



2018 INDUSTRY STUDY

BRIDGING THE HVAC EMPLOYMENT GAP

Preface

The shrinking skills gap in the HVAC industry is not a sudden phenomenon. It is often reported that 25% of the workforce will be of “retirement age” by 2020. At the same time, the industry will see a 15% growth in the number of jobs created in order to meet the expected demand for HVAC services and products.¹ To put that in perspective, the average growth rate for all occupations is 7%.²

Idiomatically speaking, the wolf is at the door; it’s time to take on the challenge of reversing the misconceptions created by those outside of the industry and develop a sustaining workforce made of each successive up-and-coming generation.

The EGIA Foundation endeavored to fully understand the challenges associated with filling trades positions with qualified young professionals; in particular, those born in or after 1997.³ This post-millennial generation is just coming of age and approaching the next phase of their lives as working adults. The opportunity to influence students to consider a career that pays well, provides job security, and is always in demand is now.

1 Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Heating, Air Conditioning and Refrigeration Mechanics and Installers, on the internet at <https://www.bls.gov/ooh/installation-maintenance-and-repair/heating-air-conditioning-and-refrigeration-mechanics-and-installers.htm#tab-1>

2 Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Heating, Air Conditioning and Refrigeration Mechanics and Installers, on the internet at <https://www.bls.gov/ooh/installation-maintenance-and-repair/heating-air-conditioning-and-refrigeration-mechanics-and-installers.htm#tab-1>

3 “Defining Generations: Where Millennials End and Post-Millennials Begin”, Pew Research Center, Washington D.C. (March 1, 2018) on the internet at <http://www.pewresearch.org/fact-tank/2018/03/01/defining-generations-where-millennials-end-and-post-millennials-begin>

This first step was to take a closer look into the HVAC industry through a comprehensive research study. The goal was to better understand perceptions, misconceptions, and other issues that are contributing to the current HVAC labor shortage which is expected to increase exponentially over the next decade.

In this report, the EGIA Foundation goes a step beyond addressing the labor market disruptions from an aging workforce and an indifferent populous but also will propose strategies that address the questions that often arise when workforce development is discussed. How can the industry take ownership of its image from those who view HVAC as a “lesser” career choice? What are the best avenues for reaching those post-millennials who are not aware of the opportunities yet, but are apt to thrive as future technicians and installers? How can equipment manufacturers, educators, and contractors aid in engagement and development of those in forthcoming generations?

This report outlines the learning from a broad-sweeping research study performed by Decision Analyst and was conducted in the following three phases during late 2017 and early 2018:

1. Secondary research to examine the impact of economic and workforce trends.
2. A series of one-on-one, in-depth interviews with manufacturers, distributors, contractors, and educators.
3. A survey among manufacturers, distributors, contractors, educators, high-school students, and parents.

The EGIA Foundation appreciates those in the HVAC industry tirelessly working on solving the labor gap within the trades.

In particular, we would like to thank EnerBankUSA,
who without their support, this publication would not be possible.

We wish to also thank the Foundation Board of Trustees who provided the framework and vision.

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The EGIA Foundation is a nationwide 501(c)(3) organization focused on promoting HVAC as a first-choice career option through a unique coalition of industry stakeholders devoted to building the home service trades workforce through initiatives including public outreach, mentorship programs, scholarships, and more.

Decision Analyst provided the qualitative and quantitative research and subsequent data analysis. They are a research and analytical consulting firm serving major corporations, advertising agencies, and marketing consultancies in the Americas and across the globe. Decision Analyst conducts sophisticated studies on marketing strategy, market segmentation, product optimization, advertising testing, package optimization, new product concept testing and forecasting, website optimization, and customer experience optimization. The firm blends qualitative research, secondary data analysis, survey-based research, econometrics, and advanced analytics (modeling, simulation, and optimization) to solve the most difficult marketing problems.



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Overview

The HVAC industry's labor shortage is growing at an exponential rate. Decades-long shifts in economics, culture, and lifestyle have led the trades to this precipice. Solutions do exist. The qualitative and quantitative research when compiled led to some fascinating key findings and conclusions.

HVAC – The Little-Known But Often Maligned Industry

Research among high school juniors and seniors, as well as their parents, indicated that interest in an HVAC career is extremely low. For many, the idea of working as an HVAC technician – or any skilled trade – is perceived negatively. Yet, these same groups revealed a lack of familiarity with what HVAC work entails. Only 3% of students (Fig. 1) and 23% of parents (Fig. 2) are “extremely” or “very” familiar with HVAC work (another 43% and 40%, respectively, are “somewhat” or “slightly” familiar).

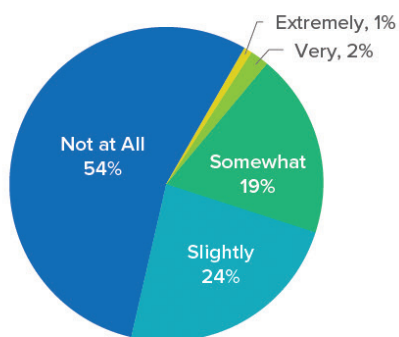


Fig. 1
Student Familiarity
with HVAC Work

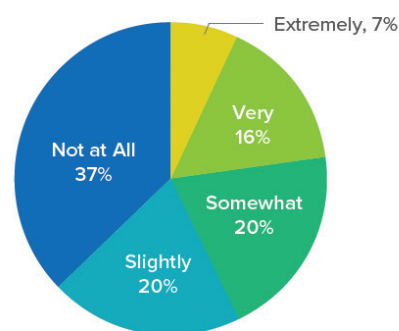


Fig. 2
Parent Familiarity
with HVAC Work

Past parental generations (Silent, Baby Boomers) generally had a strong desire for their kids to pursue a collegiate path. Parents' desire for one's children to achieve a better economic status meant to them a post-secondary education in a "white-collar" career. As these paths were pushed as being the most worthwhile, trades became perceived as "bad" or undesirable.

This same perception is given validity through the shift of primary and secondary schools' focus. Not long ago, every student attending a public middle or high school was exposed

to the industrial arts: carpentry, metalwork, sewing, cooking, and drafting. As attitudes about post-secondary education changed so did the programs available to students. Technical programs slowly faded away as schools pushed college preparatory studies. Fifty-four percent of surveyed students expressed that their guidance counselors provided information regarding vocational career paths (Fig. 3). However, it should be noted that vocational education does not necessarily involve skilled trades; in fact, little HVAC-specific content is offered. The National Association of State Directors of Technical Education Consortium has defined 16 vocational career groupings including business management, health sciences, hospitality, and information technology.

[HVAC is] not something that makes you feel proud or successful.

It's not something that will make your parents proud or feel happy for you.

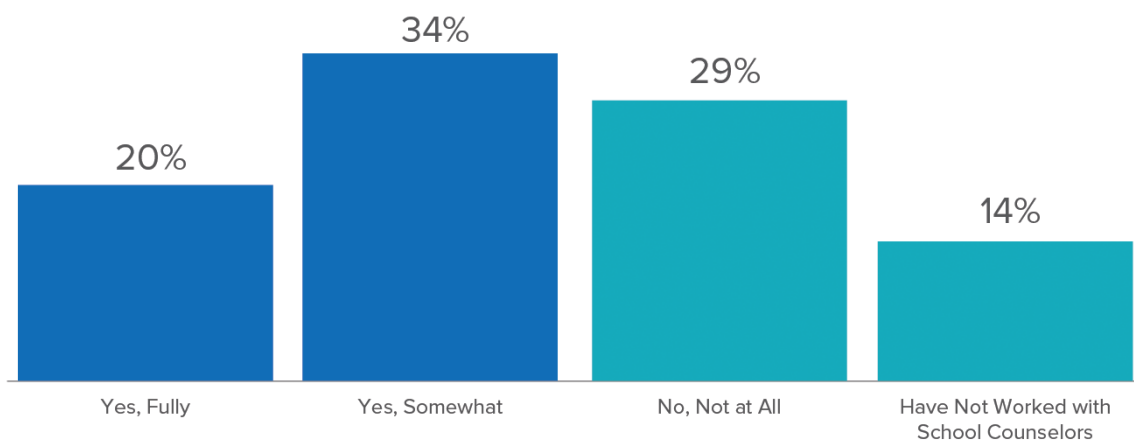


Fig. 3
High School Counseling: Inclusion of Vocation/Tech/Trades

Poor public image is seen by contractors, educators and the like as a major factor affecting the current labor shortage. Mass media perpetuates the stereotype that students who attend a trade school are lesser academically or troubled. A Disney sitcom, titled *Jessie*, designed for children 7 and up, aired an

episode titled “A Close Shave,” in which a Dennis the Menace-type kid is learning to shave for the first time. The dialogue of the main adult figure is latent with its bias against a trade education: “Our little Luke is growing up. Soon he’ll be applying to trade schools and, getting his own probation officer.”⁴

This concept of the trades as a warehouse of non-traditional learners has affected the quality of students entering HVAC programs. Educators and administrators of such curriculum have shared frustrations concerning incoming students. Many are unprepared, with deficiencies in core knowledge, basic academics, and in softer skills like communication ability. This seems to be true no matter the age; many students are in their 20s, entering an HVAC program as a “change of careers” (perhaps after being uncertain and/or working unskilled jobs right out of high school). As a result, these programs have to do all they can to bring students up to the level where they can effectively learn the trade and be prepared for their first jobs.

For years we’ve taught students that only the dregs of the student body go into the trades. This has caused the entire trade industry to be disdained as an opportunity. For many, it is seen as a last ditch effort for an underachiever or trouble maker.

For many, the vision of a contractor is that of “a bubba” not of someone who provides comfort, safety, and durability with state-of-the-art technology.

⁴ Valerie Ahern & Christian McLaughlin (Writer) & Shannon Flynn (Director). (January 16, 2015). A Close Shave [Television series episode] in Pamela Eells O’Connell & Adam Lapidus (Producer), *Jessie*, Disney Channel



Mike Rowe, TV personality, has communicated that the trades' image problems come from negative impressions perpetrated by those outside of the industry as well. In the attn: video, "Hollywood's Portrayal of Blue-Collar Jobs", he asks the viewer, "Close your eyes and picture a plumber, Is he 300 pounds? Can you see his butt crack? I bet you can."⁵

When surveyed, contractors identified negative public perceptions biasing the decision to pursue a trade career: all "good" jobs require a college degree (78%), HVAC work is not dependable, steady, year-round work (70%), HVAC work is for men only (69%), HVAC workers are not highly educated or skilled (68%), HVAC work lacks opportunities for advancement and earnings growth (68%), and HVAC is not respected work (68%) (Fig. 4).

Students have been told for 10-15 years there is only one path to success ... college.

People think it's not a job you brag about. I know people with degrees (even masters) who make less than an HVAC tech.

Maybe some young people think it is not sexy, like computer programming.

5 attn: (2017, September 27) *Hollywood's portrayal of blue-collar workers is all wrong*. Retrieved from <https://www.facebook.com/attn/videos/hollywoods-portrayal-of-blue-collar-workers-is-all-wrong-mike-rowe/1305416199493836/>

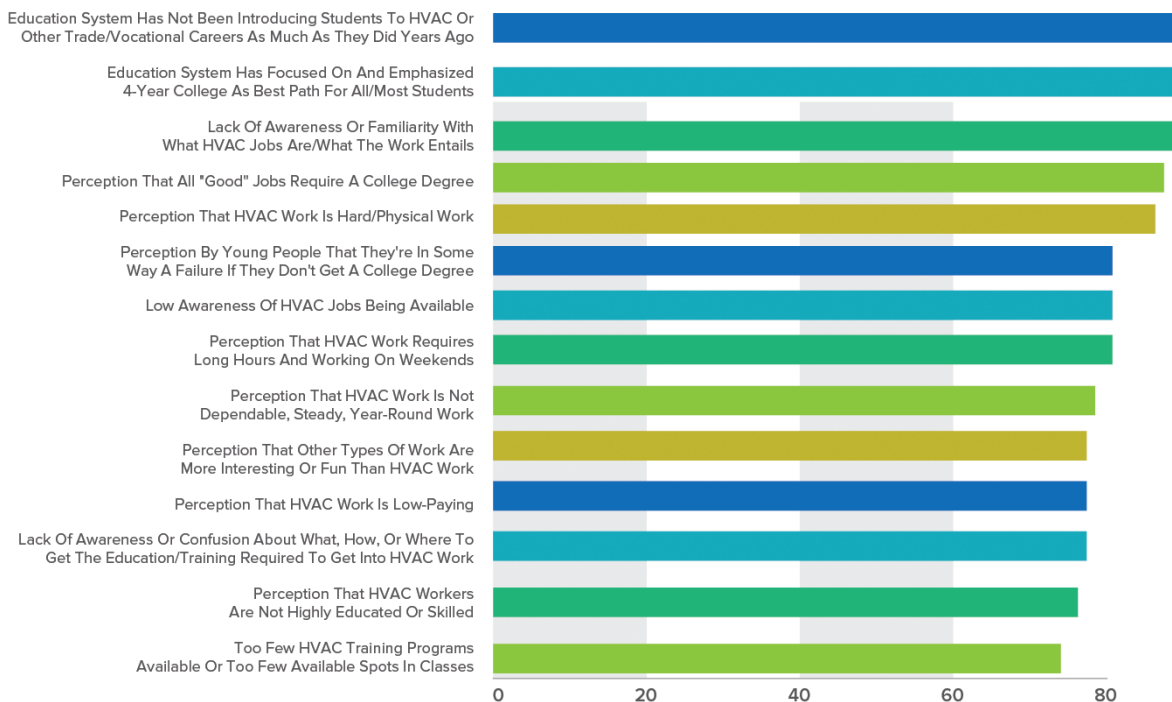


Fig. 4

Factors Impacting Worker Shortage: Contractor Agreement

The participating HVAC professionals feel that negative perceptions convince students to steer away from a skilled trade career path. Suspicions range from a general lack of respect to an overarching societal focus on 4-year college degrees.

HVAC Work Offers Characteristics That Post-Millennials and Their Parents Are Looking for in a Career

The most common perceptions of HVAC work from students and parents include: it's physical/hard/dirty/uncomfortable work, it involves long hours and weekends, it's not widely respected, it offers little variety/is boring, and it doesn't offer equal opportunities for men and women. While it's true that HVAC work will require poking one's head into an untouched crawlspace or navigating an attic on a sweltering summer day, the career provides its workers with so much more. People do not realize that many of the items they want in a job are aspects of a career in HVAC (Fig. 5).

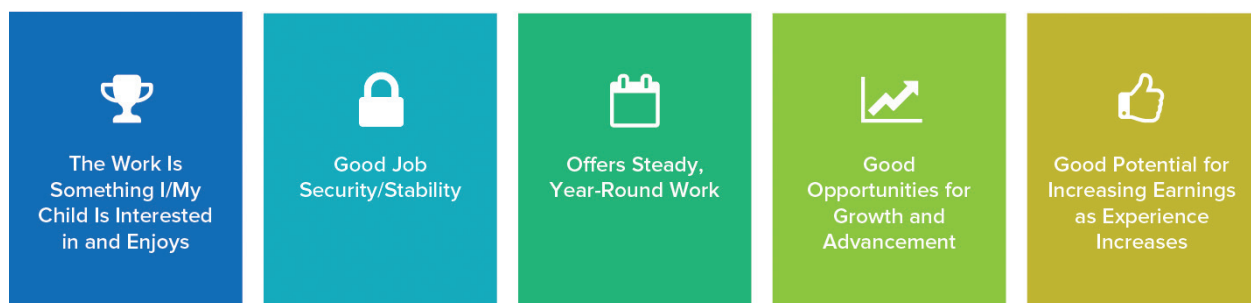


Fig. 5

Top 5 Career Characteristics From Students & Parents

Each survey group is largely similar in the aspects they identified. Secondary-aged students agreed that HVAC careers allow the ability to “get to work outside/not stuck in a cubicle/behind a desk” as well as being “a great fit for people with mechanical aptitude” and “[allowing an opportunity] for problem solving and troubleshooting.” “Careers in which jobs are readily available throughout the country” was identified as a key attribute by parents.

What Young People & Parents Are Looking for in a Career

Even though parents' surveyed indicated that a career in HVAC would make them proud, it appears they have very little intention to promote this pathway. In fact, 51% of parents surveyed expect their child to attend a four-year college.

Very few student respondents (13%) express probable or definite interest in an HVAC career; parents (70%) indicated they “probably would” or “definitely would” support their child if he or she were to Select HVAC as their chosen career (Fig 6). It is not surprising that parents would support their child's career decision as it's culturally encouraged in the Western world. Yet, the crux of this labor gap is the familiarity and understanding of HVAC. Hence, communication efforts must include student and adult perspectives.

This research confirms what has long been acknowledged; the general public knows very little about HVAC services let alone its career opportunities. While further research is needed to fully understand the true motivations and ultimate outcomes from the parent/student demographic, key concepts can be inferred in order to take steps toward bridging the HVAC employment gap.

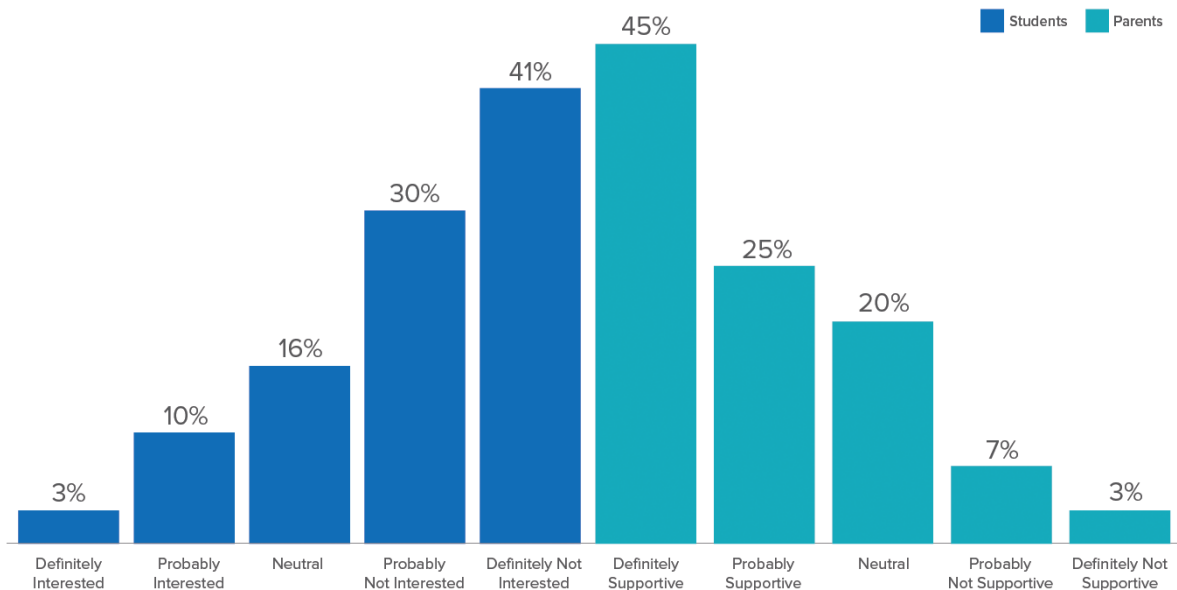


Fig. 6
Interest in Pursuing/Level of Support for HVAC Career Field

Change to Key Concepts Necessary When Working to Increase Awareness

Changing perceptions: HVAC is often seen as being dirty, hot, and uncomfortable and as requiring long/inconvenient work hours, which at times is true. Messaging needs to highlight the positives. Post-millennials are looking for variety in their work, something that won't be monotonous or boring. They and their parents also want foundational stability/job security, career and pay growth potential, and an affordable education. Those involved in the industry can easily communicate and demonstrate the positive traits in an HVAC career.

Establishing awareness: Post-millennial students and their parents have little knowledge of the HVAC industry let alone the careers available. Carefully-crafted and targeted communication about the types of jobs and breadth of opportunities can further build interest in the career.

Building excitement: Highlighting the high-tech nature of the work should be done in a way that builds intrigue and interest. A career in HVAC will be so much more than manual labor. It utilizes intelligence, mechanical aptitudes, as well as knowledge and interest in cutting-edge technology.

Advancing gender inclusivity: Women comprise almost 57% of the total workforce in the United States. Yet, they make up less than 1.7% of the HVAC workforce.⁶ Many women have the same mechanical aptitudes and economic aspirations as their male counterparts though communications and outreach are skewed towards men. It is essential that conversations about HVAC careers include more images and representations of women succeeding in the HVAC industry.

Supporting newcomers: If HVAC contractors donate their time to allow students to job shadow, it will provide valuable insight into the industry prior to students making decisions about their career and education. This will lead to a greater number of engaged and excited students entering HVAC programs and, therefore, better prepared technicians upon graduation. Internships are an effective way to help students who are beginning their education to become qualified, effective technicians more quickly. By giving back to the industry, students are brought up to a level where they can effectively learn and be successful in the business.

⁶ United States Women's Bureau. U.S. Department of Labor, Women's Bureau. Washington, DC: U.S. Dept. of Labor. [Web.] <https://www.dol.gov/wb/stats/NEWSTATS/latest.htm>



Awareness/Familiarity of HVAC as a Career Path

A staggering fifty-five percent of surveyed high school juniors and seniors indicated that they were not familiar or knowledgeable about HVAC work or career opportunities. Only 3% of students considered themselves extremely or very aware of the industry. While parents of such students considered themselves slightly more familiar with HVAC work (23%), 37% indicated that they had no knowledge of the trade (Fig. 7).

It's been said numerous times that our perceptions become our reality. And there are some notions permeating the industry's image that are potential hurdles that need addressing in order to attract more post-millennials to pursue HVAC as a first-career choice.

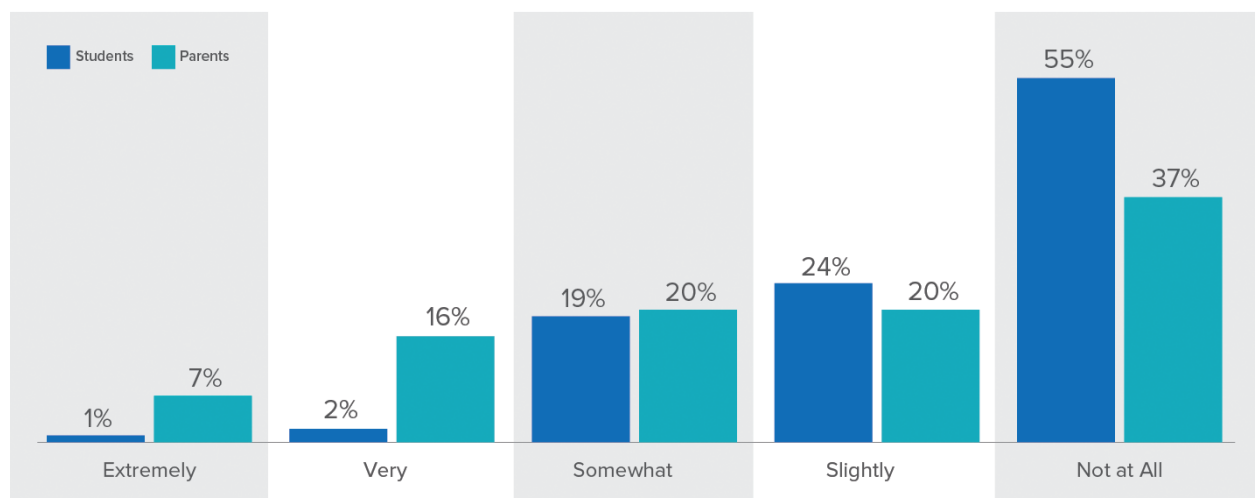


Fig. 7
Familiarity/Knowledge of HVAC Work

As cited previously, students and parents acknowledge that there are positive aspects to a career in HVAC. Each survey group is largely similar in the aspects they identified. Secondary aged students agree that HVAC careers allow the ability to “get to work outside/not stuck in a cubicle/behind a desk” as well as being “a great fit for people with mechanical aptitude” and “[allowing an opportunity] for problem solving and troubleshooting.” Careers in which jobs are readily available throughout the country were identified as a key HVAC attribute by parents (Fig. 8).

“Reality is merely an illusion, albeit a very persistent one.”

– Albert Einstein

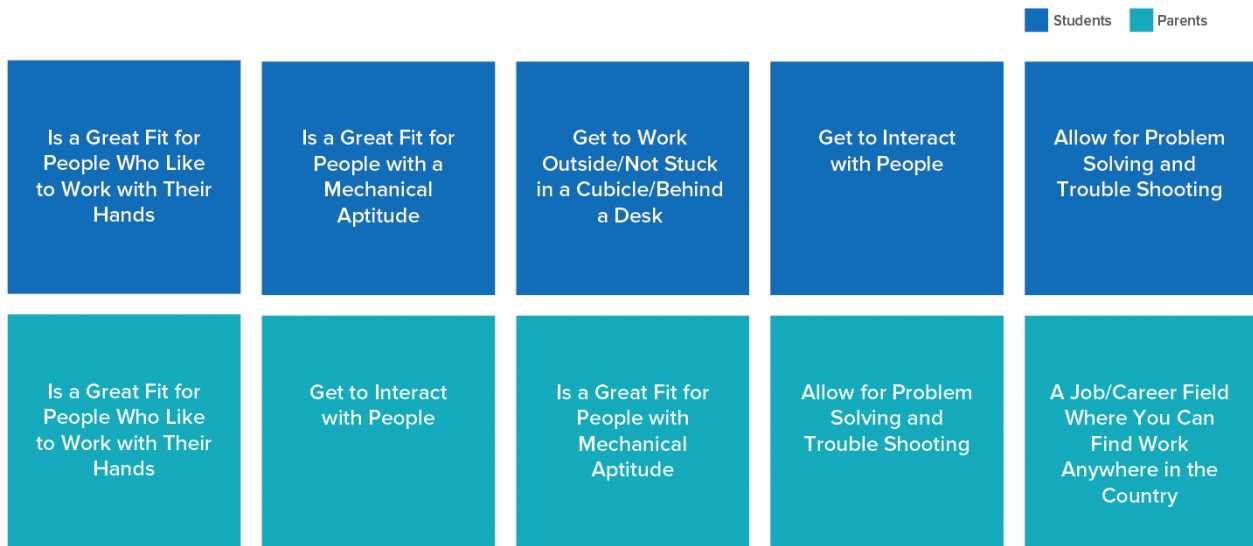


Fig. 8
How Students & Parents View HVAC Work (Top 5 Attributes Indicated by Students & Parents)

Generally speaking, parents are more positive in their views of HVAC work particularly as it pertains to the positive aspects of technology, job security, and advancement opportunities. However, there is a significant difference between the parents’ perception and that of their student-age children. While parents perceive themselves to be more knowledgeable about HVAC, it does not appear they are imparting that information to their children.

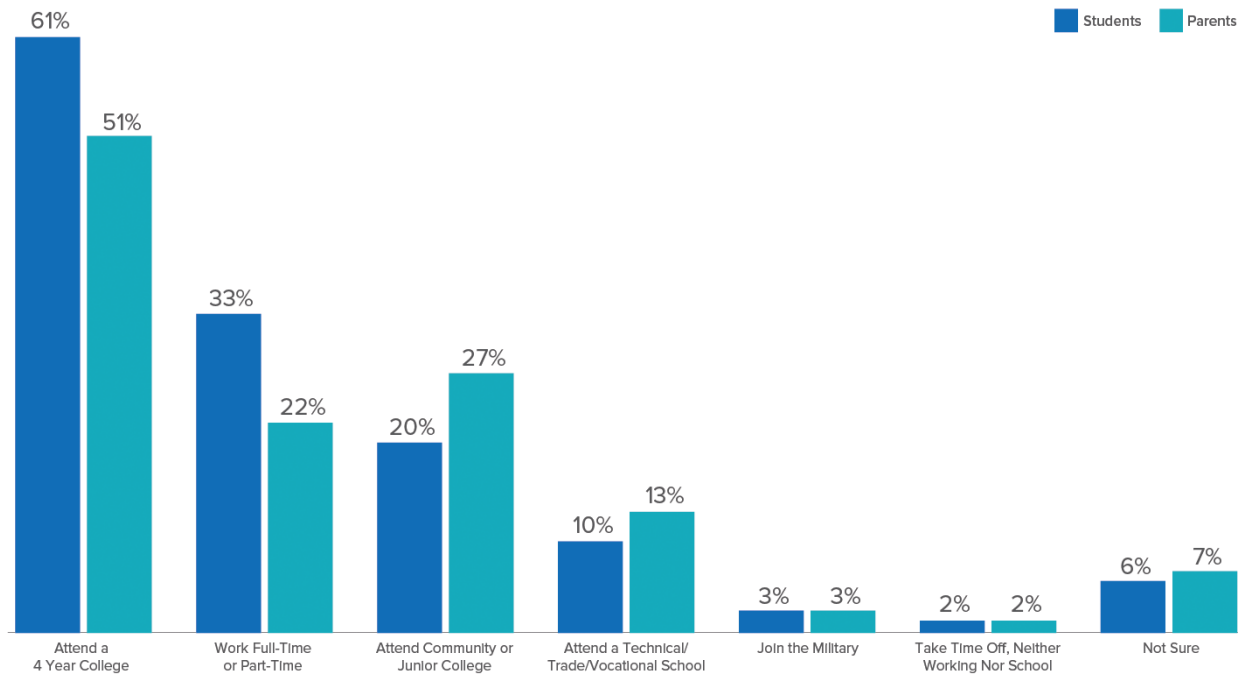


Fig. 9
First Year Post High School - Current Expectations

Public Perceptions of HVAC as a Respected Career

The Influence of 4-Year College Prep

It is well-known that students are pushed and primed into obtaining degrees from 4-year colleges or universities. Each of the rank-and-file research organizations focused on workforce development report similar findings and results: primary and secondary school students are conditioned to believe that the only way to be considered or become successful is by attaining a bachelor's degree. This aligned with students' post-high school plans: Sixty-one percent of students surveyed will likely pursue a bachelor's degree upon graduating from high school (Fig. 9).

Lost opportunities abound when it comes to vocational awareness. As schools face more and more budget constraints, ancillary programs like vocational education are eliminated. With few options and fewer champions, the trades became viewed as inferior professions to those with "white collar" occupations. Today, roughly one student out of 10 has plans to attend a technical or vocational school after graduation. Enrollment in a particular vocation was not asked as part of this question, therefore non-trade related programs could be the pathway the surveyed students have chosen.

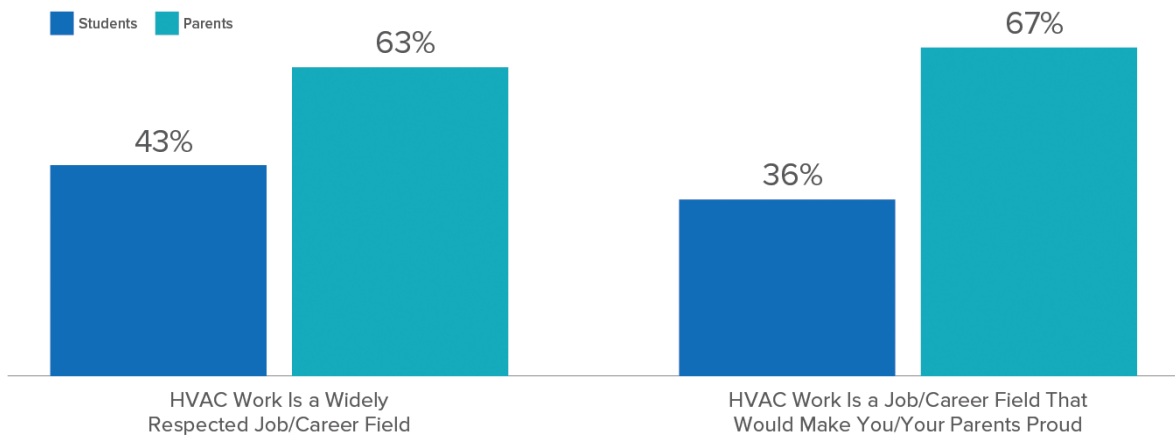


Fig. 10

Percent Who Agree Completely or Agree Somewhat with the Statement

Perceptions of HVAC as a Respected Career

Less than half of the students surveyed (43%) felt that HVAC was not a respectable career choice. The post-millennial generation does not view HVAC as a career that receives respect (Fig. 10). Both students and parents were completely aligned regarding their more negative impressions of what HVAC work entails. Physical work in uncomfortable conditions with long hours does not appeal to the post-millennial generation. These same students feel that HVAC work is neither something their parents would find pride in (36%) nor is it a respectable career choice (43%). Despite their indicated supportiveness, parents do not see HVAC having good opportunities for growth/advancement, low education costs, or an ability to easily find an entry-level job and opportunities within the HVAC industry nor do they have knowledge/familiarity of the industry in large numbers. Ultimately, parents indicated that they want their child to find work in something that interests them (Fig. 11).

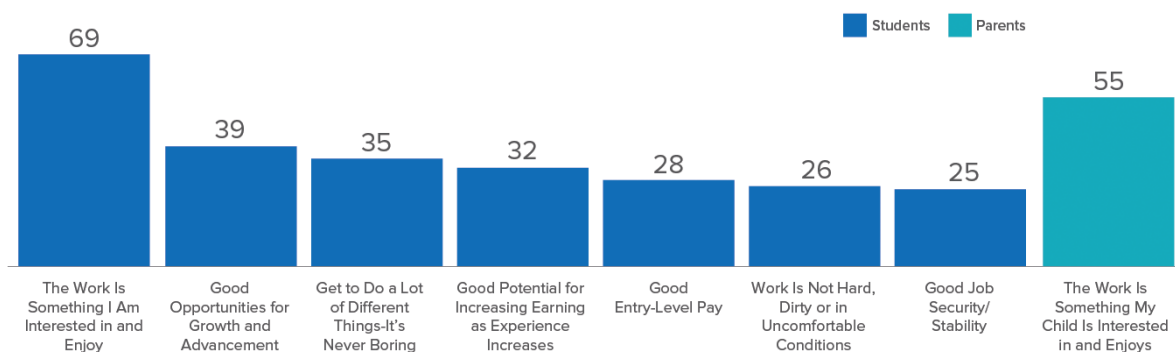


Fig. 11

Gap of Importance to Career Choice Versus Perception of HVAC

Educators' Impressions About the Public's Perception of the Trade

The education community does find that negative perceptions create a barrier to involvement. However, they cited the largest factor to low interest in the trades is the lack of exposure provided by secondary schools (53%) (Fig. 12).

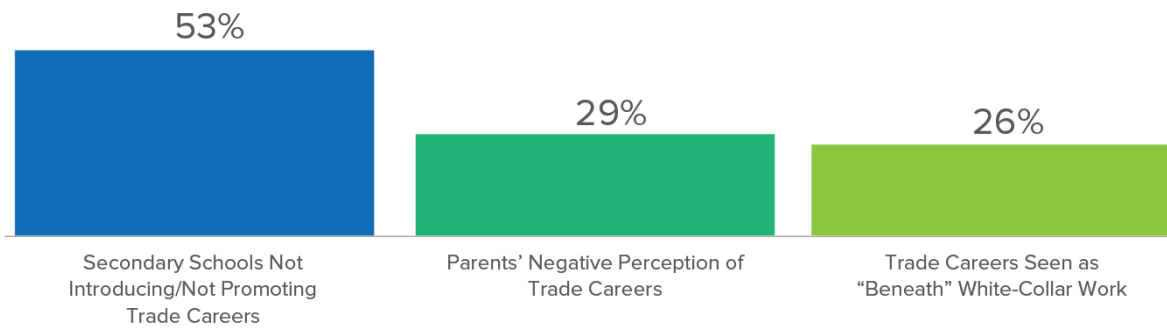


Fig. 12

Public Perceptions Affecting the Labor Shortage as Seen by Educators/Administrators

According to the students and parents surveyed, 55% of high schools offer vocational or trades programs. Of those schools, only 17% provide an HVAC program (Fig. 13). This roughly translates to only 1 high school out of 10 offering HVAC education. These results are concerning due to the knowledge about available secondary HVAC programs – very few technical trade programs exist in U.S. high schools. According to research by the National Center of Education Statistics, vocational school participation increased in the areas of communications, health care, public services, and culinary services, but not in any of the skilled trades.⁷

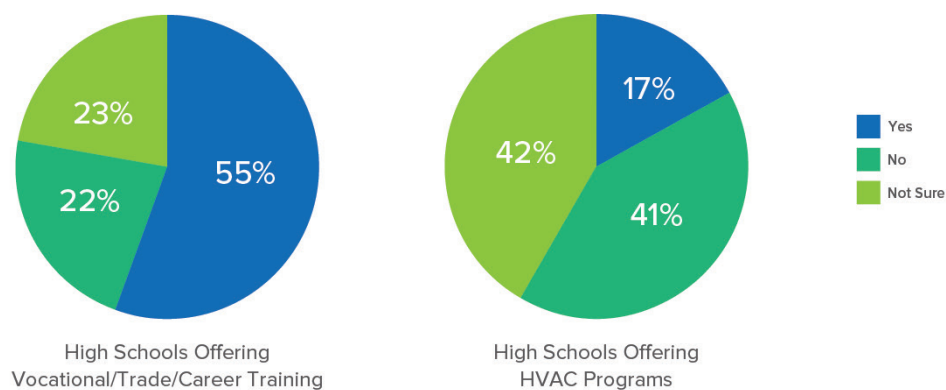


Fig. 13

High Schools Offering Vocational and HVAC Training

⁷ Hudson, (2013), U.S. Department of Education. Institute of Education Sciences, National Center for Education Statistics online at <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2014901>

Half of students surveyed have been exposed to a vocational path by their school counselors. Twenty percent of students claimed to be “fully” exposed to information about careers in the trades by school advisors, while another 34% were “somewhat” introduced, meaning a little over half (54%) were made aware of these vocational careers at all (Fig. 14). Those numbers worsen among female students, with 35% saying they never once discussed the trades with their counselors. Specific vocations were not reflected in the study thus it can only be presumed that these are not HVAC or skilled trade-related options based on noted national program offerings.

Students have been told for 10-15 years there is only one path to success ... college.

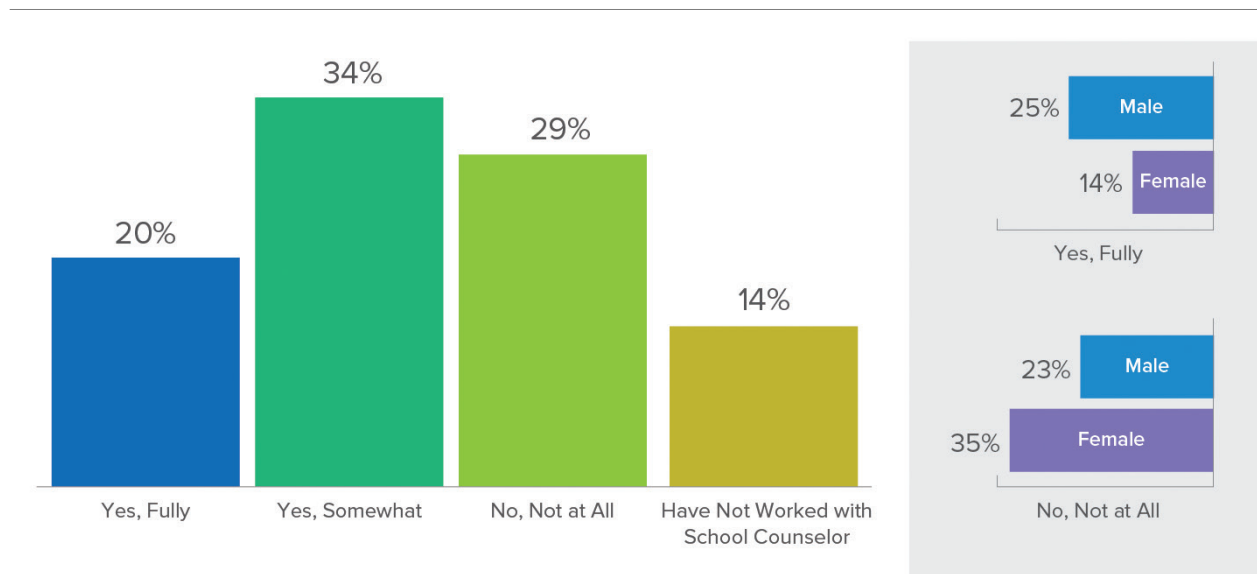


Fig. 14

High School Counseling: Was there Inclusion of Vocation/Tech/Trade Schools

Contractors & the Problem of Perception

Overall, industry professionals feel that the negative public perception and lack of exposure are the biggest barriers to students entering the trades as a first-career choice. Twenty-four percent of the contractors see the inherent physicality of the work as a contributing factor of disinterest in the trades (Fig. 15).

The greatest negative to young people considering a career in HVAC is the fact that most high schools today only promote college and downplay or do not promote trade schools at all. So it has become socially unacceptable to do physical labor to make a living.

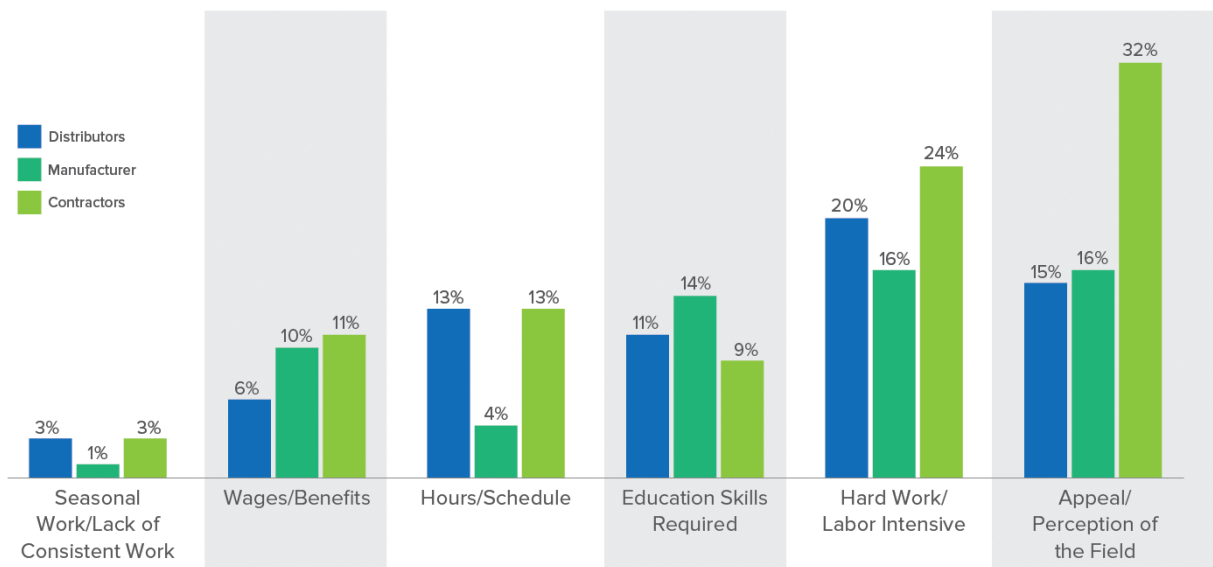


Fig. 15

Perceptions That Would Cause Post-Millennial to Not Choose a Career in HVAC as Seen by Industry Professionals

The HVAC industry is not well understood and this poor public image can be attributed to many factors. Neither the post-millennials nor their parents have knowledge of HVAC as a career opportunity, let alone the many positive aspects: starting salaries, variety of job types, and the long term for potential for growth.

Post-Millennials Are Looking for a Career That Offers:

- Good job security/stability
- Steady year-round work
- Good opportunities for growth and advancement
- Good potential for increasing earnings as experience increases

Contractors Felt the Positive Attributes of a Career in HVAC to Be:

- Great fit for those with mechanical aptitude and interest
- Easy to get started in and provide growth and advancement
- In demand and available anywhere in the US
- Able to provide good job security/stability
- Steady, year-long work opportunities

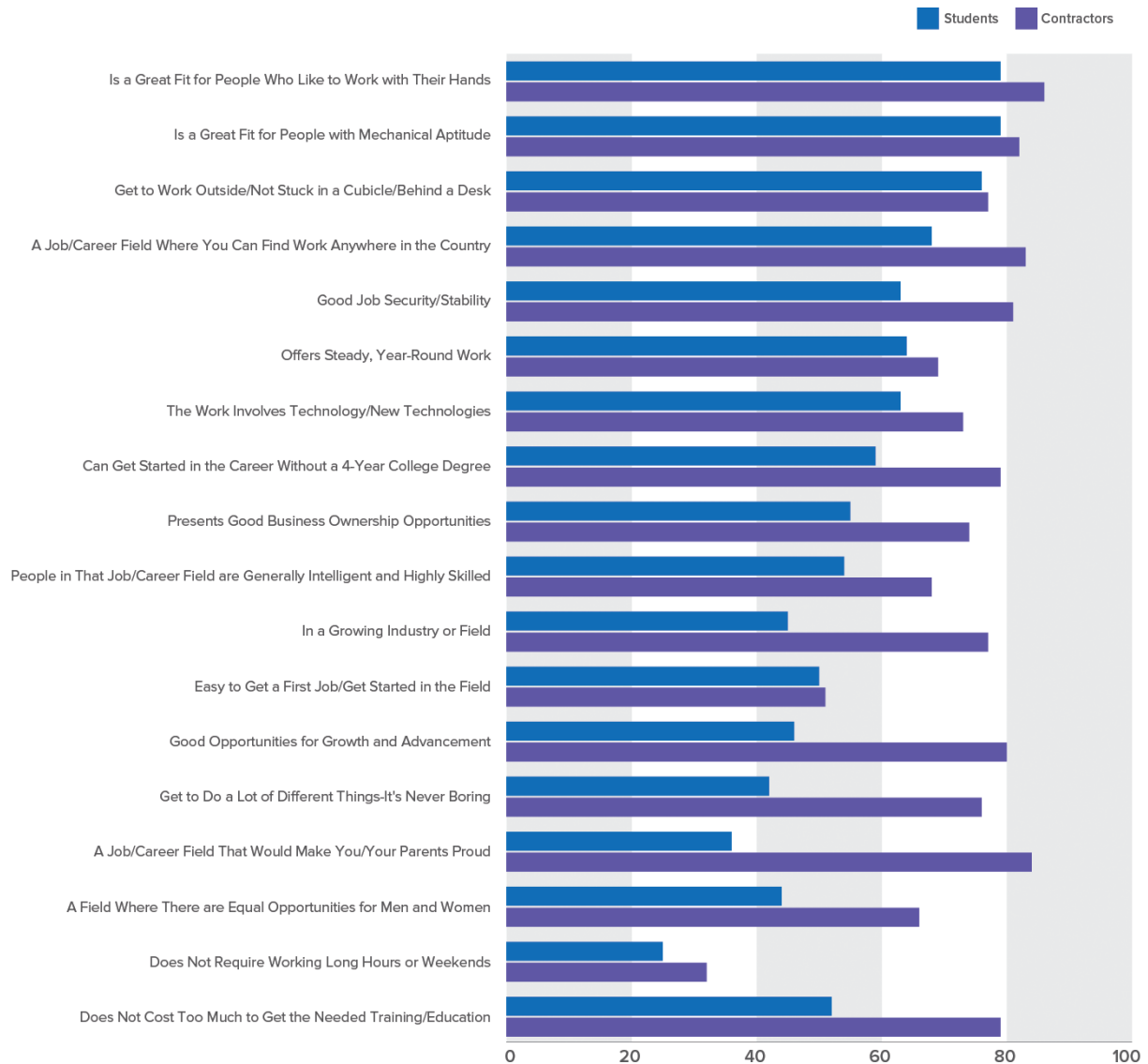


Fig. 16

Positive Attributes of an HVAC Career: Students Vs. Contractors

The research shows significant gaps between a contractor's perspective of the industry's positive attributes and what students understand those to be (Fig. 16). Nevertheless, it can be deduced that HVAC does have career highlights that would be of interest to post-millennials.

- Job outlook projections indicate that 48,800 jobs will be added to the market by 2026⁸. That roughly equates to 1 new technician for every 6 currently employed.

⁸ Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Heating, Air Conditioning and Refrigeration Mechanics and Installers, on the internet at <https://www.bls.gov/ooh/installation-maintenance-and-repair/heating-air-conditioning-and-refrigeration-mechanics-and-installers.htm#tab-1>

- Contracting companies do not experience the large seasonal employment swings as in the past. Most have complementary services, offer preventative maintenance care, and increase marketing efforts in those shoulder seasons. Moreover, climate control is needed year round and independent of economic downturns.
- As one's tenure in the industry grows, the opportunities for advancement increase. There are plenty of pathways available whether it is supervisory, sales oriented, or marketing-related. Oftentimes individuals rise through the ranks and move on to start a company of their own. The Fall 2017 Gallup Pool of Students discovered that 30% of post-millennials want to start their own business⁹: a common path that many successful company owners followed.
- The current median base salary for an HVAC technician is around \$45,000. Brand-new technicians (with no experience in field or post-secondary HVAC education) are being hired within a range of \$35,000 - \$41,000/yr. on average. Those with an Associate's Degree are hired with salaries closer to the median base. Salaries do vary based not only experience and education, but also by location and employer.

HVAC may never be considered a sexy job. Regardless, there are benefits of this career choice that post-millennials desire – and largely go unseen. Post-millennials provide the greatest opportunity in supplying long-term labor. The research infers that they are looking for job security, steady work, advancement, and entrepreneurship; all characteristics of HVAC contracting.

⁹ Gallup Student Poll (2017). Engaged Today – Ready for Tomorrow. (Data Set). Retrieved from http://www.gallup.com/file/education/233681/2017%20GSP%20Scorecard.pdf?g_source=link_wwwv9&g_campaign=item_233555&g_medium=copy

HVAC Considered as a Career Change

Administrators and instructors at post-secondary schools offering HVAC programs participated in this research. The responses indicated that the average student enrolling today is between 22 and 29 years of age and returning to school in order to make a career change (Fig. 17) and working part- or full-time. These non-traditional students can be returning to complete a degree, starting post-secondary education for the first time, or obtaining a degree/certificate in a different subject matter.

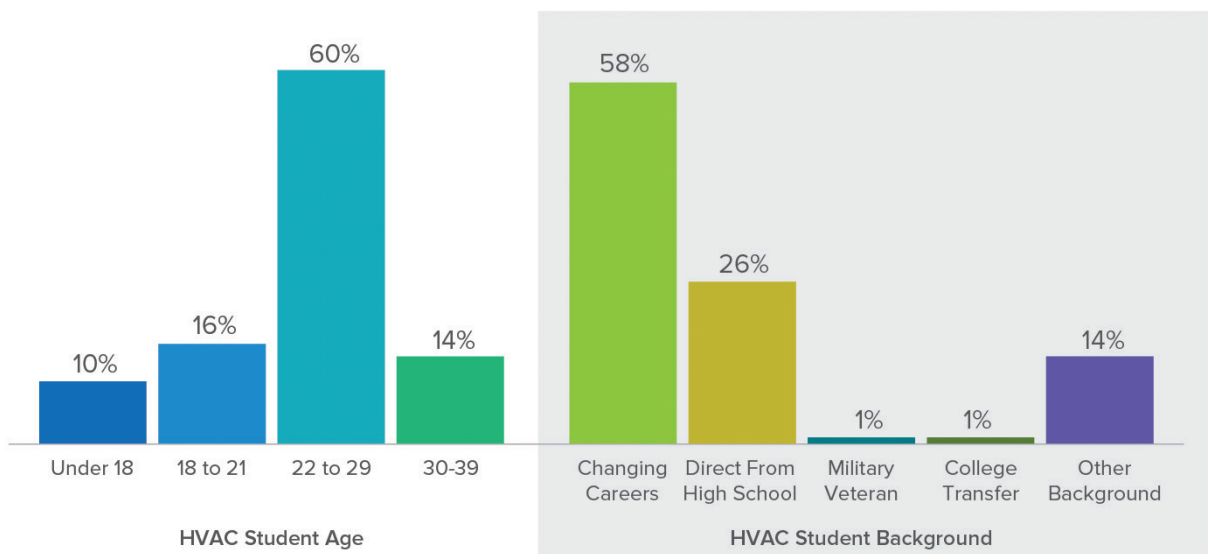


Fig. 17

Typical HVAC Program Student

This research suggests that 31% of contractors surveyed pursued a 4-year college education (Fig. 18). While it is unknown how many of that 31% chose to return to school with the purpose of making HVAC their second career choice, the responses regarding education/training level indicate that HVAC is not the first choice career of many.

The current labor pool of entry-level technicians skews heavily towards a change-of-life career or as a job for ne'er-do-wells.

A challenge with HVAC being viewed as an undesirable career is that students are often lacking basic knowledge, interpersonal skills, and mechanical aptitude. Therefore, time must be spent on ensuring the student body is proficient in general education subject matter.

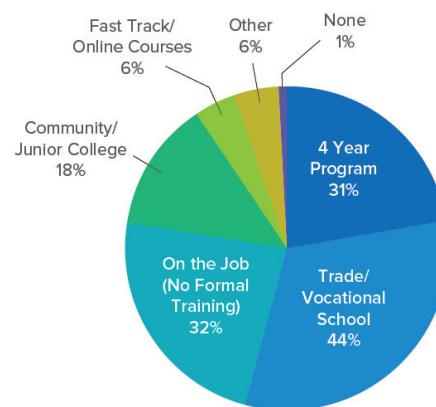


Fig. 18

Contractors' Education/Training Level

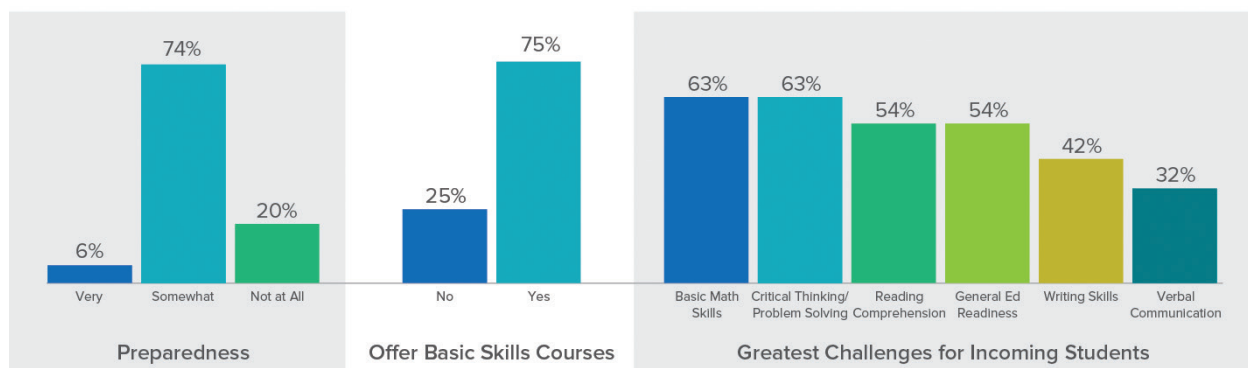


Fig. 19

New HVAC Student Preparedness/Challenges

The educators surveyed see most students who enroll in an HVAC course of study as unprepared to enter the program (Fig. 19). Students entering a tend to be lacking in basic knowledge: math skills (63%), reading comprehension (54%), and writing skills (42%). Consequently, most schools offer classes to build basic skills like math, critical thinking, and reading comprehension.

While there are opportunities to participate in accelerated technician programs, post-secondary HVAC programs, according to survey participants, are at least seven months in length. The majority of students (49%) opt for certificate programs even though half of programs offer an Associate's Degree (52%) (Fig. 20).

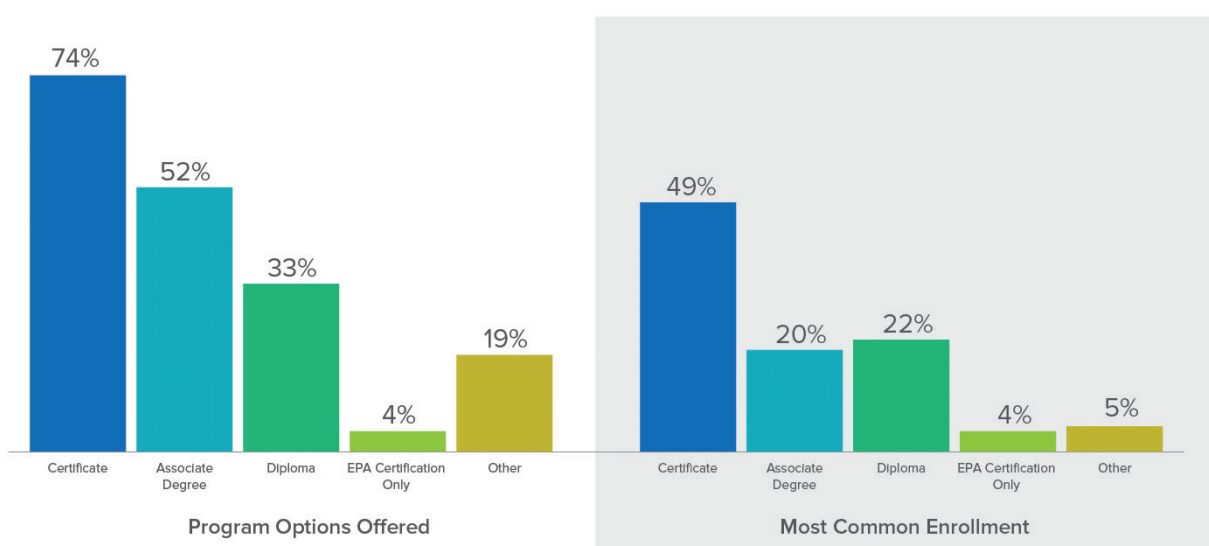


Fig. 20

HVAC Program Options/Enrollments

Contractors find that entry-level new hires with post-secondary involvement are more job ready than those with only a high-school diploma or GED equivalent. The majority of contractors have the perception that HVAC training programs and schools provide excellent training. Unfortunately, there are not nearly enough graduates to fill current job needs.

General education, understanding of HVAC fundamentals, troubleshooting/repairing system experience, and communication skills are considered must-have skills from approximately 89% of the contracting companies surveyed. While there is a level of aptitude required, one's disposition is crucial.

Reliability/dependability, positive attitude, and willingness to work were identified as the most important characteristics in a new service technician or installer (Fig. 21). In fact, mechanical ability and familiarity with equipment were selected by 6% and 3% of participants respectively.

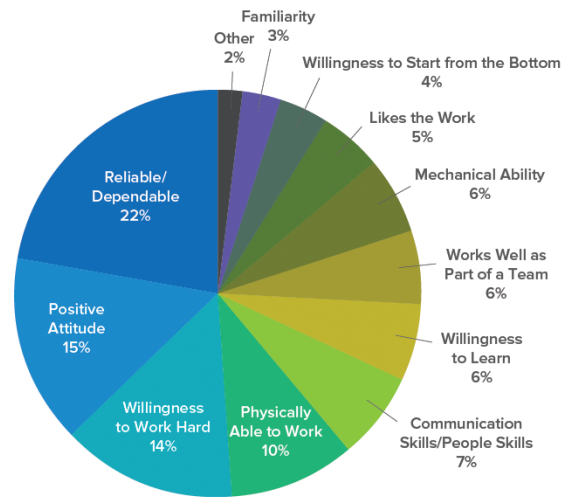


Fig. 21
Most Important Trait for a Service Technician to Have According to Contractors Surveyed

Looking into the demographics of the typical HVAC post-secondary student, it was shown that 73% of students became interested in the trade because someone close to them is working in the field (Fig.22). It could stand to reason that increasing HVAC's visibility and careers would accelerate the interest of post-millennials who may not have access to someone in the industry.

This raises the question, how can the HVAC industry be the "friend" of the world at large?

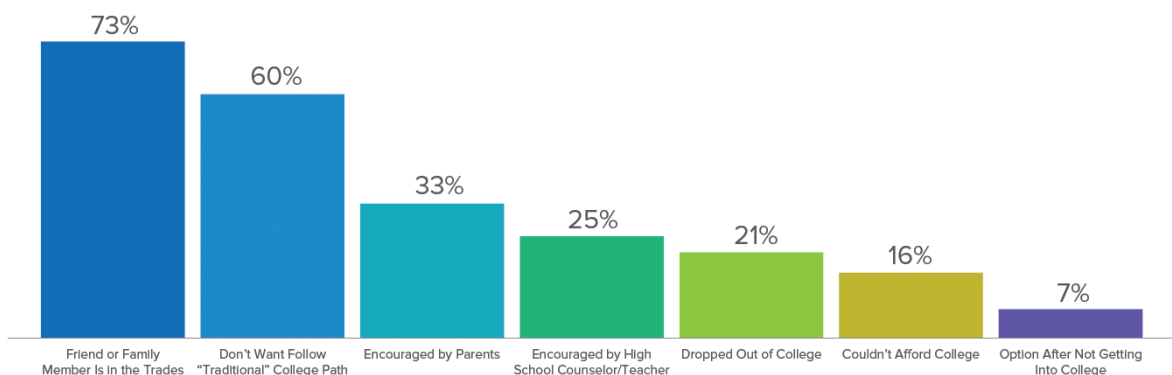


Fig. 22
Reasons Students Enroll in an HVAC Program (According to Post-Secondary Educators & Administrators)





Demand Supply

Conclusion

The labor shortage within the HVAC industry was foreseeable yet the magnitude of the problem is still shocking. Each year, fewer individuals are positively introduced to the trade while more tradespeople leave the workforce.

In a world without HVAC, companies can no longer hit current production levels. Computer systems require air conditioning to function. Employees need constant climate control throughout the seasons. Homes are opened up to environmental hazards and particulate matter with occupants experiencing high incidents of respiratory afflictions. Without humidity control, structures deteriorate more rapidly. Hospital-contracted infections increase and mortality rates decline.

Nevertheless, the HVAC Industry Can Begin to Take Charge of Its Destiny By:

Changing Perceptions

For too long, the image of a contractor is a terrible cliché. HVAC contractors are professionals in a highly technical field who work to preserve livelihoods, structures, and the environment. Those involved in the industry should take advantage of every opportunity to highlight who they are, what they do, and how they do it.

Building Connections

Join forces with like-minded stakeholders to create greater awareness of the industry. The research shows that very few people truly understand or are even slightly informed about HVAC and its career paths. Those working in the industry, from contractors to equipment manufacturers, should connect with technical schools by donating equipment or one's time to educate, inform, mentor, or hire those graduating.



Changing Perceptions, Building Connections

The EGIA Foundation Was Created to Facilitate These Actions.

The Foundation's Strategic Goals Are To:

- Drive greater awareness within the general public about trade careers and the work entailed through a national outreach campaign
- Build a coalition of industry partners and like-minded stakeholders to define and support the positioning of HVAC in a positive light
- Facilitate mentorship, guidance, and internship opportunities between HVAC companies and students
- Connect contractors with HVAC program graduates looking for entry-level employment

In the near term, the EGIA Foundation is implementing initiatives to engage future generations in viewing HVAC as a first-choice career.

Firstly, the EGIA Foundation is uniquely positioned to facilitate the connections necessary for all interested stakeholders to share information, combine efforts, and ultimately, create greater awareness of the HVAC Industry and lessen the labor gap.

Secondly, those post-millennials engaged in pursuing an HVAC related education, but who may not have funds to attend an accredited institution, could be the next recipient of the EGIA Foundation Scholarship Program. Unfortunately, the EGIA Foundation cannot provide every interested student with a \$2500 scholarship therefore partnerships with similar organizations will be forged to cross-promote opportunities. The long-term goal is to engage those in the industry in subsidizing a student's education through an endowment or reimbursement program.

Finally, the EGIA Foundation is launching a public awareness campaign, through the use of educational videos that will focus on driving improved awareness of the job types, availability, and opportunities for success in the HVAC industry. HVAC must be positioned as something far beyond skilled labor. Rather, the focus will be on the importance of HVAC in every facet of life, the advancement of technology, as well as its role in creating healthy, sustainable, durable environments. These nationally distributed videos will be developed to change the negative perceptions, familiarize people about the industry, and appeal to post-millennial interests. In the broadest sense, the general population needs to know more about the technology, the work involved, and the lucrative nature of jobs in this field. Increased general awareness will also serve to equip parents, educators and career counselors, and other influencers as they help post-millennials weigh all their options for life after high school.

No one person or organization can do this alone. Let's bridge the HVAC employment gap together and start generating tomorrow's workforce today.



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