



Student Internships: Resources for NAHB Members

Contents

- Introduction 1
- An Overview of Career and Technical Education 2
 - High School..... 2
 - Community College 3
 - Four-Year College or University 3
- Work-Based Student Learning 4
 - Career Exploration 4
 - Mentoring 4
 - Service Learning 4
 - Co-Operative Experience 5
 - Internship 5
- The Internship Experience 6
 - Preparing for an Internship Program 6
 - Evaluate Needs 6
 - Research the Legalities 6
 - Develop a Training Plan 6
 - Finding and Hiring Interns 8
 - Managing Interns 8
 - All Good Things Must Come to an End..... 9
 - Terminating Unsuccessful Interns 9
 - Retaining Good Prospects as Employees 9
- Other Pipelines..... 9
- Conclusion 10

Introduction

The U.S. housing industry suffers from a chronic shortage of directly-employed labor and subcontractors. While the shortage varies somewhat by trade, by region, and from year to year, over the long-term, demand outstrips the supply in most skilled trades. In addition, there is an ongoing need for home building firms to find the next generation of talent to manage and grow their companies in the future. This guide will focus on how home builders can engage with three talent resources to meet these needs: secondary (high school) students in career and technical (CTE) education programs; community college students; and university students.

This guide will assist the home builder in understanding the ways in which secondary schools, colleges and universities may offer work-study student-learning opportunities and deciding which type of student resource best fits the company's needs. The guide will focus specifically on one type of work-study student learning experience: the paid internship. This type of employer/employee relationship is sometimes described as a long interview, allowing both parties a chance to evaluate the suitability of the relationship in view of potential post-graduation employment.

Connecting with student resources requires "getting inside" the educational institution, and understanding where to start can be daunting. This guide will assist the home builder in identifying ways to establish contacts at local high schools or colleges; engage with students through career fairs and other approved venues; write a suitable job posting, interview, and hire candidates; and supervise, evaluate and communicate with the intern and the educational institution as part of the educational requirements of the internship.

Hiring high school youth (under age 18) means navigating what may be unfamiliar territory involving federal and state labor laws dealing with youth employment; federal and state education policies for CTE programs; and state or individual school policies for student employment. This guide helps the home builder understand the roles and responsibilities of the employer, educational institution, student and parent/guardian and legal/insurance issues involved in hiring high school and college students.

Links throughout the guide point the reader to databases of high schools, community colleges and universities that offer construction-related programs and other resources to assist in the successful launch of a student internship program.

An Overview of Career and Technical Education

High School

In a broad sense, the goal of the American secondary (high school) and post-secondary (college/university) system is to prepare students to be responsible citizens who can contribute to society through their knowledge and skills. There are more than 24,000 public and 7,000 private high schools graduating more than 3 million high school students per year in the United States. In recent decades, more than two-thirds of high school graduates have immediately entered community college or university. Of those high school graduates who did not continue to college, nearly two-thirds immediately entered the workforce.

High schools prepare students for work, not just for college, through “career and technical education,” or CTE. On the surface, enrollment in CTE courses at the high school level appears strong—the National Center for Education Statistics reports that nationwide, more than 85% of public high school graduates take some type of occupational education courses. However, there is no longer just “shop class” focused on woodworking or welding, but courses in many occupational fields, and not every high school that offers CTE courses offers construction technology as an option. Historically, only about 7% of high school graduates take at least 1 credit of construction-related coursework, and the trend has been slightly declining, while business, communications and design, health care, public services, agriculture and consumer/culinary services have increased in popularity.

At the high school level, CTE courses are offered to students in several ways. Some states have stand-alone CTE centers that have career preparation as their primary emphasis, while students also must meet state graduation requirements in academic courses such as English, math, science and social studies. In other cases, students from “traditional” high schools are bussed to area CTE centers for a portion of the school day, taking academic courses at their “home” school for several hours each day and traveling to the CTE center for the rest. Alternatively, CTE courses may be offered as elective or enrichment courses as part of the curriculum at traditional high schools.

It is difficult to obtain a complete listing of high schools or CTE centers that offer construction-related courses, but each state has a [director of CTE](#), and [local school districts](#) also maintain staff to connect students and employers. Public high schools that offer construction training in a specific state, region or city can be found using the National Center for Education Statistics ([NCES](#)) database, using the search criteria “vocational.” Public charter and magnet schools may also provide construction-related programs. Finally, employers should not overlook area private and [parochial schools](#).

Community College

The U.S. community college system consists of more than 1,100 public and private institutions. Community colleges may grant students an associate degree as a stand-alone credential or a stepping-stone to a baccalaureate degree; provide skills or credentials that allow students to go directly to work; or re-train adult learners who are changing careers.

At the associate degree level, programs of interest to home builders may be titled construction technology, building construction technology, construction management technology or other similar names. These programs typically require a minimum of 60 credit hours of courses that include basic mathematics, science and communication, and construction-related courses as print reading, estimating, planning and scheduling, safety, and building systems. An associate degree can typically be completed in two years. Graduates may be suited to supervisory roles in the field.

One means of finding community college programs that offer a construction emphasis is to search for accredited construction programs. Accrediting organizations such as the Association of Technology, Management and Applied Engineering (ATMAE), Accreditation Board for Engineering and Technology (ABET), or American Council for Construction Education (ACCE) are independent, non-governmental bodies that produce and enforce quality standards for their member programs. Additional unaccredited programs may be identified through the National Center for Education Statistics ([NCES](#)) database. “Unaccredited” does not necessarily imply “low quality,” and many currently unaccredited programs are simply new or in the process of achieving accreditation. Nationwide, there are approximately 30 [ATMAE](#), [ABET](#) or [ACCE](#)-accredited and 70 unaccredited community college programs that offer some type of building construction-related associate degree.

Four-Year College or University

There are more than 3,000 four-year colleges in the U.S., of which about 110 offer an accredited construction-related degree. At the bachelor’s degree level, programs may be titled construction management, construction engineering, construction science, building science, building construction technology, or similar names. Graduates must demonstrate proficiency in such topics as plan reading, estimating, scheduling, construction contracts, construction finance, and construction safety. There may be an opportunity for students to specialize in residential, commercial, heavy-highway, industrial or other construction sectors. Graduates typically enter the workforce in such roles as project engineer, estimator, scheduler or assistant superintendent and typically rise to upper management or executive roles over the course of their careers.

Four-year construction programs may be accredited by [ATMAE](#), [ABET](#), or [ACCE](#), but unaccredited programs can also provide a source of students.

Work-Based Student Learning

At both the secondary and post-secondary levels, schools often encourage students to explore a variety of career opportunities and gain work experience while they are students. This work experience may be extra-curricular or may be during school time and earn credits that meet graduation requirements.

At the high school level (and to some extent at the college level as well), students may be led through a progression of experiences that help them identify their career interests and abilities. These experiences may include career exploration, career mentoring, service learning, and internship or co-operative experience. Home builders, as potential employers, may interact with students in each of these experiences. For the protection of minors, it is not uncommon for high schools to require a background check on potential employers or volunteers working with students under age 18.

Career Exploration

Early exposure to a variety of career opportunities may help freshmen high school students (typically 14-15 years old) find an area of interest to pursue further. A home builder might be involved in career exploration activities by:

- hosting field trips to job sites
- providing guest speakers for a student club, class, or general student assembly
- welcoming students on short-term (unpaid) job shadowing
- participating in career fairs at the school
- participating in competitions or demonstrations of construction skills, including national events such as [SkillsUSA](#) and [NAHB Student Competitions](#), or local events such as the [iBuild Showcase](#) in Kansas City.

Mentoring

Home builders may interact with high school or college students, particularly those from under-represented groups, by acting as career mentors. Assistance on becoming a good mentor is available through organizations such as [ACE Mentors](#), but a home builder may also work through the local HBA, [Big Brothers Big Sisters of America](#), or simply as an individual. A mentoring relationship for a home builders might involve:

- holding regular face-to-face or virtual meetings between the mentor and protégé
- allowing student job shadowing
- introducing the student to industry professionals on the jobsite or at industry meetings
- recommending or sponsoring the student's membership in industry associations
- helping students understand the expected work ethic, academic knowledge, technical skills, professional ethics, career opportunities and rewards of a career in the home building industry.

Service Learning

Home builders may provide opportunities for high school or college students to complete construction-related community service projects that meet individual course requirements, or that are extracurricular projects for student organizations or clubs. Taking part in a "real-world" public service project such as building park benches, a picnic shelter, handicap ramp or community garden shed may enhance a student's understanding of and interest in a construction career. Home builders may volunteer to sponsor or work with a student learning project by contacting the high school administrative office or the college construction department.

Co-Operative Experience

A “co-op” is a joint school and (paid) work experience for students that provides a transition from school to work. In high school settings, the co-op student takes related courses at school, works off-campus for up to 15 hours per week, and is evaluated on both academic and work performance for graduation requirements. Employers typically provide some level of feedback to the school on individual student performance at work.

In college settings, co-op students often alternate working full time one term (quarter, trimester, or semester) and going to school full time the next term. The college co-op work experience typically adds one year or more to the time required to graduate. Co-operative education students typically start early in their college career when they have had limited classroom instruction, and may receive no credit toward graduation for their co-op work experience.

Internship

A construction internship resembles a co-op but is considered a “capstone” experience that takes place near the end of formal education when the student has more technical skills and/or academic knowledge, and typically earns college credits toward graduation. As such, it may be more structured to provide practical application of academic knowledge, may require more detailed written feedback from the employer, and oversight (including jobsite visits) by a school-based internship coordinator.

At the high school level, the internship experience involves four parties: the student, the internship supervisor (employer), the internship coordinator (school), and the minor student’s parents/guardians, who must agree to the work conditions, agree to provide insurance, and provide the means of transportation. Internships for college students aged 18 or older do not involve parents/guardians.

Student interns are typically required to meet certain standards set by the school, such as completing the OSHA 10-hour safety training course, establishing a training plan with the employer, adhering to standards of dress and decorum, submitting regular reports to the school regarding work activities performed, and writing a final summary report. Employers must typically agree to such things as creating a training plan that covers a variety of work activities, providing adequate supervision of the student, and providing timely feedback on student performance as required by the school.

The internship may be for a specified period (e.g., fall semester), or a specified number of hours (e.g., 320 clock hours). College internships are often done during the summer between junior and senior year. Rates of pay are typically set by the employer. Unpaid internships, if permitted by the school, are uncommon in the construction industry.

Internships benefit all the parties involved. Students receive practical experience and skills that cannot be taught in the classroom and learn whether the “dream job” of their childhood will be the right fit for them as adults. Employers get a long look at an individual, learn what is happening inside the local educational institutions, and get to provide feedback to shape and improve student learning. Schools benefit from the input from industry practitioners and the expansion of learning opportunities for their students beyond the campus facilities. Communities benefit from more mature, experienced workers who may be more likely to remain in the area after graduation and work for local companies.

The Internship Experience

Preparing for an Internship Program

Student interns from high school, community college or four-year college or university can contribute to the home builder's organization as future employees, but employers must take a longer view when determining whether to start an internship program. Student interns can be the source for future office personnel, construction labor, skilled trades, first-line supervisors, or field superintendents, but the internship period itself is a training period.

Evaluate Needs

Before establishing an internship program for students of any age, the home builder must consider the needs of the organization, determine how an intern will be utilized, and what resources will be required. Who will supervise the intern? What meaningful work can the intern perform with supervision? Are the work activities, the supervisor and co-workers flexible enough to accommodate the intern's available (and perhaps erratic) work hours? Is the need for help greatest during the school year, or over the summer months? Will an intern be welcomed and supported by current employees? After thoroughly evaluating the company's needs, draft a concise job posting to use in advertising an internship position. The high school or college career office may provide a template or examples for writing a suitable job posting.

Research the Legalities

The legal aspects of hiring students must be examined early in the process. Does the employee handbook need to be revised to address student interns? What are the requirements for pay and benefits? What are the insurance issues? What safety guidelines or other protections are needed for student interns, especially minors? Under what conditions can an intern be terminated?

Schools that place students as interns will have developed a set of guidelines and policies for the protection of students and can help employers navigate the legal requirements of hiring students. Internship manuals or guidelines developed by the school will establish the roles and responsibilities of all parties to the internship and contain forms and documents to assist the employer in fulfilling the supervisory role. For example, youth under the age of 18 are prohibited by federal law from participating in "any occupation the Secretary of Labor has determined to be hazardous," including roofing, using power tools including circular saws, nail guns and sanders, or operating heavy equipment including skid steers, backhoes or man-lifts ([DOL Fact Sheet #43](#)). There is limited exemption to the youth employment restrictions when the student is at least 16 and enrolled in an approved program, or when the student turns 18. The home builder's legal counsel should be consulted to review the internship manuals and forms provided by the school and [state and federal youth employment regulations](#) to make sure issues are addressed.

Develop a Training Plan

Internships are learning experiences for students, and the employer must have a plan for how students will be introduced and integrated into the daily work activities of the company. The plan should provide for the student to be exposed to a variety of meaningful experiences, including both field and office functions, in keeping with the age, level of schooling and legal limitations on activities of the student. CTE high school programs must prepare students to meet state-mandated performance standards, and training plan objectives should be developed to complement those performance standards. The school can provide the employer with these standards.

Example training plan activities for high school students might include:

- Use math to perform quantity take-off of items, lengths, areas and volumes.
- Read construction drawings, identify wood and metal framing components, perform quantity take-off.
- Participate in building layout, including location of lines and corners, squaring the building corners, identifying benchmarks and elevations, and identifying tools, equipment and safety procedures.
- Participate in building formwork for concrete flatwork, including learning the necessary materials, tools and equipment, including personal protective equipment.
- Read construction drawings to identify location and construction details of braced walls partition walls, plumbing walls, stairwells, and other features.
- Participate in wall framing, erection, plumbing and bracing.
- Observe installation of building systems including electrical, water, sanitary sewer, drainage pipes, HVAC, and plumbing.
- Participate in ordering, taking delivery and installing windows and doors.
- Read construction drawings and specifications to identify type, size and details of interior wall and floor finishes, cabinets, appliances and other items.
- Observe and take notes on subcontractor planning and coordination meetings.
- Observe vendor/supplier deliveries and documentation.
- Perform jobsite housekeeping and safety activities.

College or university programs may allow student interns and employers flexibility to craft a training plan or may provide a template with a list of the types of activities, skills or experiences the student should have during the internship. Example training plan activities for college interns might include:

- Perform quality control tasks to verify work performed is in accordance with plans and specs.
- Monitor work in place and compare against budget labor production for tracking purposes.
- Attend and document planning and coordination meetings.
- Establish and/or maintain a field submittal filing system.
- Post/draft as-built conditions on record drawings.
- Perform quantity take-offs for material ordering purposes.
- Assist with preparation of purchase orders for material and equipment.
- Prepare, log, and distribute requests for information (RFI's). Procure RFI answers from designer and distribute to relevant parties.
- Assist with preparation of billing/pay applications process.
- Review submittals ensuring compliance with contract documents.
- Log submittals from subcontractors in accordance with anticipate submittal log.
- Log change requests in document tracking system, procure subcontract pricing, and assist with preparation of contractor change order requests.
- Analyze subcontractor scopes; prepare bid tabulation for comparison purposes.
- Participate in sales and marketing activities.
- Shadow management during owner contract negotiations.

Finding and Hiring Interns

The distribution of CTE programs in the U.S. is geographically uneven—some states have a greater emphasis on career and technical education at the high school level, and construction programs at the two-year or four-year college level are limited in number. The home builder looking for a student intern to work part time during the school year may be limited to students from local schools or colleges, while summer interns (usually college students) may be drawn from a wider geographic area. The decision on which avenue is best may be based on the company's proximity to a pool of likely interns. Some initial research may be required to become familiar with local schools that offer a construction-related program.

Career and technical high schools are employment-focused and will typically have a placement office to act as the bridge between potential employers and students. The high school guidance office may also be an appropriate point of contact for employers. At the college and university level, employers may contact the placement (or career) office.

At both the high school and college level, it is typical in construction for employers to directly contact the faculty or administrator in the construction program to find interns, arrange interviews, or participate in career fairs. Construction faculty typically have construction experience themselves and are proactive in interacting with companies interested in employing their students. Employers can also meet prospective student interns by working with student organizations in construction programs such as the NAHB Student Chapter, providing speakers for student chapter meetings, hosting field trips to job sites, or sponsoring student teams in construction competitions. The construction faculty is also instrumental in facilitating these types of interactions.

At both the high school and college/university level, potential employers may become involved with the construction department by joining the industry advisory board, or IAB. An IAB informs the academic institution and specific academic program on industry trends and needs of construction employers and may assist in reviewing textbooks and course content during accreditation reviews. The IAB members often provide support for construction students, faculty and academic programs by donating time, expertise, building materials, equipment, travel money or scholarship funding.

Companies interested in hiring students may also participate in career fairs sponsored by the school. The trend for colleges has been moving career fairs to fall for companies hiring spring semester graduates. Some schools host career fairs in both the fall and the spring, and employers are advised to start early to have access to the best students. Career fairs are often coordinated through a career/placement office, but the construction faculty is a good contact for getting information on upcoming career events.

If no local schools offer construction programs, employers should not overlook students in accounting, marketing, computing, interior design or architecture and introduce them to the home building industry through these allied fields.

Managing Interns

Because the internship is viewed as a capstone experience for students who have nearly completed their academic education, the employer of interns has a responsibility to provide meaningful work activities that allow the student intern to learn. At both the high school and college level, internships are considered capstone experiences that apply the student's academic learning in a workplace setting, and help students transition from

school to work in a structured and supervised manner. As such, the student is overseen by two entities—the *internship supervisor* in the workplace, and the *internship coordinator* at the school.

At the workplace, the internship supervisor is responsible for developing and adhering to the training plan, providing regular feedback to the student and the internship coordinator, and ensuring a safe and supportive workplace for the student.

At the school, the internship coordinator is responsible for ensuring that the internship experience for each student is meeting expectations and academic requirements. The coordinator maintains contact with the student through weekly logs or reports, emails or phone calls, and a visit to the workplace to meet with the student and the internship supervisor. This site visit is typically conducted approximately mid-way through the internship period to verify that the appropriate safeguards and structure are in place for the protection and education of the student, to assure that the student is meeting the expectations of the employer, and to foster a positive outcome for all parties by addressing problems early.

All Good Things Must Come to an End

Internship experiences vary from a few weeks to a few months, typically near the end of the student’s academic career at the high school or college level. High school students may enter college rather than the workplace in the fall after graduation (but may continue to work through a college co-op experience or return to work during summers and breaks), while college students typically enter the work force immediately after completing their education.

Terminating Unsuccessful Interns

The internship experience should be a positive experience for students, employers and schools. If an intern (or an employer) is not living up to the agreement set forth in the internship guidelines, and an intervention by the internship coordinator has been unsuccessful in mitigating the situation, an intern may be terminated. The internship guidelines should address this outcome.

Retaining Good Prospects as Employees

Because the internship experience gives both the intern and the employer a long look at each other, it is not uncommon for successful interns to be hired as permanent employees upon graduation.

High school students who plan to continue to college may choose to enroll in a co-op experience and work for the home builder full-time during alternate semesters and summers. High school graduates who plan to enter the skilled trades may enter an apprenticeship program, earn certificates at a local community college, or continue learning through the home builder’s in-house training programs.

Four-year college interns typically complete their internship during the summer between their junior and senior years. Offers to impressive interns for post-graduation employment should be made promptly. In most construction management programs placement rates are very high and the best students receive multiple job offers prior to their graduation.

Other Pipelines

While this resource guide has focused on high school and college students who will graduate from their schools, many high school students drop out before completing the requirements for graduation. Programs that help

place these youth and young adults in employment and training programs may also be sources for construction employment. These resources include the federal [YouthBuild](#) program and the [HBI Job Corps Centers](#), in addition to state and local (public and private) job training programs.

Conclusion

An internship program can be a powerful tool for recruiting talented young people who will already have a long-term relationship with the company on the day they begin their full-time, post-graduation employment. Interns bring “book learning” and computer skills that may assist in key activities such as estimating and scheduling, combined with an eagerness to learn “hands-on” skills from experienced employees in the field and in the office.

Starting an internship program is not difficult. Schools that teach a construction-related curriculum are eager to place their students with good companies and will provide guidance to make the internship experience successful. Cultivating good working relationships with the faculty members who teach construction courses at the high school, community college or university level is key to finding and hiring students who are interested in a career in home building.