

Chapter Name : ABC-New Hampshire/Vermont Chapter

Contact For Submission : Joshua Reap

Contact Title : President & CEO

Contact Email : josh@abcnhvt.org

Submission Title : Careers in Construction at Parkside Middle School

Categories (Check all that apply) : Workforce Development - Careers

SCOPE: 15 Points : The workforce shortage was identified as a long-term, systemic problem due in part to the lack of education about the opportunity a career in construction can provide. The ABC-driven “Construction Careers Program” at the Middle School at Parkside in Manchester, NH is a semester-long project-based course to introduce 7th grade students to the skills and career opportunities within the construction trades. The great thing about this program is that it involves members, community engagement and promotes merit shop values. The program runs over six weeks, twice a year (the length of two school semesters) and takes place entirely at the middle school using contractor and school resources. There is no capital expenditure required by the chapter, but chapter staff is responsible for helping to find contractor partners in the identified trades. The time commitment for ABC members is just a few hours a semester. The program is easily adaptable anywhere because it was developed with input from teachers, skilled craft workers and ABC staff. Schools like the program because it is engaging for students and easy to replicate.

NARRATIVE: 15 Points : One of the biggest challenges in industry today in New Hampshire is the workforce labor shortage, a reality that serves as backdrop to the new construction career exploration program at Parkside Middle School in Manchester. The program is unique in that it provides an educational curriculum with input from educators and industry experts. When we began this project, we set out with the goal of making the Parkside Project into a long term solution to the workforce shortage that could become self-sustained and replicated at all the middle school buildings in the district. The immediate challenge was to design an attention-grabbing program that was hands-on but age-appropriate for seventh graders. This required a forward-thinking shop class teacher that was willing to “reboot” his woodshop class into a construction learning, a school principal that was open to the idea, and most importantly an ABC member that happened to also be a school board member. We proposed the plan to the school board and received unanimous support. Once we had a curriculum put together, the shop class teacher worked with each of our volunteer ABC contractors to identify resources needed and ways to scale down to age-appropriate projects. For example, students learned how to frame a small wall and the following week learned how to plumb a sink using pre-cut PVC pipe into the very same wall. One class built a wall out of brick and the next week a demolition contractor brought in their demo robot to show the students how to use the radio control joysticks to make the machine take down the wall. With the program approved, we then identified ABC members that could help cover the topics and donate materials; fortunately, we found many members that were willing to cover topics such as carpentry, plumbing, HVAC, Building Information Modeling, architecture, electrical and more. The lesson we learned is that such programs need to multiple partners in each area to ensure adequate coverage once the program went district wide. ABC member employees speak and guide students through projects designed to educate them about the trades. We identified that the workforce shortage as a

multi-generational challenge brought on in part by the lack of construction career exploration in schools. Today's average age of a trades person is around age 53, which means that in 10 years there will be a major gap in skilled labor. We need to help students identify the opportunities that exist in this field and recognize that they can have an extremely successful career. We thought the biggest challenge for this program was making sure we had enough contractors to ensure we could cover all six weeks, but once we put out the ask, members lined up to help.

INNOVATION & CREATIVITY: 15 Points : This program is an innovative approach to construction workforce development that will match experienced craftspeople up with educators and create a self-sustaining career exploration program. The school teacher educates students with age appropriate projects that uses materials donated by ABC contractors. Then a construction professional will come in to talk to students about their personal story and share how the skills just covered in class have given them a great living. For the student, after completion of the course and experiences, they will demonstrate understanding of needed core academic skills, practical work skills, and the importance of team work, communication and cooperation. In addition, they will gain an understanding of the various jobs and career paths available within each of the subfields. This program requires no extraneous budget support from the school district, or ABC, to deliver a comprehensive hands-on learning lab program experience for students. The only physical resource the chapter put in was to supply ABC stickers, posters and other promotional materials that were already at the chapter office. Contractors donate materials leftover from jobsites and the time of their skilled professionals. Every middle schooler must go through the program, so that makes this a great opportunity to expose all students to the potential careers in construction. Through the program, children become aware of the opportunities available to them, so when they reach high school, they can make a better decision in which career field they may want to explore either through college or apprenticeship. Not every student is bound for the same career pathway but what's so great about this program is it lets students know of the array of positive opportunities available to them in the construction industry.

MEMBER VALUE & INVOLVEMENT: 15 Points : Involved members tell us there is significant value for them by participating in the program. In fact, contractors are so eager to participate in our program that we have noticed increased member participation and improved retention. At the beginning of the program, chapter resources were leveraged to engage members and educators. Today the program is self-sustaining with significant member buy-in. The typical ABC member invests about ten hours a school semester. That involvement includes a classroom presentation where a skilled professional will speak to the students about their career choice and how it afforded them a great lifestyle and sense of purpose. Having a member speak seems to resonate the message much more effectively than a teacher just reading from a lesson plan. ABC members get value out of giving back to their community and they also benefit from the positive media coverage that comes from their effort.

BUDGET IMPACT & REPLICABILITY: 10 Points : The program is easy to replicate at any chapter. At the beginning of the program the chapter's Workforce Development Director would spend a few hours a week on the project but, several months later, the amount of time invested is minimal as the program is now self-sustaining. Once we had a proof of concept at Parkside, other middle schools across Manchester and the state began the process of adopting the curriculum. What is also great about the program is that as more schools do this, more opportunities for ABC member involvement through our chapter's coordination.

OVERALL EFFECTIVENESS & IMPACT: 10 Points : Development of this initiative was guided by the ABC mission to “help our members develop people, win work and deliver work safely, ethically and profitably for the betterment of the communities in which they work.” The members see value in helping to develop the next generation of skilled workforce in the community in which they work and call home. The best part is our members rely on ABC to ensure they get their spot in the classroom. We have no shortage of contractors that have stepped up to invest in this Careers in Construction program. There are several challenges in career planning and this type of program, regardless of content, allows students to make better informed decisions about their career option.

OVERALL PRESENTATION: 10 Points : Our chapter established a strategic goal of developing ways to address the workforce shortage in New Hampshire. Early on we identified part of the problem was that we are not effectively communicating to students and adult educators about what a career in construction looks like and that it would take a multi-faceted approach to address the problem with students, adult influences and the general public. By working with a member from the Manchester School District to get this program up and running within six months. By the end of this first year, we will have had over 200 students go through the program. As its about to become adopted in other schools across the state, it is likely that thousands of students will have been exposed to a positive image of construction careers.

Materials :