

EDU500034

## Reconnecting Education and Industry

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### Learning Objectives

- Determine your call to action
- Define Industry Engagement
- Understanding the Value of Industry Engagement

### Description

This course will cover one main overarching subject: Why is it so necessary for education and industry to maintain a constant connection with one another? We will take a deeper dive into educational institutions that are still training students in ways that are no longer relevant, and we'll look at how drastically this practice affects a student's career progression using data captured by the advanced manufacturing team at Danville Community College. In parallel to this, we'll discuss how an earlier introduction to advanced manufacturing can affect a college graduate's impact on industry, as well as the advancement that can be made in two-year institution curriculum. Last, we will not only discuss the need for long-term, sustainable, skilled workforce pipelines, but also the need for short-term, accelerated training for veterans and/or incumbent workers.

# AUTODESK UNIVERSITY

## Speaker(s)



**Tim Robertson-** A machinist by trade, I now serve as Director of Operations in the Advanced Manufacturing Division at The Institute for Advanced Learning and Research (IALR). This role includes strategic and tactical oversight of the Accelerated Training for Defense Manufacturing program, projects in our upcoming Center for Manufacturing Advancement and other manufacturing initiatives across the region. My previous experience includes serving as Haas HTEC teacher training program director and Integrated Machining Technology instructor at Danville Community College (DCC). My other responsibilities at DCC included serving as a subject matter expert and curriculum developer for our local K-12 CTE programs and as a contributing author/reviewer on national manufacturing exams and competitions.

<https://www.atdm.org/>

<https://www.ialr.org/>



**Jeremiah Williams-** Currently appointed as Director and Instructor for Integrated Machining Technology at Danville Community College. I oversee development and training of two-year machining graduates where I train them to apply the most current advanced manufacturing techniques and leadership skills in today's workforce through an additional year of accelerated training. Previous experiences and accomplishments include providing HTEC training to industry and educators, authoring numerous Autodesk professional certification exams, serving as senior machining specialist for Rolls-Royce aerospace, 2021 Project MFG National Championship winning team coach/mentor.

<https://www.danville.edu/>

## Determining your “call to action”

What is the driving force behind your program? Does your program have a positive impact on the industry in your area? Is your program involved in the economic development or sustainment of your region? Can your program use the success of your students to drive success at large? All of these are questions for your team to reflect on when determining your call to action. The answer may be yes or no to these questions and many others. This program reflection will help determine the strengths of your program and identify opportunities. Ways to help guide this reflection are listed below:

### -Establishing a clear vision

A great way to start your program reflection is by creating a clear vision and mission statement for your program. In many cases, this vision and mission may be slightly different than your school's statements. These statements help keep your program on track and keep the program from suffering from “mission drift”. Your vision and mission statement also help you find funding opportunities that align to your goals versus “chasing grant dollars”.



### -Determine alignment to your community

This can mean many things to many different stakeholder groups. Your best alignment may mean providing opportunity to an underserved population in or around your community. Your best alignment may mean supporting the economic transformation of your region. Regardless of your best fit, aligning with your community is key. Filling a need in your community helps align you to funding sources, recruit students validate the value of your program.

### -Find your passion

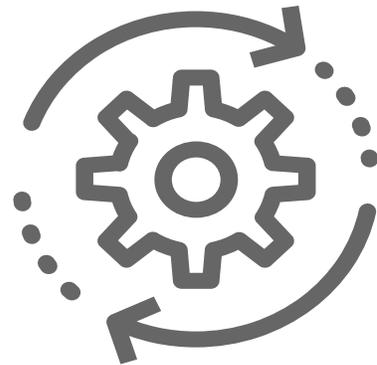
As you know, establishing a new program or revising an existing one is a challenge. This is especially true when you tie in all the stakeholders of education, fellow educational institutions and local partners. Be sure that your call to action follows your passion. As an educator this is not difficult to find when we look at the successes of our students.

## Defining Industry Engagement

In our experience, Industry Engagement has been a pillar of success for all of our training programs. This includes our programs starting as early as sixth grade, all the way through advanced level (3<sup>rd</sup> year) community college programs. Keeping industry engaged through multiple lines of effort builds support for your program at a tactical and strategic level. The multiple lines of engagement include traditional engagement and strategic engagement. Each is outlined below.

### -Traditional engagement

Traditional engagement serves as the vehicle to keep your program relevant from a technical standpoint and ensures you are meeting the needs of industry. This type of engagement helps build trust between participating industries and your program. We consider traditional engagement the opportunity to keep our “finger on the pulse” of what is happening in industry. It also establishes relationships that can result in support for your program. Examples of traditional engagement are detailed below:



- Serving on your program’s advisory committee
- Curriculum guidance including suggested learning outcomes
- Career fairs hosted by employers. These serves as a recruitment tool for the employer, as well as, your program

### -Strategic engagement

Strategic engagement often springboards off of the trust and relationships that are built through established traditional engagement. Strategic engagement plays a key role in giving your program the broad base support that is required for larger-scale grants and contracts. Traditional engagement provides the playbook and strategic engagement provides the opportunities to secure the funding to execute that playbook. Examples of strategic engagement are outlined below:

- Letters of support for grants and contracts
- Political support for grants and contracts
- Help navigating local, regional or state-level political scenes

## The value of engagement

The value of industry engagement in your program is so vast it is hard to quantify. We often use the phrase “success breeds success”. Although deeply engaging industry is very time consuming and sometimes difficult, the gains are exponential. An example of success stacking through industry engagement could look something like this:

1. A community college instructor reaches out to a local employer and establishes a relationship.
2. This employer decides to engage the school by serving on the school’s curriculum advisory committee.
3. The feedback that the community college receives from the employers leads to a revised curriculum that is exactly what industry is looking for. The community college has now established a level of trust with this employer.
4. The community college instructor notices a state level grant opportunity that aligns well with their program. This letter requires letters of support from local industry.
5. The community college reaches out to the local employer for a letter of support for the grant. Unknown to the instructor, the executive of his local employer serves on the board of directors at the state level organization that will be making decisions on the grant.
6. Because of the quality of their program and reception to feedback, the industry executive feels comfortable supporting the community college in their quest for the grant.
7. The community college receives a grant to buy new equipment and renovate their lab.
8. New equipment and a freshly renovated lab make recruiting for the program.
9. Over the course of 4 years, the community college program doubles in size. With the increase in students, the community college now has well established relationships with 12 companies across their region.
10. The community college is now in a position to compete for much larger grants and contracts because of their broad-based industry and political support.
11. The cycle continues and success breeds success...



The situation above is strictly hypothetical, but it is certainly a recipe for success. All of this snowball of success starts with an instructor engaging a local industry representative for feedback.