled talent. Obviously, that is what community colleges do best. We supply talent for our workforce. That is what the second part of this is; exposing faculty to current technology and practices helps them deliver relevant training to students, and as a way to guarantee a future skilled workforce.

Objective one is provide experiential learning opportunities for California community college faculty externships at identified California defense supply chain or manufacturing companies. Now, you might say, what does that mean? So, we do have a list of, approved, DOD manufacturing companies, but it doesn't have to be just those people. It can be a new manufacturer who wants to supply the department of defense, or it could be a supplier that supplies to a supplier of the department of defense. Our manufacturers that we can place the externships at are pretty wide open, and they include such organizations as NASA, and defense logistics organizations all over the state. There are a lot of good choices.

OBJECTIVE TWO

Provide work-based learning opportunities for California Community College students through student internships at identified California defense supply chain or manufacturing companies.



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The second objective is to provide student internships. As I mentioned before, we want to place 20 students at, different sites across the state, and there'll be paid externship internships.

OBJECTIVE THREE

Build a pipeline of workforce talent for California defense supply chain or manufacturing companies.



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The third objective of the course is the long-term objective. That's to build a pipeline of workforce talent for California defense supply chain or manufacturing companies.

DELIVERABLES

Ten colleges participating in the student internship/faculty externship project working with California defense manufacturing community consortium firms



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So the deliverables are ten colleges participating in the internship externship project with California defense manufacturing community. So, what we asked for was 10 faculty externs, but that could be up to 20 if you want to share that with another faculty at your institution, so that if you want to, each share the load, however, the maximum amount is still \$8,000 plus \$500 travel allowance because we hope to get together later in the year in person. So, that's what that goes for.

Our goal or initial goal is to do, faculty externships in the summer this year. Why did we say some of this year, because we want you to be able to go onsite to a manufacturing facility and we feel that most of our faculty will be allowed by their colleges to go onsite by them. With the COVID thing, that's put a whole wrench in it for the last year. We're just trying to open back up now.

DELIVERABLES

*Phase One
Summer 2021*

Ten primary (and optionally ten secondary) Advanced Manufacturing Sector Faculty participating as faculty externs to coach student interns placed at California defense manufacturing community consortium



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DELIVERABLES

*Phase Two
Fall 2021 – Spring 2022*

20 Student Interns placed with California DoD defense innovation and manufacturing firms



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Phase two will probably start in fall spring, 2021, 2022, where we put interns at the intern sites and our thinking there is by then, hopefully everybody will be back to what we're calling the new normal, and we will be back, working at sites. That's our plan for that.

And then ongoing. What does it take for each faculty member? Well, they should plan to attend a monthly zoom meeting, and that will be with both project nine and project 10 teams.

DELIVERABLES

Reporting

Monthly report out of achievements, best practices identified, and outcomes from the project, including end of project survey of student interns and DoD dual-use advanced manufacturing firms to capture the benefits to both students and DoD firms and lessons learned.



DELIVERABLES

Ongoing

Monthly community of practice meetings with faculty and consortia representatives via online web conferencing (i.e., Zoom)



There'll be, anywhere from 10 to 20 to 40 faculty members on that zoom call plus Salomon, Chuck and me. That'll be monthly. We'll do a report out each month. I'm not going to force you to talk each time because I know some of us don't like to do that, but, we'll ask you to do a report out if you have any really successes that you want to talk about or your externship went really well. That's what we want to do with the monthly meetings. Also, we can share best practices and, any challenges that we happen to face.

So, this is the scope of work, the nitty-gritty right? Each college applying must identify at least one faculty member to participate in the externship and act as a coach for the interns, the selected colleges will receive an \$8,000 award to pay a stipend for faculty. The total award is \$8,000. If one or two faculty members are selected.

CADENCE Scope of Work – CADENCE Project 9

- Selected faculty extern(s)/coach(es) will attend a faculty orientation meeting planned for April 30, 2021 and participate in monthly Zoom community of practice meetings hosted by the Statewide Director for Advanced Manufacturing, Statewide Director for Business and Entrepreneurship, and Project Coordinator.

CADENCE Scope of Work – CADENCE Project 9

- Identify at least one faculty member to participate in externship and act as faculty coach(es) for student interns
- Colleges selected to participate will receive an \$8,000 award to provide stipend to faculty member(s) and a \$500 travel award for the anticipated in-person meeting later in 2021.
- Set up process for paying stipend to faculty.

The orientation meeting scheduled for the selected faculty is scheduled for April 30th, 2021. That's another Friday, I've chosen Fridays because that generally seems to be the best day for our faculty to attend a webinars. If that doesn't work for the 10 people that are selected 10 to 20 people will change the day we want to fit your schedule.

We want the faculty to be the primary person to select two internship candidates for their colleges. That's because we can't be at all 20 colleges and you know your students best, which ones will work the best in an internship opportunity. the reason why we say we anticipated late fall early spring of next year is because we want you to have a chance to actually work with students in person, which we anticipate will be later this year. By then, you'll be able to identify the likely candidates better.

CADENCE Scope of Work – CADENCE Project 9

- Recruit a minimum of two students to participate as student interns with DoD companies.
- Assist in matching student interns with DoD companies.
- Promote and assist students with enrollment in the college's Work Experience/Work Study course so that students can earn college credit for their work experience as interns.

Scope of Work – CADENCE Project 9

- Faculty coach will work with the DoD companies and students to develop a scope of work for the internship project and then provide guidance and advising to the students in completing the internship project.
- The 75-hour internships must be completed by August 31, 2022.
- Submit final report documenting the results and outcomes of the project using provided final report template (see Appendix A).

Faculty will be expected to act as a mentor coach for the duration of the student's internship. What we want you to do is to make sure the students are doing the internship, and if they're having any problems, help them out in those areas, basically what you do every day in your classrooms, make sure the students is headed towards a, a role of success.

TENTATIVE SCHEDULE FOR SELECTION PROCESS

Informational Webinar	10 - 11 am	March 26, 2021
Applications due no later than	5:00 P.M.	April 16, 2021
Notification of Awards		April 23, 2021
Orientation for Faculty Externs/Coaches		April 30, 2021
Sub-agreements approved by Calbright Board		TBD
Project Start Date		TBD
Project End Date		August 31, 2022

Here's the tentative schedule for selection process. Everything has to end by August 31st of 2022. We have a year and a few months. What we've already heard is it will probably be extended. We'll probably have more time to do the externships at the end. We don't know that for sure.

Submittal Check List

- Cover letter signed by the responsible Dean/Director/Administrator briefly describing college's interest in participating in the student internship and faculty externship project, description of existing curriculum/programs or resources that may be relevant to implementing the project, and background of the faculty extern/coach proposed for the project.
- Resume(s) of the faculty externs/coaches (can be full-time or adjunct) proposed to participate in the project.
- Contact information for the work experience/work study coordinator at the college.
- [Submit Application to Participate](#)

Contact:
 Alan Braggins, Project Director, CADENCE Project 9
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 Centers for Applied Competitive Technologies
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And here's the submittal checklist. You need a cover letter signed by the responsible Dean director or administrator. I put those three choices in is because, I've worked at a couple of community colleges and I know what it's like to get a letter signed by anybody. If you, if it's the department chair that signs it, that's fine. If it's the Dean, that is fine too, but some schools require a VP or director to sign.. I don't want to place a real burden on you. I want you to be able to do this as easily as possible, a resume or a curriculum vitae, from the faculty for the externship, really what I really want to know there, or what are we want to know is your background related to the discipline that you are take teaching and contact information for the work experience coordinator. We need that because a lot of the internships must be placed through your

college's workplace coordinator. We need that exact information and then submit the application to participate. This presentation has a link to it. The website has a link to it. It's a Google form, pretty simple to fill out. If you have any problems, you can contact Salomon or myself and we will help you through the application process.

This is the rubric we're using the score. It, in addition to all the things seen here, the six regional directors of advanced manufacturing across the state are going to actually be doing the rating of the applications. It could very well help out if you have to have a good relationship with your Regional Director of Employer Engagement.

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Student Internships – Faculty Rubric	Existing college program of study or regional project participation.	Focus due to program review, labor market information or advisory committee minutes.	Existing reviewed college program of study.
College Programs/ Curriculum	Existing student college programs within department to support grant outcomes.	Some student college courses within department to support grant outcomes.	Limited college curriculum support grant outcomes.
College Resources	Administration identified resources to help support students and faculty.	Support structures within colleges assist outcomes of opportunities.	Sole grants funds to support student and faculty outcomes.
Communication of Information	Existing college programming for showcasing student work.	Support for student internship showcasing work.	No systems to showcase student work.
Faculty Resume(s)	Faculty resume indicates practical experience of mentoring students with open ended employer problems.	Faculty resume sustains activities supportive of employer engagement or start-up activities.	Faculty resume lacks varied experience with employers or start-up.
Regional Representation	Preferred selection for region representation.	Representative of the region.	Least to represent the region.
Student Program	Existing student college activities within college program and outside of courses.	In-region, "one self" activities supporting students.	Needing of development of student support activities.
Student Program	Existing processes within college / department / division to support outcomes.	Familiarity with required processes and acknowledgment of assistance.	Development of new systems with grant funds.
Support for work experience	Active resource development for sustainable work-based learning experiences.	Inclusion of work-based learning for scholarships or future/grant grants.	Lack of examples resource planning for sustaining activities
Sustainability	Focus of work-based learning in program design.	Limited use of work-based learning for courses.	Lack of examples of work-based learning inclusion.

That is the end of the first part of the presentation, which is the nitty gritty of the grant. So, if you have a question, go ahead and unmute yourself and you can ask it or you can put it in the chat, whatever you'd prefer to do.

At this point we took questions from the attendees. Those questions have been moved to the FAQ page available at: https://cact.org/documents/CADENCE_FAQ.pdf.



Okay, then we'll proceed on and here is Salomon Davila:
Well, thank you, Alan. Welcome once again to everybody. And, just to describe about the internship itself. I already, Alan talked about the mechanics of applying, which I encourage everyone here to do. It's a very, interesting process to work with a company that are in these situations of developing their technology and bringing it up to market. That's one thing Alan mentioned, these companies are specifically looking to grow the DOD ecosystem into potentially get a full contract. Most of them are still in the prototyping pilot phase of their businesses and our students are going to be a lot of help to them part, frankly, I've witnessed it already working with, six or eight of these companies in a previous grant. Yes, I encourage all of you to be part of this. I just wanted to show of what the internship may be. Some of your colleges may or may not have a formal internship office. That's not a constant throughout all our institutions. I wanted to just describe the methodologies that would be involved so that you understand that this is not,

you drop off the student at the employers and you're done, it's a real partnership with the employer. That's why the externship is there because the point is for you to essentially learn the business and understand their challenges, negotiate that scope for the internship as well. You see in front of you is of a process that we've been utilizing as a framework. We also have a guide book that goes along with this as well, which was developed as part of a CCC maker project that I was part of, several years back, which was led by Sierra college, which I know is on the call. Go Sierra on, thank you for that opportunity.

This worked really well with many employers to develop a, a challenge and to have students develop problems, to do some critical thinking through those challenges, report back, have some deliverables to the business and, to the business team, in the coach, notice we have coaches there that would be your role. You're facilitating the interchange of this information and also making certain that the quality is presented to the employer. You can imagine that the results of the student's work is also your responsibility, because you're, making certain that everything is on the up and up for the student and of course for the employer to receive value from that exchange. In a way it's a coached internship. It's not a you drop them off and you check in later type of internship. It's more hands-on. There may be a cadence of weekly or bi-weekly bi-monthly meetings that you may have with your intern in your business to check in what, how things are going, make sure that the project is still within the scope that you negotiated upfront, and that it's, there's no scope creep that's happening or more time that you anticipate on certain tasks.

At the same time, making certain that these things are happening through the roughly, Alan correct me if I'm wrong, but these are 75 hour internships. [That's correct.] Okay. 75 hours is the total amount of internships that you would have with your intern in the business, to complete these steps and to at the end develop a proposed solution so that the students present the solution in public setting. We're encouraging all colleges at, towards the end to have a, an event, a virtual event, if it's the case, to do, a showcase of the student's work, invite your faculty, invite your advisory meetings, invite your dignitaries at your college to witness the students' work. Of course the employer, to see the benefit of the labors of everyone's effort. It's really meant to be a, the journey for the student, obviously positive to the events, of student learning.

I just wanted to describe that process and we'll help you through this again, if you've never participated internship program, or if you don't have an office, we provide some of those resources and part of the monthly talks or project meetings that we'll have, will be addressed in some of these sessions.

I don't know if there's another slide, but that, Oh, these are best practices that we've synthesized for you here that have helped, other internships, for example, to have clear outcomes, whether it be to validate student education so that they have a portfolio and a resume at the end through this experience. And, and one thing that really has helped students to again, for employability purposes is that they have a valid experience they can talk about, and it has turned out that when they go for employers, they really want to hear about how they think through problems.

How do they address problems and time over time. I've personally assisted over 200 students get employed experience and talking about what they've done supersedes to any technical skills that they may not have. Because of even if they don't have something, the employer obviously sees the passion, sees the thinking through it and they can teach them the technical skill on the job, if necessary, another outcome that's very critical for the business is the impact it may have on cost savings and professional solutions and strategies and setbacks that was saved due to the internship itself.

It's really critical to identify those needs and respond to those needs, especially their cost savings. That's also another requirement that we have to report to the grant grand tours of the governor's office or DOD themselves, that we need to kind of catalog cost savings to the business as well. So that's critical. That's important. Employers have testified, yes, this has saved me money. They're glad to tell you, and also development of a case study for your college.

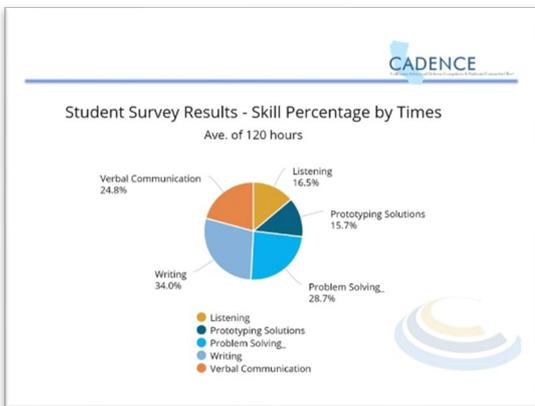


In other words, you can use this for your classroom, use it, as a learning, tool. So record anything. You can document anything you can and then use it as many times as you need to for your courses. Definitely to introduce the industry, to introduce careers, and introduce maybe a diversity to the workforce as well. In case, for case studies, obviously scalp soft skill developments is a big part of this due to the, exit interviews that we've conducted students say that they have to communicate, right, articulate, listen, throughout this whole process of much more than any technical ability that they've had to, practice through the internship. We do exit interviews of our interns. This comes up quite a lot soft skill development is of course of the nature of the event of the experience lends itself really nicely to that.

Another thing you may want to cover is NDAs, because there may be some information that the employer may be sharing with you that is obviously private and not for public consumption. There may be NDAs, there may be methodologies for communication, but we have companies that wouldn't use zoom because there they weren't secure at that time. Maybe the security has increased at this moment, but back then they were not allowed to use zoom. Remember these are defense companies, so there's a lot more stricter, provisions for security. Things like communications, is important to make sure that I'm sorry, I moved off. The one is the NDAs and the communications, knowing how their, they prefer communications, whether it's a video or email timeline development that scheduling, and also any team building exercises you may want to facilitate for the student. Remember this may be the first time they actually perform a work experience.

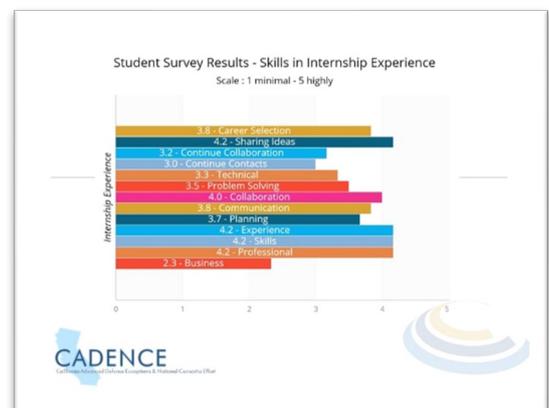
You may want to just consider some of that to just break the ice and other things to consider as the preparation of the student, if you work with a career center or once again a internship office, it would be very helpful to have someone on staff, even if it's part-time staff from your division office to recruit and handle the applications and to do any orientations and to explain the expectations of the students and to have that assistance. It could be against a staff member in one of the law offices. It also helps to have someone speak to the student's strengths and weaknesses, just so that they're aware of them. Again, some counseling, some orientation, something that they can go in, understanding the experience better and their, our effort and work would be recommended, yourself, make sure that you do of program inventory, your availability as well as important and what to do when things go wrong.

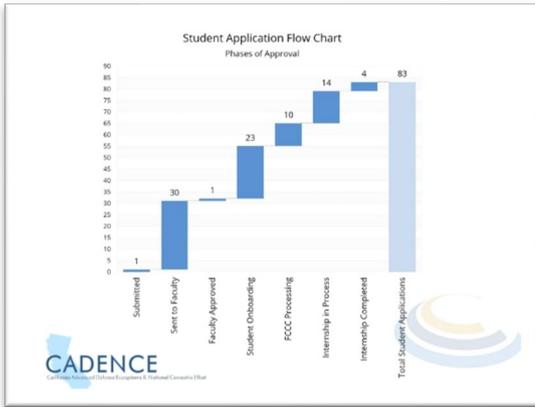
We've had situations where, we've had to, do of a circling, the wagons thing, around, a situation where there was misunderstandings and things of that nature. We want to make certain that you're prepared and on top of the experience between the employer and student and that's important. Then, it's, it seems like an obvious conversation, but it's also critical as you need to also address how the employer should work with students. Again, this is part of the upfront negotiations that you would do as a coach. To explain, these are students, this is the capacity, this is what they can deliver. That the employee doesn't expect anything that you didn't promise or like they promise. It's always important to have those clear expectations upfront. Those are some of the learnings that I've been able to succinctly put together for you from many folks, who've done internships like this across the state.



This is just the soft skill learning as you, as I mentioned, students do a lot of this, in their internships, and you can see how that breaks down.

This is part of their exit interview. You can see, the value of what they ranked from, I think zero through five, sharing ideas and skills being professional collaboration. Those are early highly ranked, lower ranked are the lack of continued collaboration or continued contacts. Maybe learning more about business practices is something that they ranked less.





This is not, it sounds, looks really busy, but the whole purpose to this one little graphic is to show you that there's various steps and onboarding students to the application, to the internship. This is why we recommend to make certain that you secure someone to help you, to be, know, partner in this process because there's many of them. And so, there's an application process.

1. Student Application
 - Filled by interested students
 - Sent to Admissions Team
 - Local selection approval
 - Message to denied students
2. DoD Background Check
 - Local mitigation, if concerns appear
 - 2-3 Days
3. Student Onboarding
 - Coach
 - Employer Job Description
 - Student – Schedule, Start Date, Pay Rate, Learning Outcomes
 - Timekeeper Supervisor Contact
 - Biweekly timecard
4. FCCC
 - Receive College Information
 - Workday processing
5. Employment Documentation
 - Employment Forms
 - I-9 Student Part
 - I-9 Faculty/Timekeeper Supervisor Part
6. Verification to Start

<https://foundationccc.org/What-We-Do/Workforce-Development/Career-Catalyst>

There's a student onboarding process, the foundation who's the ultimate employer also needs to, go through this. Even before that the DOD does of background check on the student, to make certain, again, this is, these are DOD companies. So there's a reason why. Even after that, after the foundation processes for their payroll, there's ongoing timekeeping. Of course your, meeting check-ins that you would have with the student and confirming of the time that's performed so that the student gets paid in a timely fashion, in a regular cadence, that the foundation has for paychecks. Anyhow, the point is that there are several steps and you're going to need help. Most certainly. We track where things are at, this is about the foundation, essentially, we'll go through this, if you're selected, but we'll go through the process of all, everything that needs to happen. This is too much detail for today, but know that you would work with, basically a third entity for the employer of record and timekeeping, throughout the internship.

[Alan Speaking]

I just want to add that the career catalyst program we've been using in the colleges for several years, that works very well. At Intech center, we hire a lot of our student interns and our parents through the career catalyst program. It works out very well. They're very easy organization to deal with. Actually they're also the fiscal host for this grant because they are Calbright's fiscal host. So, it actually eliminates a step by having this grant hosted at Calbright.

That's the end of our second part of our presentation. Again, I'm going to open it up for questions. If you have any, feel free to unmute yourself and ask them, or put them in the chat, whatever you prefer.

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**Project 9: Internships/Externships
for Dual Use Advanced Manufacturing**

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