Creating Education-Industry Partnerships in Maritime

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SMART
SOUTHEAST MARITIME AND TRANSPORTATION CENTER
With nearly 50% of maritime and transportation industry technicians at, or on the cusp of, retirement age, the industry is experiencing a seismic workforce shift as well as simultaneous growth in highly-technical STEM-related technician jobs. Employers are faced with an inadequate number of skilled, educated technicians to fill the vacancies left by retiring workers, compounded by the fact that the skill set required by technicians has rapidly evolved over the past 20 years and education has failed to keep pace. Today’s technical jobs in maritime and transportation are highly STEM-oriented. Technicians use math and science daily to construct nuclear-powered ships, repair technologically-advanced navigational systems, and maintain equipment run by programmable logic controllers (PLCs). Industry employers are eager for education partners to produce a greater number of students with advanced technological skills resulting in academic and industry credentials to fill key maritime and transportation technician-level positions.

The maritime industry needs educators to help prepare students to fill their worker shortages. The first step that we can all take is to simply make students aware of the opportunities available to them in the maritime and transportation industry. Without the knowledge of the careers that are available in the maritime industries, students will not actively pursue the opportunities that are available to them. The second step that is necessary to fill these shortages is to provide the educational programs needed to prepare workers to enter these fields.

**HOW EDUCATORS CAN HELP**

Here are a few ideas of how educators can help interest students in a career in the maritime industry:

- Create a maritime club
- Create a maritime competition
- Create or use maritime education modules and lesson plans in your classroom
- Create maritime a program of study at your school
- Host a maritime career fair
- Help students to job-shadow with maritime employees
- Host a maritime summer camp
- Have industry leaders come speak to students
- Host a field trip to an industry site
- Create a mentor program with industry leaders
- Host “train the trainer” events to inform other educators
REASONS TO PARTNER WITH INDUSTRY

The basis of any good education program starts with partnering with industry. To make programs relevant to the needs of the industry in your area, leaders from local maritime businesses need to be involved when developing these programs. While one area might be desperate for trained welders, another may need pipefitters more. Even within a specific trade, the standards that technician must meet vary from one area to another. Having industry subject matter experts from your area help develop curriculum ensures that you are training students to meet the needs of the jobs that are available. Businesses are also more likely to hire individuals who meet the qualifications that they need. Programs that are created through industry support give employers the faith in the qualifications that the students receive.
The benefits to creating partnership with industry help everyone – the students, the educators, and the industry.

**STUDENTS**

- Student are more engaged in programs that have hands-on or experiential learning that employers can provide.
- Students learn about opportunities for careers that are in-demand and well paying.
- Student are more employable because the industry has validated the curriculum they are learning

**EDUCATORS**

- Curriculum is relevant to the needs of the industry
- A commitment from industry leaders to help make the program more successful and sustainable
- Educators feel like they are making a difference when they know that they are helping a student become more employable
- Access to industry tours, speakers, and resources that make learning more engaging for the students
- Potential access to equipment for training that school systems may not be able to afford.
- Training opportunities in the industry for educators such as externships

**EMPLOYERS**

- Employers are getting better trained employees
- Employers know what student qualifications are when they have completed a program that they have validated
- Improved community relationships and brand identity with students
- Increased employee morale from sharing knowledge and helping others
- A larger pipeline of skilled workers
WAYS TO PARTNER WITH INDUSTRY

The single most beneficial thing that a school can do to partner with industry is to create a consortium or an advisory board made up of industry leaders. This format creates an open forum to allow for the exchange of ideas and knowledge that is necessary to creating solutions that work for your location. Educators and business leaders can discuss the needs of their industry, plan programs, update existing curriculum to make sure it is relevant, and form connections that ensure the greatest amount of benefit for each.

If you would like to start smaller, even a partnership with a single local business can be beneficial. Even if you are only working with one company to help meet their needs, students and other businesses will still benefit by having those programs available to them. Local businesses can also be engaged by volunteering the skilled technicians they already have to participate in DACUMs for creating new curriculum. This ensures that curriculum is actually teaching the skills needed within that specific trade in that area. Informal partnerships can also include things like newsgroups to keep local employers aware of opportunities for them to participate in career fairs, speaking engagements, job-shadowing, etc.

The following pages contain seven steps to help you plan and implement successful industry partnerships.
Before you race out and start asking local firms in your area to support you think through what your program goals are and what type of support you need or could elicit from potential industry partners to accomplish those goals.

**Step One: Identify your Goal-Aligned Needs**

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<thead>
<tr>
<th>Goal</th>
<th>Potential Partner Support</th>
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<td><em>(i.e.) Increase awareness about career opportunities in the field with high school students</em></td>
<td><em>Input and validation for career awareness tools (i.e. flyers, videos); hosting student tours of workplace; participating in student internship program, etc.</em></td>
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Step Two: Identify Potential Partners

Who is influential in your industry that you know or would like to know but are not currently connected with that could help your program and students? How could you leverage existing relationships to expand your partner base?

<table>
<thead>
<tr>
<th>WHO: To Partner With?</th>
<th>HOW: To Connect?</th>
<th>WHAT: To Do Next</th>
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<tr>
<td>(i.e. Joe White @ XYZ)</td>
<td>(i.e. Current partner Deb Smith serves on Community Board with Joe)</td>
<td>(i.e. Call Deb, ask her to deliver material about Center to Joe and invite to next leadership meeting)</td>
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Step Three: Get Internal Support

Once you have come up with ideas for which partners might be a good fit and be able to contribute needed expertise or resources, it’s time to approach your internal leaders. Securing the engagement of your internal leadership (department head, dean, principal, etc.) is critical to a successful partnership with local industry leaders. With your leaders’ enthusiastic approval you will have greater access to his/her contacts and will likely be able to access greater internal resources (think money, staff, and equipment) for your partnership.

Schedule time to meet with your boss or department head and bring a one-page outline of your proposed partnership program. Items to include are:

- **Goals of program**
- **Benefit to school** *(remember, the most directly this can benefit the school at large and not just your program the more likely your boss or department head is to be an enthusiastic supporter!)*
- **Potential partners**
- **What you are asking of your partners**
- **What you need from the school to implement** *(i.e. permission to mail letters on school letterhead)*
Step Four: Put It in Writing

Once you’ve gotten your leaders’ approval and have a set of potential contacts it’s time to reach out. You could call or email people whom you already know or send an email or letter to potential partners you don’t know personally.

SAMPLE LETTER

Dear (Name),

The (school name) program/club/academy that I head up is interested in helping our students learn from local leaders in the (name) industry. Students are much more likely to enter and complete relevant academic pathways for the (name) industry if they can learn from people who are already employed in the industry and see that there are good, challenging and interesting jobs in the area for them to aspire to.

Would you be willing to become a partner and support our program by contributing time, expertise, resources or financial support? There are numerous ways you could be involved in a (name of school-program) partnership such as:

- serving as a classroom speaker
- considering (school) students for summer internships
- offering expertise as a curriculum advisor
- raising funds for (name of program) events
- hosting students for a field trip site tour
- participating in a job or career fair
- agreeing to be interviewed for program newsletters, videos, etc.
- assisting with labs or technical classes
- providing in-kind donations such as equipment, materials, etc.
- hosting an externship program for teachers and faculty
- permitting (name of program) to use facility meeting space
- allowing upper-class students to “job shadow” on-site for a day
- allowing company staff to serve as formal mentors for (name of program) students

I will be calling you within the next week to discuss a possible partnership. Together we can create a more skilled, well-educated and engaged workforce to benefit our community and your company! I appreciate your time and consideration.

Sincerely,

(Name)

Once you have secured a partner’s interest it’s a good idea to thank them formally and outline what you discussed as their involvement. Although you’re not forming a separate legal entity partnership, it is important for all members in any type of cooperative work to agree to objectives, expectations and commitments (of time, money, etc.) This can be as simple as drafting a few sentence agreement such as “ACME Tugs & Towing agrees to provide Bayside High School with two speakers each year to give short in-class presentations on careers on tugboats” or writing something in much more detail. Either way it’s a good idea to put it in writing!
Step Five: Create Structure

To fully engage your partner for the long-term it’s a good idea to create some type of structure for regular meetings and/or communication. For example you could...

- Meet on a monthly or bi-monthly basis to discuss program needs and achievements
- Create a simple email template (i.e. on Constant Contact) to regularly report updates on student progress
- Send out periodic surveys to partners to gauge their satisfaction with the partnership and reporting results

Creating structure for your partnership and meeting in person is important because it lends credibility to your effort. It also enables your partners to begin networking with one another. If possible, schedule a regular meeting time (i.e. the first Tuesday of every quarter) so that partners can easily put it on their calendar well in advance. Make sure that you (or the point person for communications on the partnership initiative) sends out reminder notices at least a week in advance of every meeting and it’s a good idea to send out a follow-up memo – either full minutes from the meeting or a reminder of what was discussed and action items that people agreed to before the next meeting.

Make sure you honor your partners by keeping to your agenda for the meeting and sticking to your schedule. You are more likely to keep them on board for the long haul if you treat them as valued colleagues!
Step Six: Partner Recognition

Partners need to see the value they receive for becoming your partner. Brainstorm some ways that you can recognize partners in an ongoing manner.

**Partner Recognition Ideas**

(i.e. quarterly awards, featured “partner profile” on the website, articles in newsletter, invitation to serve on industry conference panels, hand-written notes from students, etc.)
Step Seven: Pay It Forward

Have you successfully launched a partnership program with industry leaders or employers in your area?

Send us your story and we’ll feature it on the NSF SMART Center website (www.maritime-technology.org)!

You’ll be able to tell your partners that their story is being recognized by a National Science Foundation funded Advanced Technological Education Center and you can promote it on your website to perhaps attract even more partners!
1) Learn as much as you can about a business before you make first contact.

2) Don’t send out mass emails to a group of business leaders asking to partner. Email each company individually and tailor the email to them. Follow up with a phone call if you have not heard back from them in a few days.

3) Join industry business associations or attend their meetings to network and create new contacts.

4) Start small and grow from there. Some business may be put off by elaborate plans that they do not believe they have the time to participate in or the funds.

5) Really listen to what your industry partners need instead of trying to tell them what you can offer them.

6) Be creative and think outside the box when creating partnerships. Every business does not need to participate in the same way. For example, one company may not want to be on a board of advisors, but they may have equipment that they can donate for training.

7) Ask to tour your partner’s facilities and have them tour yours. It will give you each a better understanding of the other’s needs, strengths or even limitations.
8) Set clear objectives for your partnerships. Make sure that everyone knows what you are trying to accomplish and how you will get there. Misunderstandings about objectives can cause businesses to abandon a partnership and potentially keep other industry leaders from participating.

9) If you create an advisory board, hold regular meetings. Not only does this allow a regular opportunity to update each other on issues and solutions, but it gives each partner the assurance that everyone is dedicated to sustaining the relationships and programs.

10) Be grateful to your industry partners. It may be part of your job to make these connections and create programs for your school, but that is not normally the case for business partners. Most industry leaders who volunteer to partner with educators are doing so in addition to their normal work assignments. Be cognizant of their time and effort and make sure they understand how much they are valued.
11) Get help from an expert! The Southeast Maritime and Transportation (SMART) Center is one of 42 national ATE (Advanced Technological Education) programs in the U.S. and the only regional ATE Center focused on developing effective career pathways and programs in the maritime and transportation industries. The SMART Center is leading the national effort to create a robust pipeline of skilled workers for the maritime industry. If you would like assistance in helping you create education industry partnerships in your area or with any of your maritime education needs, we would be more than happy to provide help and resources.

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