

Helping Students Become Interview STARs

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Abstract

The majority of employers of students from the Department of Agricultural and Biosystems Engineering at Iowa State University use behavioral-based interviewing (BBI) techniques. This process focuses on past behaviors (what did you do?) rather than opinions (what do you think?). When students interview for full-time employment and internships, they are expected to relate experiences showing how they've developed and demonstrated competencies important to the employer. The STAR (Situation, Task, Action, Result) is a technique for describing actions related to specific competencies. Competency development and demonstration are also critical components of our departmental outcomes assessment plan. This paper discusses BBI, the relationship between BBI and STARs, how we are integrating STARs into our curriculum from freshman to senior years, how our students successfully use STARs, and how STARs contribute to our overall outcome assessment plan.

Introduction

Career interviews for engineering students are evolving from interrogation sessions to structured conversations. This evolution is facilitated by the proliferation of information technology that has automated many of the previously manual tasks such as reviewing resumes and scheduling interviews. This frees recruiters to spend more time networking and building relationships with job candidates.¹ The real impetus for this evolution is the realization that past behavior is the best predictor of future performance.² And after all, future performance is what any interviewer is trying to ascertain.

This type of structured conversation, commonly referred to as Behavioral Based Interviewing (BBI), aims to discover examples of past behavior through guided questioning. Development Dimensions International, Inc., a global provider of competency-based performance management tools and services,³ is a leader in teaching managers how to interview candidates. They call this method Targeted Selection.[®] While this technique is called by many names, the underlying premise is the same – past behavior is the best predictor of future performance.

Traditional interviews often include such questions as:

- “What are your strengths and weaknesses?”

- “Why are you interested in working for us?”
- “Tell me about yourself?”

While the answers may be interesting, they are opinions (even when answered truthfully) and may or may not predict future performance.

BBI, however, emphasizes past performance and behaviors. Questions in a BBI setting might include:

- “Think of an occasion when you had to deal with a difficult co-worker.”
- “Tell me about a difficult situation when it was desirable for you to keep a positive attitude. What did you do?”
- “Give me a specific example of a time when you used good judgment and logic in solving a problem.”

In BBI, the interviewer gains detailed job-related examples from a candidate, and to assess past performance and competencies. This generates specific details about candidates’ experiences. It prompts the candidate to provide more than “canned” responses and focuses the interview on past actions, not perceptions. The interviewer can use follow-up questions to clarify an answer or to probe deeper.

Figure 1 gives a comparison of the “traditional” interviewing and BBI. The traditional interview seeks to reveal personality traits, whereas BBI looks for demonstrations of competencies. Competencies are application of knowledge, skills, attitudes and values, and behaviors⁴ and are now the focus of many companies’ hiring and employee assessment processes. Typical competencies might include innovation, analysis and judgment, teamwork, and communication. By assessing competencies, the interviewer increases the consistency among interviews and has less chance of introducing interviewer bias, and allows the interviewer to make decisions based on standard, objective assessment criteria.

Career specialists suggest that applicants answer BBI-type questions through the use of a STAR. A STAR is an example of a past behavior which includes a *situation* or *task*, the specific *action* taken, and the *result* of the action⁵. Table 1 gives an example of a student STAR that might be used to answer the question, “Tell me about a time when you showed initiative.” The student showed initiative by taking a proactive approach, acting beyond what was required.

BBI is a technique used by companies across nearly all industries, and engineering in particular. Anecdotal evidence suggests that over 80% of the companies interviewing Iowa State students for engineering positions use BBI to some degree. Helping students prepare for BBI experiences is not so widespread. Certainly, career services across the country try to assist students in the BBI process. If you google “behavioral based interviewing,” you will find a number of career sites, at colleges and private companies, that offer BBI information and strategies. Little has been done to incorporate BBI and STARs into engineering curricula to help students prepare for the hiring process, the culmination of their college educational experience.

BBI and STARS complement the new directions taken by the Agricultural and Biosystems Engineering (ABE) program at Iowa State University. The foundation of our outcomes assessment process⁶ is the evaluation of fourteen competencies (Table 2) through electronic portfolios⁷ (ePortfolios), co-op and internship evaluations⁸ and evaluations of ABE graduates two years post-graduation.

Integrating STARS into the Curriculum

STARS are integrated into the ABE undergraduate curriculum during the first semester in both of our Agricultural Engineering (AE) and Agricultural Systems Technology (AST) programs. Both programs have a first semester orientation class (Engr 101 and AST 110) that meets for one hour each week for fifteen weeks. Both orientation classes have integrated two periods on BBI and STARS.

During the first period students are introduced to fourteen ISU Competencies that are used to in our learning outcomes assessment process. Students are asked to read and reflect on the descriptions of the seven of these core workplace competencies: Engineering Knowledge, General Knowledge, Analysis and Judgment, Communication, Continuous Learning, Initiative, and Teamwork. Next, students are asked to write a STAR for three of the seven core competencies, making sure that they describe their STAR completely enough to demonstrate the competency.

During the second period students are asked to analyze a company job description in order to determine the workplace competencies necessary for resume development/modification, interview STAR preparation, and ultimately career success. After analyzing the job descriptions for key phrases that relate to the competencies, the student chooses one of the more frequently mentioned competencies to develop a STAR for interviewing preparation.

During the second semester for each program, a one credit “experiencing” course is taught to expose our students in a hands-on, interactive way to each of the programs options. In order to continue the focus on BBI and STARS, a STAR development for each competency is assigned each week for the students to complete. All 14 competencies are covered during the semester. Since the class is broken up into peer groups, group discussion and evaluation takes place each week related to the STARS. Each STAR is then uploaded to the student’s electronic portfolio (ePortfolio).

Student Use of STARS

After the first year in the program, our students are well prepared for BBI. Students can refer to their freshman assignments to help prepare for co-op, internship, or summer employment interviews. Students will also be asked to reference their STARS to update or replace them as they gain new work or life experiences that better demonstrate a certain competency. One important benefit of having students complete STARS is that they reflect on their past experiences to chart their future academic and life direction. Since the students store these in the ePortfolios, they are easily accessible to make additions and update their STARS.

Outcomes Assessment and STARS

Our departmental outcomes assessment process is based on competencies and STARS are essentially a demonstration of a particular competency. STARS are used by students as artifacts in their ePortfolio. A student's ePortfolio is a collection of artifacts that demonstrate the development of the fourteen ISU competencies. Other artifacts could be, for example, classwork, design projects, and/or video of presentations.

An ePortfolio consisting entirely of STARS would not be an acceptable demonstration that a student has developed the competencies. There needs to be examples of actual student work that provide verification that the competency was achieved. However, some experiences may be difficult to present in any other manner, as the demonstration of a competency may not result in an artifact that could be loaded into an electronic database.

As students begin to create their ePortfolios, they generally have not had enough experiences to generate enough artifacts to cover all the competencies. STARS fill that gap nicely. It gives the students something to fill the "holes," and provides them with the opportunity to reflect upon and learn from the experiences. Many of the STARS initially placed in the portfolio would likely be replaced by more concrete artifacts as time goes on.

Summary

Behavioral-based interviewing (BBI) is based on the theory that past behavior is the best predictor of future performance. Many interviewers use BBI to gain detailed job-related examples from a candidate, and to assess past performance and competencies. One technique of preparing for BBI experiences is to use STARS - examples of competency demonstrations that include a *situation* or *task*, the specific *action* taken, and the *result* of the action.

Students in our department, starting their freshman year, develop a "library" of STARS that encompass the fourteen competencies central to our outcomes assessment program. Students develop, reflect upon, and update these STARS through their academic careers. They include them in their electronic portfolios. They use their STARS to prepare for career interviews that use BBI.

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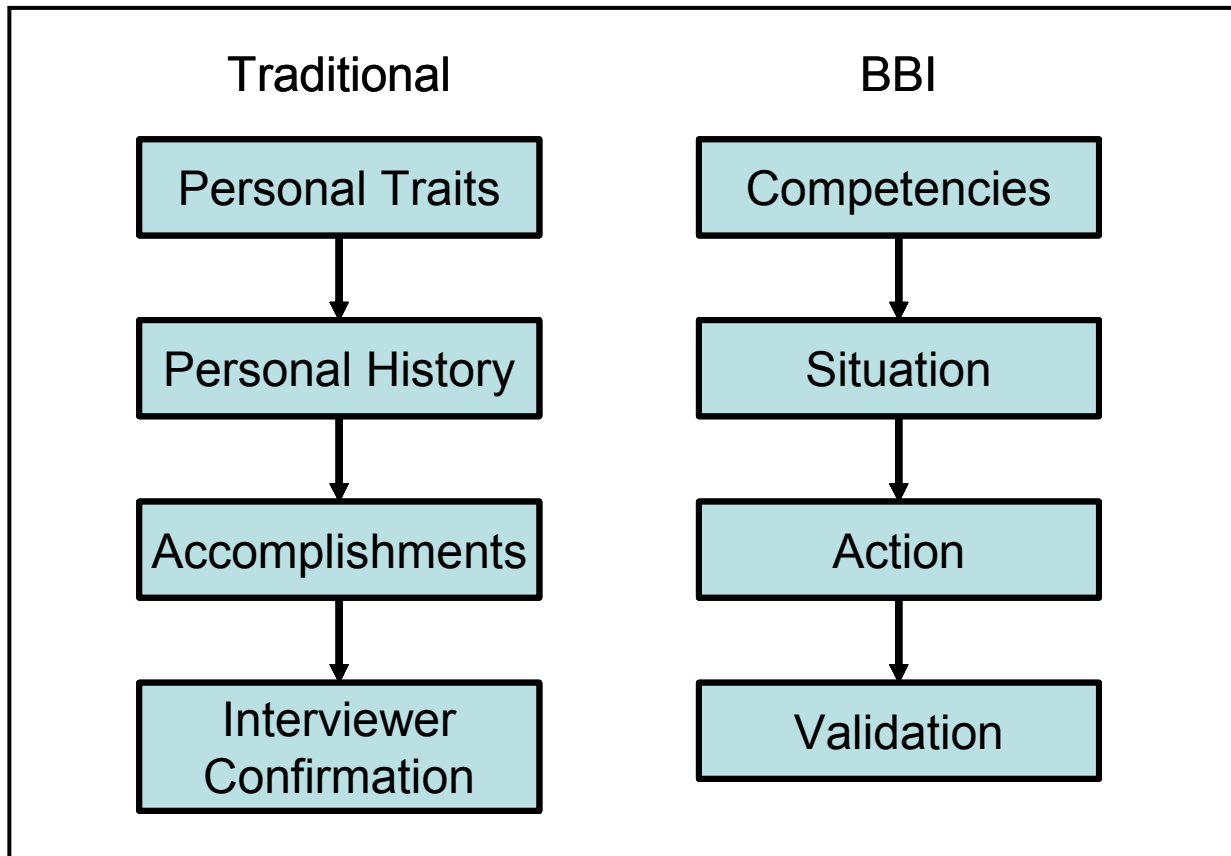


Figure 1. Comparison of traditional interviewing and behavioral-based interviewing (BBI).

Table 1. Example STAR⁹.

Interview Question	Tell me about a time when you took initiative.
Situation / Task	I was a member of the student organization, XYZ. We planned to have a float for VEISHEA [an Iowa State student-run festival]. Our president stopped attending meetings or communicating with the other officers. Attendance dropped and nothing happened at meetings. Our organization had been on campus for a long time and had a great reputation.
Action	Although I was not an elected leader, I asked two officers to meet me at the union to talk about the float.
Result	At the meeting, I mentioned that XYZ had a great reputation and my Dad talked about XYZ when he was a student. The vice president agreed to meet with the president to clarify his role. We learned the president was having problems and was relieved that the vice president was willing to assume leadership. The three of us looked at the requirements in the by-laws and took the necessary steps to change the leadership to the vice president. I contacted the members who stopped attending. We got a late start, but we pulled together and had the float in the parade.

Table 2. The 14 ISU Competencies in our departmental outcomes assessment process.

Engineering Knowledge	Innovation	Teamwork
General Knowledge	Cultural Adaptability	Integrity
Continuous Learning	Analysis & Judgment	Professional Impact
Quality Orientation	Planning	Customer Focus
Initiative	Communication	