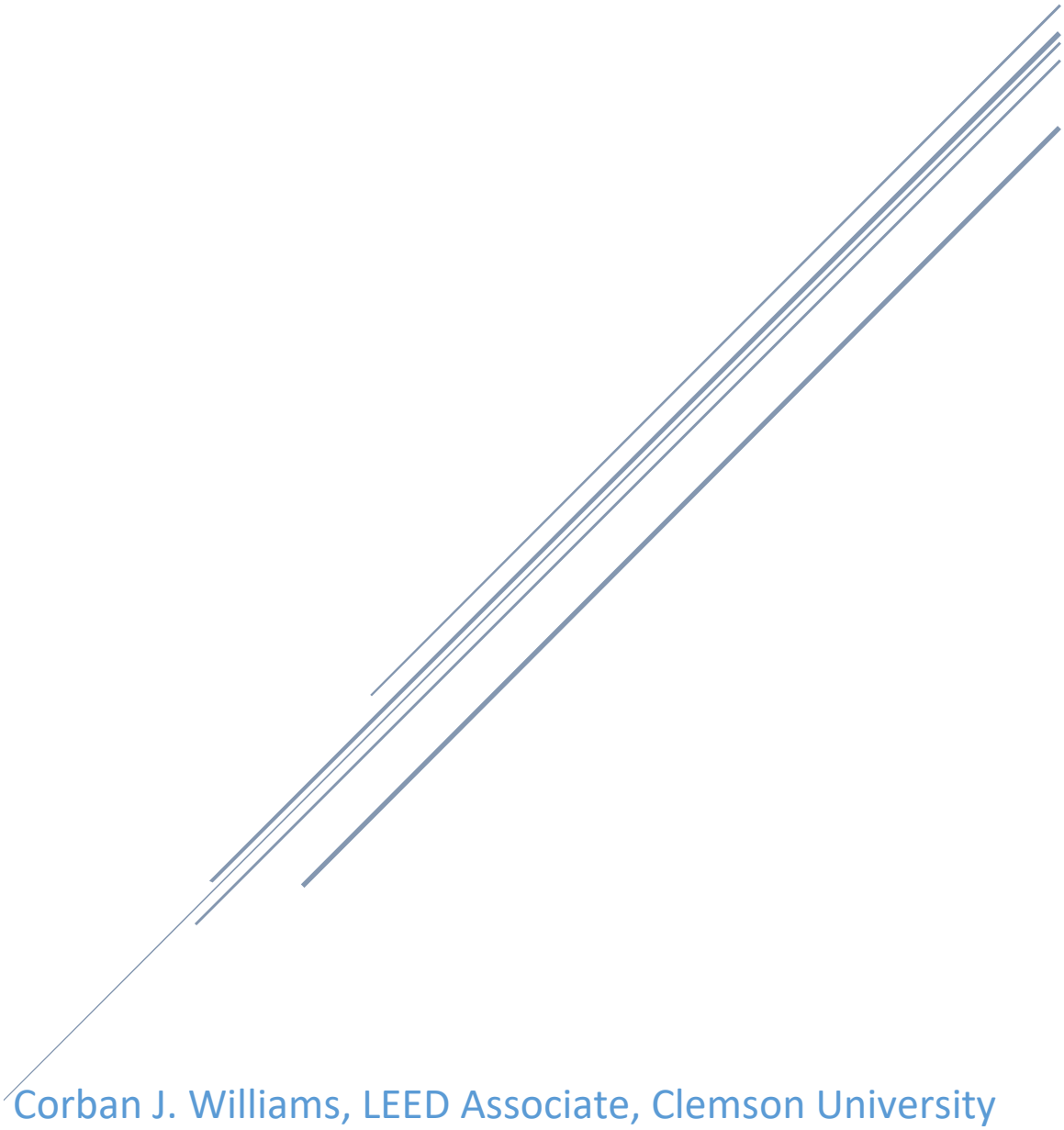
Increasing Diversity and Inclusion Through Mentoring Underrepresented Groups

AGC Allhands Essay Competition



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Abstract

The Construction Industry historically has struggled to gain traction with underrepresented groups, such as women, African-Americans, and the Hispanic/Latinx community. To combat this, industry-wide action is necessary to increase diversity and inclusion. Underrepresented communities have misconceptions about the construction industry including a lack of knowledge about the wide range of possible careers. By the AGC establishing a mentoring program with career goals and psychological attributes for grades 6-12 and college students, a positive dialog about the industry would be established. Visibility and promotion of the program would encourage students of underrepresented communities to consider a career in the construction industry.

As an African-American male in the United States, a career in the construction industry was not one that was spoken of frequently. As a child, I had a slight obsession with Bob the Builder, as most 4 and 5-year-old boys had, but Bob the Builder was nothing more than a TV show to me, at least I thought. This thought process continued into middle school where we had to choose ‘exploratories’, similar to a major in college. I liked building and drawing plans, but I knew that I did not like math; so engineering was not an option for me. Additionally, I had family members that were successful architects, so, naturally, I figured that architecture was the best fit for me.

That all changed when I was exposed to the general contractor which built my church, Construction Dynamics, Inc., the largest African-American owned construction management and contracting firm in the State of South Carolina. I was introduced to David Myers, Director of Operations, and Clemson graduate and CEO, Nate Spells, Sr., the first African-American to graduate from the Construction Science and Management program at Clemson. This was the first time I had seen African-Americans in successful careers in construction management. Before this, I had never considered a career in the Construction Industry. I had closed myself off to considering an area like Construction Management as a career, until I saw people who looked like me in a field that was dominated by people that did not look like me, be successful in their endeavors. I refocused my interests in college, especially as I was given the opportunity to have intentional mentors and to experience the benefits of having positive, like-minded individuals as a part of my support system. Because of intentional mentorship, it has allowed me to be able to speak up and encourage other underrepresented populations to see what the construction industry has to offer.

The term “mentor” or “mentorship” is commonly defined by the Cambridge Dictionary as “the guidance provided by a mentor, especially an experienced person in a company or an education institution” (Cambridge Dictionary). In the construction industry, the need for mentorship to underrepresented groups is important. In order to assure that the construction industry begins to gain traction as being modern, attractive and inclusive, the industry needs to consider its current techniques for increasing diversity and inclusion. This could be done via promotion and mentoring, to project a positive image to the public. By targeting underrepresented communities and providing mentorship opportunities to students early in their development, it opens up a new labor pool of potential workers.

Self- Efficacy: How A Single Trait Can Increase Diversity and Inclusion Participation

In order to understand what needs to be implemented in a successful mentoring program for underrepresented groups, we first need to understand the influence behind decision making. This influence can be attributed to the theory of Self-Efficacy, which “refers to an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments” (Bandura). Underrepresented communities often have certain hidden nuances that can hinder their growth and belief in Self-Efficacy to enter into a ‘non-traditional’ industry such as construction. This thought process may not completely be erased through mentoring, but has been proven to help students increase their perception of themselves and their own capabilities. Mentoring can provide additional resources, such as hands-on industry experience and a support system that is beneficial to increase one’s Self-Efficacy. It has been documented that there is a correlation between Self-Efficacy and a student’s entrance and completion of a construction-related program. The power of Self-Efficacy and the student’s perception of their capability strongly influences behavior when presented with situations outside the norm. For underrepresented

populations, construction careers that are seen as “successful” can be a primary factor that influences their potential talents. Through mentoring, the mentee- mentor relationship can be strengthened by reinforcing the idea that careers in the industry, especially managerial-level careers, can lead to very successful pathways. With the development of a mentoring program for underrepresented groups in the construction industry, there are two facets that are essential to the program. The first facet is that the program has a strong career base, with support and tools to help students navigate the industry and improve their networking skills. The second facet is that there is a positive psychological element. With detailed implementation, the program will be able to meet the needs of each student to open up new opportunities and promote positive attitudes about careers in the industry.

Women and the Construction Industry: Where Are They?

According to a NAWIC study done in Sydney, Australia, with grade 11 girls (high school junior equivalent), it was shown that none of the students could see themselves with a career in construction. “The girls not only had very little knowledge of the construction industry, but also had fears of entering the industry relating to not being heard enough or having careers being limited to holding signs or directing traffic” (Carnemolla).

Attention from construction organizations are necessary to support underrepresented groups to become champions for diversity and inclusion. As women grow up and are influenced by their environment, it is possible that they may completely rule out an industry such as construction. Variables such as environmental factors are extremely influential in women’s career choices. Some examples of this could be statements from close relatives such as, “women are not usually in construction”, or “construction management is too low level of a job”. Further refuting this point, a study done by Davey and Stoppard showed that one-third of female 12th graders surveyed expected to have

occupations that were traditionally more female than their preferred occupations. A program that has had much success in changing perceptions of the industry is the Women in Construction Management Summer Institute held at Colorado State University. The Institute accepts about 30-40 female high school students each summer at CSU and teaches the young girls about the basics of Construction Project Management. The Institute also teaches values that can only come from mentorship such as self-reliance, self-efficacy and strength in numbers in the industry to promote growth and resiliency. By the end of the 2019 program, according to the year-end report, *High School Girls Learn about Construction Management at Annual CSU Institute*, "100% of participants gained a lifelong mentor that they could rely on, 100% of the participants felt that they were more informed about leadership roles for women in the construction field and how to navigate the industry as a woman, not only recommend the program to other women, but also 100% of the participants agreed that construction is a great field for women" . The industry must create its own mentoring programs and outreach initiatives from middle school into college to overcome female perceptions of lack of interest by underrepresented groups.

The Latinx/Hispanic Population in the Construction Industry

According to the Bureau of Labor Statistics, Hispanic/Latinx workers make up over 3.2 million people in the US construction industry workforce. This percentage rounds out to about 30%, which is the largest percentage of any ethnic minority group in the

construction industry. Unfortunately, only “6.9% of workers have a bachelor’s degree and 45% of all Hispanic/Latinx workers in the Construction Industry are not in managerial positions” (Bureau of Labor Statistics). It is important to include the Latinx/Hispanic population because of the massive labor pool that could be expanded in the construction industry. To combat this lack of representation in managerial positions, the Construction Management Academy Career (CMAC) was created to “prepare young Hispanic men and women—as underrepresented minorities—for successful careers and future leadership roles in construction and construction-related industries” (Escamilla, Edelmiro, et al.). CMAC is aimed at High School Juniors to highlight the industry and introduce careers in Construction Management. The program provides engagement and outreach in communities where local construction companies are based. By giving the students local connections and opportunities to see work being done in their community, it allows for tangible evidence that assists in changing the negative perception of the industry. CMAC consists of a new focus each day offering classes such as Architectural Drafting, Construction Management, Carpentry, Welding, and Agriculture. At the end of the program, a survey was taken asking the students, “How confident are you that participating in the Construction Management Academy will make a positive impact on your career choice?” (Escamilla, Edelmiro, et al.). The results showed that the majority of the students were more likely to have a positive attitude towards a career in the industry. Similarly, At the University of Texas (Austin) , the Project M.A.L.E.S (Mentoring to Achieve Latino Educational Success) uses peer-peer mentoring to “allow for longer-term bonds between undergraduate, graduate and professional mentors for Middle School and High School students of color participating in the mentoring program” (Sáenz, Victor B.,

et al). A study was done using Hispanic/Latinx students to identify top needs for success during their tenure at the University. The students ranked mentoring programs most frequently, making up 45% of the number 1 choice on the survey.

Increasing Participation Amongst African-Americans in The Construction Industry

African-Americans in the workforce make up a significant percentage of the total labor force in the United States, but are still extremely underrepresented in the construction industry. In 2018, less than 4% of Construction Managers and less than 5% of first-line supervisors in the United States were African-American. The number of African- Americans in Construction Management positions has not seen much growth in the past
10 years according to the Bureau of Labor Statistics. Parents and educators alike want what is perceived as best for their youth and perceptions may come from cultural and societal norms. However, these perceptions may not accurately reflect the industry in regards to career success. This further highlights the importance of having industry mentors who have navigated the industry with experience to shed light and guidance on a non-traditional career.

According to the *Projections of Education Statistics to 2025,* there will be an increase of "African-Americans receiving college degrees by 22%" (Hussar, W.J., and Bailey, T.M.). As a result of this growth in this underrepresented community, certain STEM industries have made it known that increasing visibility within underrepresented groups is a problem that can be addressed through mentoring programs. STEM fields are recognizing the importance of diversity and inclusion by seizing the opportunity to recruit the new influx of college graduates. Conversely, there is a substantially higher amount of African-Americans in labor-intensive sectors of construction such as, "cement masons, concrete finishers and terrazzo workers that made up 12.5% of the subset of the (African-

American) population and highway maintenance workers that made up 12.2% of the subset of (African-American) workers in 2018" (Bureau of Labor Statistics). This increased number of African-Americans in labor-intensive jobs could correlate to how this community perceives the industry. The Colorado Association of Black Professional Engineers and Scientists (CAPBES) created a program designed to introduce and create positive mentoring impressions on middle school and high school students interested in construction. The association has noted that "(a) students career decisions are heavily influenced by their peers and (b) students tended to follow the career path of the CAPBES' volunteers and/or instructors that the students admired" (Brigham, Dewey, et al). The increased visibility of construction professionals in the program such as teachers and mentors, have made a positive effect on the mentees and their perceptions of the industry. The majority of the middle school students thoroughly enjoyed the program and were more apt to choose construction classes. This information provides a good measurement of mentoring underrepresented students at an early age.

Looking Ahead to the Future: Effective Program Implementation

The AGC has already taken an important first step by asking student groups what the organization should do. The next step is for the AGC to ask Minority and Women Executives, Project Managers, Directors of Operations, etc., for their honest opinions on the direction to ensure the best course of action in mentoring young students. Correct implementation of a mentoring program would involve the creation of a diverse action team of underrepresented entry-level and seasoned construction professionals and executives. This team would be tasked with implementing the AGC's programs at a national and local level. The AGC should provide support by offering marketing assistance

and the promotion of the program for industry and legislative buy-in. The AGC could also provide support to colleges and school systems for outreach programs to women and minority students.

The execution of these programs could flow under a ‘chain mentor’ system. In this system, the underrepresented industry partners would take the lead. These industry partners at a local level would be introduced to local college students via the schools’ collegiate AGC chapter. The industry partner would mentor the college students in preparation for a career in the industry. With this ‘chain system’, the college students would, in turn, mentor high school and middle school students within the community. The AGC, both nationally and locally, would need to spearhead the effort in making connections with local school districts to identify the areas that would be best served for the program. The college students, with assistance from industry mentors, would provide enrichment opportunities for exploration of the industry for younger students. This would inspire those students to keep the ‘chain’ of success visible within underrepresented groups in the construction industry. The AGC could explore opportunities to partner with organizations such as NAMC (National Association of Minority Contractors), NAHC (National Association of Hispanic Contractors), and the NAWIC (National Association of Women in Construction) to further broaden its reach into each respective community that the organization is servicing.

It is clear that these underrepresented communities can strongly benefit from an intentional mentoring program. By the AGC creating a program to increase diversity and inclusion through mentorship for underrepresented groups, the construction industry can experience new opportunities for growth and change. If the AGC is able to forge

intentional relationships with industry professionals and students of underrepresented groups, provide them with support, resources, and open lines of communication, the possibilities to promote visibility in the industry via mentoring are highly attainable. Mentoring in underrepresented communities is important to the construction industry to assist in its efforts to promote diversity and inclusion. When younger students see their mentors being successful and actively enjoying what they do, it could potentially inspire them. Regardless of the mentees' career decision, it would change how they view the construction industry as a whole.

"With the significant increases projected for the underrepresented populations in the next several decades, it is imperative that efforts are put in place promptly to get various minority groups engaged within the Construction Industry." These words came from Clemson graduate Nate Spells, Sr., one of my mentors and the first African-American to graduate from the Construction Science and Management program at Clemson. The AGC has tasked students with discovering new means and methods of attracting and maintaining underrepresented groups, as well as discovering new ways to create a more inclusive environment in the construction industry. By implementing a mentorship program for underrepresented groups in the industry, it will promote and ensure increased participation. There is nothing more impactful, as a college student, than to establish that they are able to have the same opportunities that I was given through mentoring. When I graduate, I intend to commit my time and effort to support this plan for mentoring underrepresented populations. Together with the AGC, we can be highly effective in increasing diversity and inclusion in the industry.

Works Cited

Bandura, A. (1977). *Self-efficacy: Toward a unifying theory of behavioral change.* Psychological Review, 84(2), 191-215.

Brigham, Dewey, et al. *Increasing African-American Participation in the Construction Industry* . vol. 48, Associated Schools of Construction , 2012, pp. 1–8, *Increasing African-American Participation in the Construction Industry* .

Bureau of Labor Statistics, U.S. Department of Labor, *Current Population Survey*, [Labor Force Statistics from the Current Population Survey], on the Internet at [https://www.bls.gov/cps/cpsaat18.htm] (10/20/19)[11/02/19])."

Elliott, Jonathan W., et al. "Promoting CM Student Success: Establishing an Academic Performance Benchmark Given Construction-Education Self-Efficacy, Motivation and Planned Behavior." *International Journal of Construction Education and Research,* vol. 13, no. 4, 2017, pp. 284–298., doi:10.1080/15578771.2016.1249316.

Carnemolla, Phillippa. *Girls Perceptions of the Construction Industry: Building a Picture of Who Isn't Interested in a Career in Construction and Why*. NAWIC IWD-Australia Scholarship Report, 2019, *Girls Perceptions of the Construction Industry: Building a Picture of Who Isn't Interested in a Career in Construction and Why*, www.nawic.com.au/NAWIC/Documents/Philippa_doc.pdf.

Davey, F. H., & Stoppard, J. M. (1993). Some factors affecting the occupational expectations of female adolescents. *Journal of Vocational Behavior, 43,* 235-250.

Escamilla, Edelmiro, et al. "Factors Impacting Hispanic High School Students and How to Best Reach Them for the Careers in the Construction Industry." *International Journal of Construction Education and Research*, vol. 12, no. 2, 2016, pp. 82–98., doi:10.1080/15578771.2015.1077296.

High School Girls Learn about Construction Management at Annual CSU Institute." *Women in Construction Management High School Institute,* 19 June 2019, www.chhs.colostate.edu/cm/programs-and-degrees/b-s-in-construction-management/women-in-construction-management-summer-institute/.

Hussar, W.J., and Bailey, T.M. (2017). *Projections of Education Statistics to 2025* (NCES 2017-019). U.S. Department of Education, Washington, DC: National Center for Education Statistics.

Mentorship: Definition in the Cambridge English Dictionary." Cambridge English Dictionary, 2019, dictionary.cambridge.org/us/dictionary/English/mentorship

Sáenz, Victor B., et al. "Developing a Latino Mentoring Program: Project MALES (Mentoring to Achieve Latino Educational Success)." *New Directions for Higher Education*, vol. 2015, no. 171, 2015, pp. 75–85., doi:10.1002/he.20144.