

Skills and Traits Recruiters Value Most When Interviewing Construction Management Students for Internships and Full-Time Positions

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Interviews are a common method for companies to find whether a candidate meets all the requirements for the job at hand. Questions asked by interviewers tend to focus on hard skills, also known as technical skills, soft skills and other traits that are highly valued by the company. The objective of this project is to find which hard skills, soft skills and traits construction management professionals' value most when interviewing students. The methods used for data gathering were in-person interviews and a survey, which was sent to construction industry contacts. The ultimate goal of this report is to relay these findings to construction management students to help prepare them for future interviews

Keywords: values, traits, soft skills, hard skills

Introduction

Interviews are commonly used to gauge whether a person has the necessary skills, traits and training in order to excel at a certain position within their organization. Preparing for interviews can be accomplished by studying typical interview questions, conducting mock interviews with peers and by reviewing company's web pages. There are certain sets of skills, which are mandatory to be able to perform the job at hand. One thing that we do not know is what these interviewers value most when interviewing students. Different people have different values but many people might value one trait or skill over another.

The purpose of this research paper is to gather enough data to find which skills or traits interviewers value the most and to relay this information to students to help them better prepare for these interviews. In order to gauge which skills and traits are valued the most amongst interviewers, we have to first discuss the following categories: hard skills and soft skills.

Hard Skills

Hard skills, also called technical skills, are skills that can be learned, practiced and evaluated. These skills can be learned in the classroom, on the job, or self-taught. There are several ways to evaluate technical skills. One method to evaluate a technical skill is to test the individual where they are expected to use the skill in question under different circumstances. Technical skills are also those skills that are required to perform the job at hand. Therefore, they can be mastered with lots of time spent practicing.

Within the construction industry technical skills include scheduling, estimating, interpreting architectural drawings, and software proficiency skills. These skills are taught in a typical construction management curriculum, but they require large amounts of time, motivation and effort to master. There is a limited amount of time spent in school, so it is important to learn each skill, but to focus and spend more time on the skills that are most valuable to the construction management industry.

Soft Skills

Soft skills differ from hard skills for several reasons. According to FAST-NU, soft skills "refer to a collection of personal qualities, habits, attitudes and social graces." Soft skills are qualitative in nature

because they cannot be supported or proven by a simple test. “Communication, collaboration, listening and social intelligence are essential for a professional to succeed in the work place.” (FAST-NU2016) These are a few examples of soft skills, of which this article finds of high importance. Soft skills encompass the cultural and interpersonal aspects of an individual, which are required for an individual to perform their hard skills.

There are various amounts of soft skills that may be chosen. Out of the many soft skills available, it is necessary to choose only those few that are most mentioned in articles and interviews. According to PMI® Global Congress 2004, there are several core competencies that are present with successful construction project managers. Of these competencies, the skills highly mentioned with other articles are leadership, communication, and team building. A few qualities of an effective project manager include communication, teamwork, and problem solving skills. (Constructionworld) Therefore, these soft skills will be chosen for further research in this report. These skills are also highly valued according to Nathaniel Hagberg (Hagberg2006), which states, “Communication, teamwork and personal characteristics are important attributes for a project manager to successfully lead a project.” Out of the many soft skills available, it is necessary to choose only those few that are most mentioned in articles and interviews.

Miscellaneous Traits

These traits are similar to soft skills, except that they are interpreted in many ways depending on the company’s individual values and culture. After conducting many in-person interviews with various construction companies, one trait that was mentioned numerous times was fit with company. Katie Bouton defines cultural fit as “ the likelihood that someone will reflect and/or be able to adapt to the core beliefs, attitudes and behaviors that make up an organization.” This trait has several definitions but one participant defined fit with company as, “fit within our company means that you, as a person, fit within our culture, value what we value. Pretty much if you were in a crowd with all of our employees, you would not stick out like a sore thumb.” Fit with company is one of those traits that lies within the “eye of the beholder” and is gauged by the interviewer through every aspect of the interview.

The other trait that falls into this category is work experience. Although work experience can be quantified and proven through a resume, there are many traits that are assumed by interviewers that are related to work experience. One participant mentioned, “any type of work experience is valuable because this shows me that this person has taken the initiative to join the work force. This leads me to think that this person is motivated to gain experience both in the classroom and out of it.” Therefore, work experience is a trait that opens up the individual to provide further instances where they learned hard skills and soft skills.

Methodology

There are two methods of research used to obtain data for this for this project. The first research method yields qualitative data and is in the form of in-person interviews with fellow construction industry professionals, as well as, email and phone conversations with colleagues who are now working full-time in the construction industry. Using this qualitative data, I then created survey to gather quantitative data, which was sent to a large amount of construction professionals. I have analyzed the results of the quantitative data in four categories: hard skills, soft skills, overall skills and miscellaneous skills.

My objective for this research study is to...

- Extend the knowledge of soft skills and hard skills in the construction industry
- Determine the traits and skills that are of high value to construction industry professionals
- Extend this knowledge to construction management students to help prepare them for interviews

Research Study

The first method I used to gather qualitative data was in-person interviews and emails to construction professionals. These in-person interviews were conducted during the construction management career fair and after company information sessions held at California Polytechnic State University. This exploratory research resulted with the separation of many traits and skills into the major categories: hard skills and soft skills. Also, some traits do not fit neatly into one of these categories, which resulted in a third category titled Other/Miscellaneous.

A fourth category of Overall was created to rank the major categories against one another to determine which held the highest value with towards interviewers. A survey was conducted where each question was ranked against one another so that only one answer will be most valuable and one will be least valuable to the participant. The questions and answers for ranking of this survey are shown below.

Question	Answers to be ranked
1. Please Rate the following criteria from 1 (not at all important) to 5 (most important) with regards to what you value when recruiting students.	Technical Skills, Soft Skills, Fit with Company, Work Experience
2. Please Rate the following Technical Skills from 1 (Least important) to 5 (most important) with regards what you value when recruiting students.	Plan Reading Proficiency, Foreign Language, Software Proficiency, Estimating, Scheduling
3. Please Rate the following Soft Skills from 1 (Least important) to 6 (most important) with regards to what you value when recruiting students.	Ability to Problem Solve, Ability to Work as Part of a Team, Negotiation Skills, Leadership skills, Communication-Oral, Communication-Written

After these questions, comment boxes were to gather any insight as to what participants found most valuable, what skills or traits are most valuable to an interviewer that were omitted from the survey and any other comments that may explain concerns with the survey.

Data Analysis

Over 65 construction management professionals completed the survey. The first questions ranks the following skills and traits: technical skills, soft skills, fit with company and work experience, against one another from 4 being most valuable to 1 being least valuable. Figure 1 shows the results of this question with an overwhelming majority of participants (66%) choosing fit with company as the most valued trait.

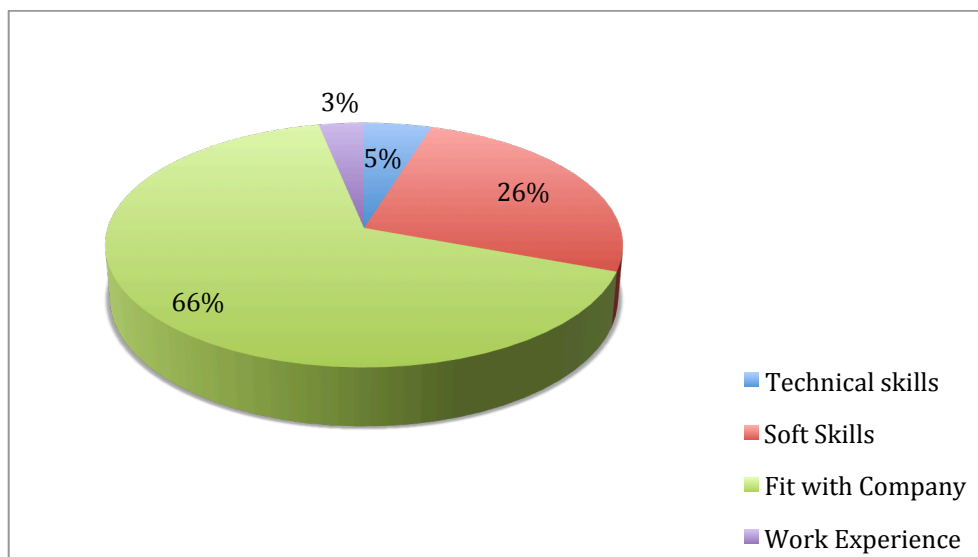


Figure 1- Overall Most Valued Traits and Skills

Figure 1 also show that soft skills, with 26% of participants ranking this as the most valued skill, as the second most valued skill. 5% or fewer participants ranked technical skills and work experience as the most valued traits and skills, which shows that both of these skills are less valued than fit with company and soft skills. The significance of this chart is that fit with company was the most valued trait overall. One issue accompanied by this result is that it is hard to near impossibly to quantify and define “fit with company” when there are many different companies with different definitions of this trait.

Figure 2 shows the results of the traits and skills that were ranked as the overall second most valued. I find that the second most valued skills and traits are more dispersed compared with the results from Figure 1. Similar to figure 1, soft skills were found to be the second most valued trait with 40% of participants ranking this as their second most valued skill. Technical skills, soft skills and fit with company received about equal amounts of votes for second most valued traits or skills. The significance of this chart is that we find soft skills to be the second most valuable skill for interviewers. Although not quantifiable, soft skills may be learned by individual students and also expressed through many types of experiences the student has encountered. This knowledge will help students prepare their “story” and focus on the soft skills that interviewers value.

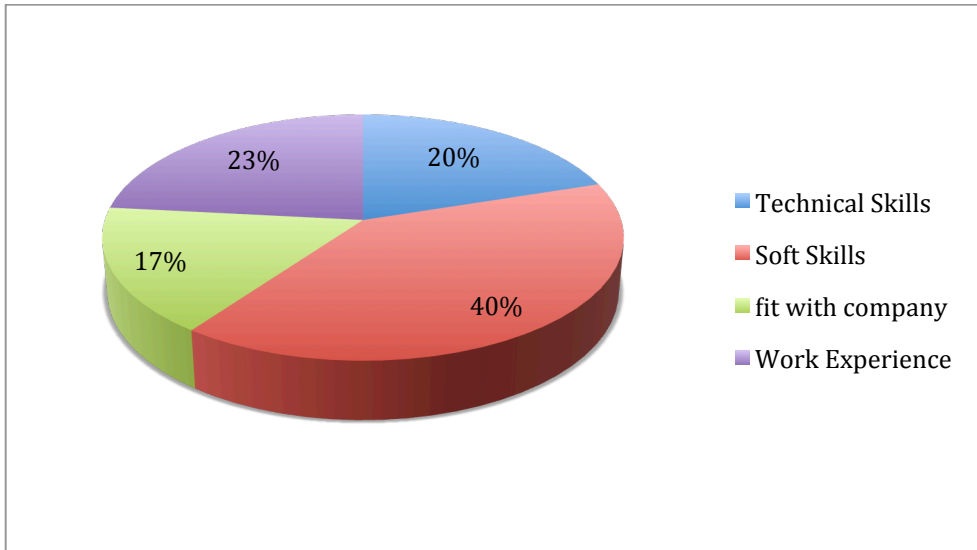


Figure 2- Overall Second Most Valuable Skills and Traits

The results from question two are shown in Figure 3. This chart shows that almost 60% of participants ranked plan reading proficiency as their most valued skill. Software proficiency was the second most valued skill, with estimating and scheduling skills at third and fourth respectively. Surprisingly, foreign language skills were the least valued when ranked against the other skills. With this knowledge, students and faculty can focus more on plan reading exercises and software usage when preparing to enter the construction management profession.

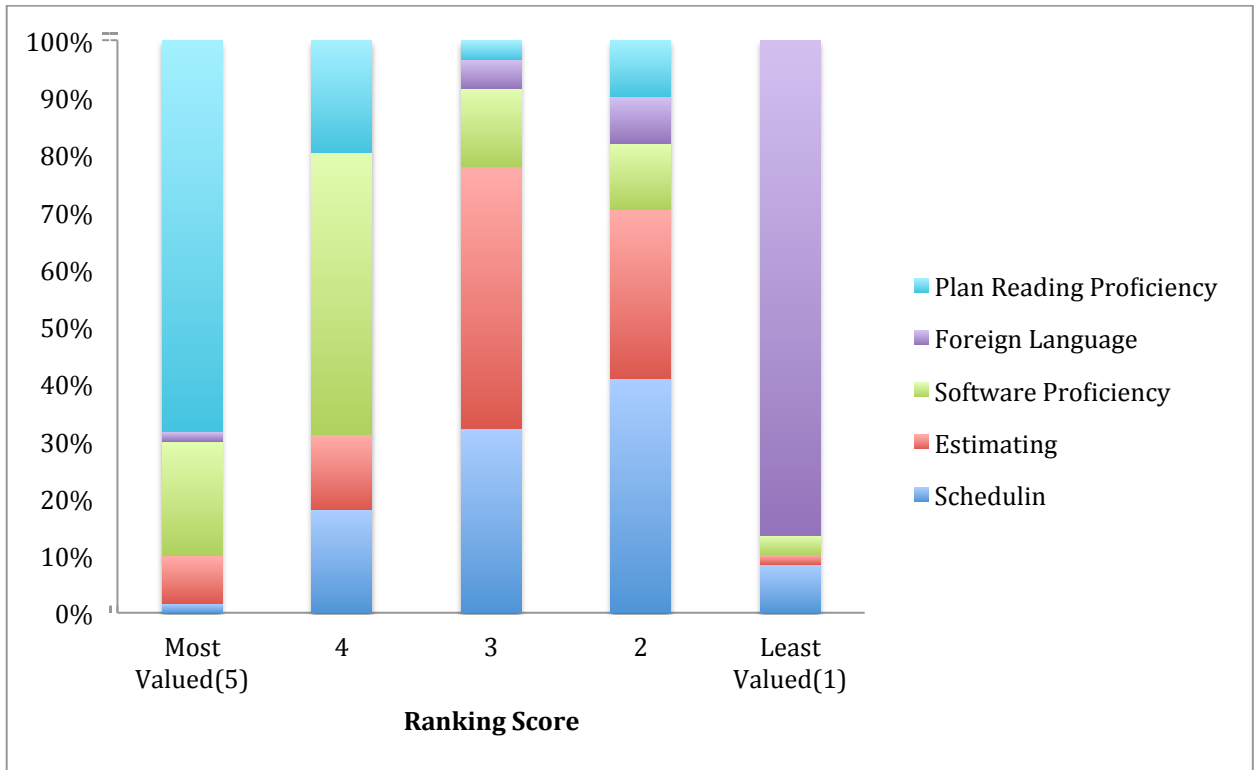


Figure 3- Most Valued Technical Skills

Figure 4 shows the results from the survey regarding soft skills. The participants equally ranked both ability to work as part of a team and communication-oral as the most valued skill. There were also two second most valued skills, which were equally ranked: ability to work as part of a team and ability to problem solve. Negotiation skills were overwhelmingly ranked the least valued soft skill with leadership skills and communication-written skills also having low value towards interviewers. The significance of these results is that the traits, ability to work as part of a team and ability to problem solve, were the most valued overall of the soft skills. With this knowledge, students and faculty in the construction management major may choose to focus more on learning these skills to make their students and department more competitive in the construction industry.

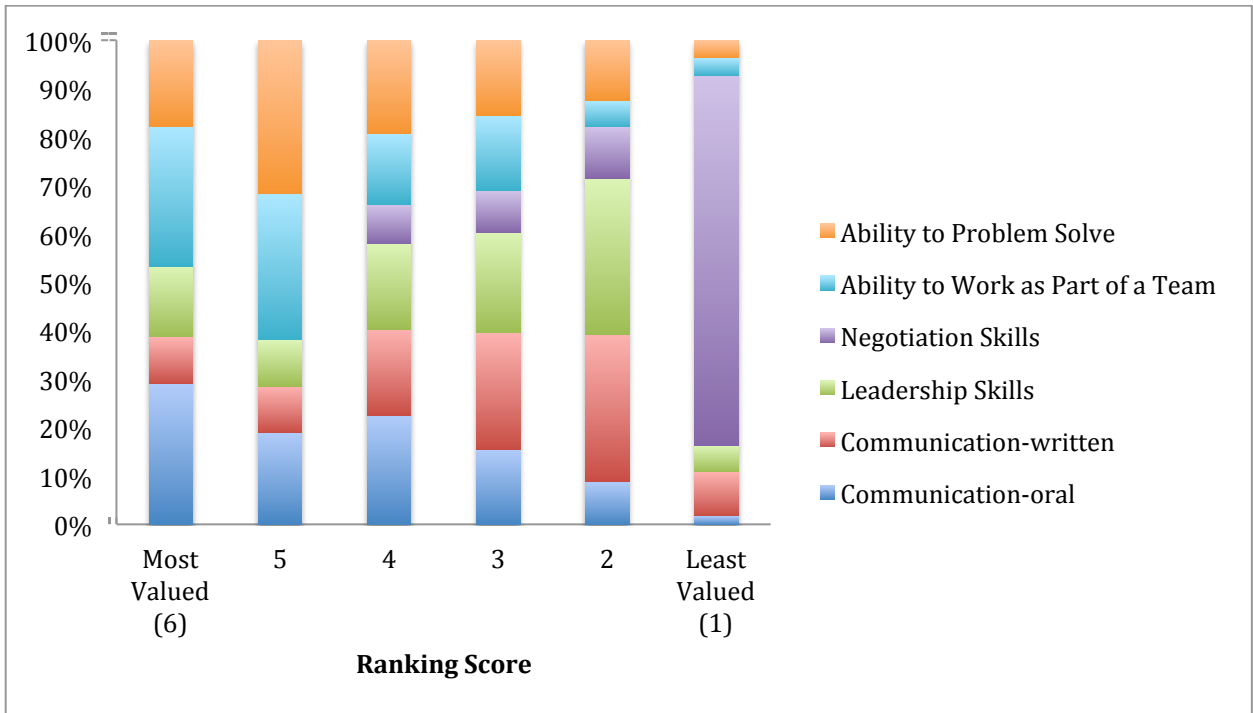


Figure 4- Most Valuable Soft Skills

Figure 5 is chart that shows highly valued skills and traits that were mentioned from the comment boxes in the survey. The significance of this data is that work experience was the most valued and mentioned trait with motivation/work ethic also being highly valued. The other portion represents other skills and traits that did not have significant amount of mentions and were outliers.

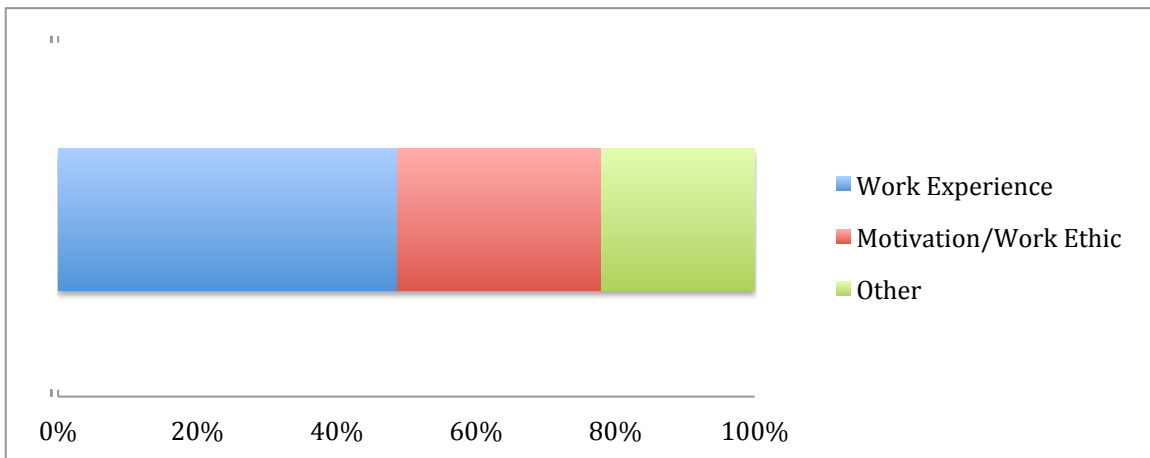


Figure 5- Highly Valued Skills and Traits from Comments Section

There were also many more suggestions from the fill in portion of the survey. One response stated, “any prior work experience is highly valuable because students with any work experience tend to have better work ethic and higher motivation.” There were also many other participants who also mentioned a variation of this statement. It is highly recommended that students gain part-time employment while in college in order to be more competitive when applying for full-time positions within the construction industry.

Conclusion

In conclusion, the data shows that interviewers highly value the following: fit with company, soft skills, plan reading proficiency, ability to work as part of a team and oral communication. With this knowledge students may better prepare for interviews by focusing their answers and stories to reflect these aspects. Also, construction management programs may also incorporate lessons that build upon these skills and traits in order to help their students become more competitive when seeking full-time employment. There is also more research to be completed with how to translate these values into construction management instruction, and how a student may use these skills and traits to help prepare them for interviews. One positive outcome of this report is that future construction management may be able to focus early on developing these skills and traits in their college career in order to maximize their competitiveness with other students in the construction industry.

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