

Connecting Summer Camps to Career Pathways



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THE NEED

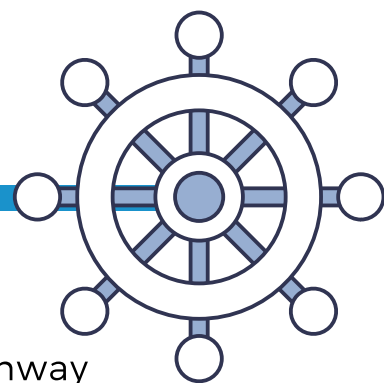
According to The Georgetown University Center on Education and the Workforce over the past 70 years the number of occupations that students can choose from for future work has grown by more than 200%. At the same time the number of colleges and universities has more than doubled and the number of postsecondary programs of study has more than quintupled. Now more than ever educators, administrators, faculty and counselors have to creatively engage students at a younger age to help guide them into career pathways that will equip them with the skills, education and credentials they need to meet local employers' critical workforce needs.

Summer camps represent a unique career awareness and pathway preparation vehicle that community colleges can utilize, leveraging their internal resources and external partnerships to build a student and workforce pipeline.

This paper examines one community college's approach to connecting students to their maritime and transportation pathway through an integrative summer camp, using local resources and hands-on activities to drive career and college awareness. This type of innovative industry and educator partnership-driven career awareness outreach work will increasingly be required to meet the widening workforce gap in the maritime and transportation industry.

The Southeast Maritime and Transportation (SMART) Center is one of only 39 National Science Foundation Advanced Technological Education (NSF ATE) centers in the U.S. It is the only center focused solely on increasing the number of technicians in the maritime and transportation industry. This material is based upon work supported by the National Science Foundation under Grant No. DUE-1003068. Any opinions, findings, conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

HIDING IN PLAIN SIGHT



One of the biggest barriers to students entering a maritime and transportation industry-based career pathway is simple unawareness. "In our experience the majority of students in any town or city with a concentrated number of maritime and transportation employers simply aren't aware of the jobs available after high school or college," noted SMART Center PI Thomas Stout. "Even though students drive past these shipyards, marinas, ports or industrial parks with maritime employers - and may even see ships or vessels on a regular basis - they have no idea what types of jobs there are at these sites and even less of an idea how to prepare for those types of jobs."

The Southeast Maritime and Transportation (SMART) Center is the only National Science Foundation Advanced Technological Education (NSF ATE) Center solely focused on expanding the pipeline of skilled, educated technicians entering the maritime and transportation industry. One of the SMART Center's primary goals is undertaking career awareness and outreach efforts to reach students earlier in the educational pathway so they will choose to pursue post-secondary education and training in critical industry occupations. "Over the past 10 years the SMART Center has worked closely with industry employers across the southeast and nationwide to understand critical workforce needs and translate those occupations' competencies into relevant curriculum, programs of study, and outreach campaigns," said SMART Center Program Director Jennifer Palestrant.

One of the SMART Center's partners in this effort is San Jacinto College (San Jac) in Houston, Texas. San Jac has built effective bridges with local public schools and industry employers to increase the number of area students entering the workforce and/or entering post-secondary maritime education programs of study after high school. In 2009 San Jac was a founding member of the Port of Houston Partners in Maritime Education (PHPME) initiative which created maritime academy programs in area high schools. Six area high schools now have active maritime programs; the first class of 117 seniors receiving their degree from a local maritime high school graduated in 2013. Today there are more than 1,200 students enrolled in the academies.



Port of Houston Partners in Maritime Education (PHPME) is a collaborative effort by the Port, local community colleges including San Jacinto College, universities, and industry employers that now has more than 1,200 high school students enrolled in PHPME-seeded maritime academy programs at six local high schools

Two of PHPME's primary goals are (1) to introduce an increasing number of youth to maritime career opportunities in port-related industries and (2) encourage higher education in the maritime field.

San Jac recognized an opportunity to create a new early engagement program that would align with the PHPME's goals; in 2010 the school launched an annual week-long Maritime Venture Camp for area high school students age 14-17.

In addition to increasing general maritime and transportation industry awareness among Houston-area high school students, San Jac sees the camps as a long-term recruiting tool for its A.A.S. Maritime Technologies program.

"We know that it's never too early to talk with students about college," says Dr. Sarah (Sallie Kay) Janes, Associate Vice Chancellor of Continuing & Professional Development for the college. "These camps provide us with a fun and direct student-engaged vehicle to help local students connect their future college and career pathway options to this critical local industry."



*Dr. Sarah Kay Janes
SMART Center Co-PI,
San Jacinto College
Associate Vice Chancellor*

To date more than 200 students have participated in the SJC Maritime Venture Camp. It is open to all Houston-area high school age students. The week-long camp provides students with entertaining and educational maritime adventures both at the college's brand new Maritime Campus as well as through field trips to explore the Houston Ship Channel and local employer worksites.

CAMP FORMAT AND ACTIVITIES

Captain Amy Arrowood, Director of San Jac's Maritime Credit program runs the Maritime Venture camps. She created the Maritime Venture camps to run in two separate week-long sessions. The camp runs from 9:00 a.m. – 4:00 p.m. Monday through Friday with a wrap-up half-day on Friday from 9:00 – 11:30 a.m. Spots are held for 25 campers each week.



Captain Amy Arrowood (center) runs the San Jac Maritime Venture Camps

Initially the college offered the camps for free, however Amy changed the policy and began charging \$25 per camper. “Parents were signing their students up when registration opened to make sure they had activities planned for their child during the summer but since there was no fee there was no ‘pain point’ and it was easy for parents to switch plans if something else came up,” Amy explains. “Then we would be left with empty spaces in camp and people on our waiting list had made other plans in the meantime.”

The \$25 fee primarily goes toward offsetting transportation and entry costs for the field trips, however it also ensures that each camper gets a camp t-shirt, snacks, and daily lunches.

Local Houston employers including G&H Towing are actively engaged in the PHPME program, bringing local maritime academy high school students on their worksites, providing internship opportunities for San Jac maritime students, and supporting the Maritime Venture Camp to make students aware of great local vessel operations career opportunities as early as possible in their academic career.



As interest and needs have grown Amy's team has increased the size of camps. "Often times we need to meet minimum requirements in order to have a free docent-assisted tour at museums," she explains. "It's helpful to know what 'freebies' you can get if you bring specific number of people so you can use that as a benchmark for setting the camp size."



The camps start every day at San Jac's new Maritime Technology and Training Center. Located at 3700 Old State Highway 146 in La Porte, Texas, the 45,000-square-foot center (above) showcases a training dock with lifeboats, davits, and fast rescue craft, and separate industry dock for crew changes. "From the moment students enter the facility they're immersed in the industry," Amy explains. Students learn about the courses offered at the school's Center and get to see the engineering simulator, and the three ships' bridge simulators, donated by the Houston Pilots. In this exciting, hands-on environment students are introduced to maritime basics from instructions before heading out to fun, hands-on tours at a wide variety of sites encompassing various sectors of the industry. Through previous camp field trips students have toured:

- Port of Houston
- Battleship TEXAS
- Oil Maritime Museum
- Kirby Corporation
- Gulf Winds International
- U.S. Customs and Border Protection inspection facilities
- Scout Sea Base
- Houston TranStar facility
- Houston Shipping Channel onboard the M/V Sam Houston

Amy's team typically arranges field trips and onsite tours through the college's industry partners. Approximately 5-10 industry partners support the camp each summer.

In 2016 the staff incorporated a hands-on project component. Students were given basic materials (provided by Home Depot) to build a cardboard boat with a goal to build a boat that could float and move in water. The San Jac team found that the students were eager to bring their friends and family to the last day of camp to see their creation and boat sailing contest. “It helped parents begin to connect over maritime-related work because students worked outside of the camp on their projects together. It fostered interaction outside the structured day sessions among students and parents.”



To maintain interest in the program Amy’s team tries to introduce new elements to the camp each year. “Approximately 50% of the camp – the core portion- remains the same year to year and then each year we look to introduce a new 50% including new industry partners, new touring sites for the students, etc.”

PUBLICITY

The San Jac team begins publicizing the summer camps approximately 5-6 months out as parents are making summer plans for their students. The team recruits camp participants with a robust, but not expensive, publicity campaign by disseminating information through:

- the San Jacinto College summer activity circular circulated through The Houston Chronicle (the area’s major daily newspaper)
- PHPME program members
- the annual San Jac Youth Maritime Expo
- advisory committees of San Jac’s industry and workforce partners
- social media
- Maritime Venture camp alumni

In addition the camp is publicized at the 6 Houston-area maritime high school academies that PHPME helped launch.

The Maritime Venture-linked PHPME program at Stephen F. Austin High School is increasing the number of female students choosing a maritime career pathway.



STAFFING

The camp is run by two San Jacinto College staff members; it is one portion of their full-time jobs. Amy approximates that she and her administrative support spend approximately two hours daily each month on camp preparations starting three months prior to each camp session. Time is spent primarily on administrative set-up tasks such as securing location sites for campers to visit, assembling materials, ordering t-shirts, etc. At least two adult counselors run the daily program each week.

FUNDING

In addition to the in-kind time investment that San Jac provides with the two staff people who plan, organize and run the camps the only significant outside investment has traditionally been a \$10,000 grant from the Port of Houston to defray camp program costs. The largest camp program expense is transportation. "Transporting students to local maritime-related sites takes up approximately one-third of our budget," notes Amy. Industry partners make significant in-kind contributions to the program, most notably through hosting students for field trips.

ASSESSMENT

Raising students' awareness of the local maritime industry career opportunities and college pathways is a key goal of the camp. To achieve that Amy's team does a short survey at the beginning of the week to determine campers' awareness. "We were shocked to consistently measure that 90% of our campers don't know about local industry and employment opportunities at the beginning of the week," she noted.

The team is working on long-term impact assessments to determine specifically if campers are choosing maritime-related career and academic pathways. "We know of one student who enrolled in the San Jac A.A.S. Maritime Technologies program as a result of our camp and we are working closely with local PHPME academy programs to determine how the camps are spurring enrollment."

As part of a continual improvement process Amy's team does a critique at the end of each camp season, identifying the best elements to build on and replicate for the following year and deciding which elements were not either of interest to students or too difficult/produced the least amount of impact for the time invested to drop from future calendars. They wrap up by reviewing annual camp budget compared to actual expenses, recruitment projects compared to actual sign-ups and identifying the biggest challenges to address the next year.

TIPS FOR STARTING A SUMMER CAMP PROGRAM

Before committing to a camp, Amy suggests that an interested school or organization take the following steps:

Gauge Interest/Need

Are there existing programs or summer camps that address the need for increased career awareness of the maritime and transportation industry in your area? Could your school or organization help expand an existing camp to include maritime information and opportunities or should a new one be undertaken?

Set Goals

In order to determine ROI you'll want to set goals for the camp. These can be quantitative and/or qualitative.

Creating a Budget

By laying out a basic budget you'll be able to approach partners for in-kind and financial donations to defray costs, price your camp, and identify potential internal resources or budgets to tap into.

Identifying Partners

Successful maritime camps rely heavily on engaged partners. Who in your area directly engages with your target audience (i.e. high school students) that could help publicize the camp? Staff the camp? Assist you in producing the camp and/or hosting various elements?

Determine Liability

Check with your school and industry partners to make sure you have all potential liability issues addressed when planning not only the camp format but all off-site trips and activities.



Port Houston is a year-long partner to San Jacinto College, frequently visiting local schools to talk with students about port careers and college-based pathways. These visits give port employees the chance to publicize the Maritime Venture Camp.



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Consider Timing

When does school let out for the summer and when does it resume? Are there specific weeks that might be particularly bad for employers to host field trips because of industry events? Will you make it a full day camp or half day? Given the demographics that you'll be pulling students from will you need to start early or run late to accommodate parents' pick-up and drop-off schedules?

Meeting Space

You will need a set place for your camp to begin each morning where students can be dropped off and picked up daily – where would be convenient for your target audience? Do you need access to open space or water for hands-on projects? Do you have a budget for renting space?

“Summer camps offer a unique opportunity for colleges to reach students. Being outside the classroom environment, engaging in fun, hands-on activities, and seeing people in the industry at work gives students a much more realistic and exciting perspective on future opportunities the industry could hold for them.”



Houston Maritime Venture camp participants may just become the next generation of Port Houston college summer interns and future maritime industry leaders in the Gulf Coast!

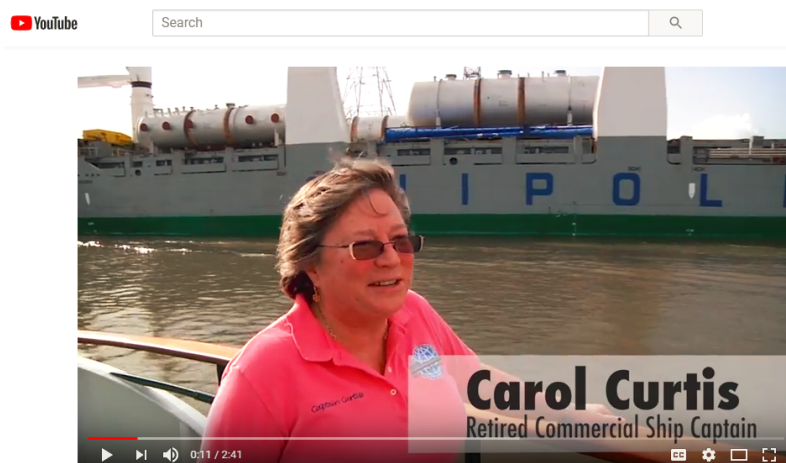
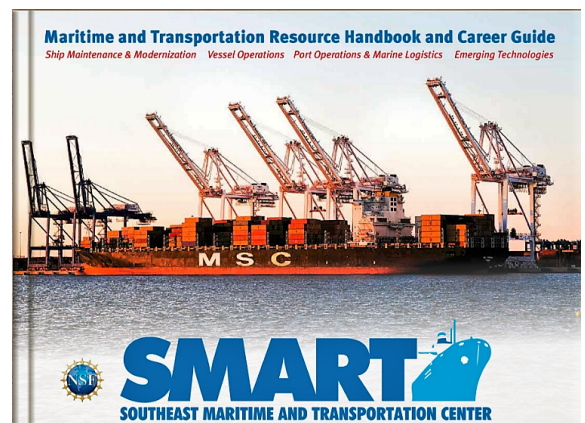
RESOURCES

The SMART Center can provide interested educators and other potential summer camp sponsors with free resources and career awareness materials for their participating students including:

- the SMART Center Maritime Resource and Career Guide Handbook including an 80+ page guide to in-demand occupations, career pathways, and information on post-secondary maritime schools and training programs
- pre- and post-assessments
- visual career pathway tools
- “Make the SMART Choice” DVDs featuring more than 20,2-minute industry career videos featuring real-life students, recent graduates, and current industry employees
- posters

In addition the SMART Center can provide educator-created and validated educational modules that can be used during the camps including games, quizlets, labs and projects. To request materials for your summer camp please visit the SMART center website at

<http://www.maritime-technology.org/order-toolkit/> and download SMART summer Institute educational modules for camp or year-round use at <http://www.maritime-technology.org/curriculum/>.



Make the SMART Choice: Women at the Helm

