CHAPTER 4 – FLEXIBILITY, PROBLEM SOLVING, AND INTERPERSONAL SKILLS (excerpt)

FLEXIBILITY

Diane, Human resources manager, Engineering services firm

Diane is the human resources manager for an engineering services firm. Although she does not have an educational background in STEM, she has a long career as an HR professional for manufacturers. Diane primarily recruits through job fairs at four-year universities. She also hires from community colleges. When asked what skills she looks for in students, she said, "We look for initiative. We look for critical thinking, problem solving, quality, you know, safety, you know, the mentality more the behavioral side" along with engineering design skills that Diane explained all colleges provide. The hard part in selection for Diane was behavioral skills. "What we look for is the behavioral side, how are they going to work with others?" Diane takes particular note of the unique stressors of what she describes as a "small cubicle environment" in her office. "You're sitting in close proximity to a lot of other people who are doing a lot of work, either on the phone or person to person. So being able to work with disruption, being able to shift gears and change direction. Because we have to do that for our customers all the time, you know, to a painful point sometimes, so they have to be really flexible."

Diane describes the flexibility skills she wants to see from workers. First, workers have to be flexible to manage difficult working environments and solve complex problems to maximize efficiency. Her company hosts paid internships for college students. These internships offer a "realistic environment because the jobs here are very difficult." Interns work a 40 hour week, Monday to Friday, 8:00 am to 5:00 pm, but they get to vicariously experience the stressors faced by employees. Time management and problem-solving skills are at a premium

because workers are under a great deal of pressure. Diane described weeks with a project deadline when workers stay well past 5:00 pm and work 50-60 hour weeks. "It's high pressure and not that we don't make mistakes but that we like to look at everything and make sure it's right the first time, you know, the quality side of doing a good job because rework costs money and we don't have any. We're lean here. We're very lean and we can't afford mistakes. We can't afford reworks." Lean manufacturing emphasizes eliminating waste from manufacturing processes.

Second, Diane also wants workers who are flexible in terms of handling multiple roles beyond their own background. Project management skills are also critical including "being able to do more than just what you were educated for…. You need to be able to have a pulse on more than just what your discipline was that you went to school for." She used herself as example. She went to school for human resources, but she cannot simply sit in an HR role. She has to understand engineering, understand the industry overall, and she has to have some financial expertise. Diane explained that project managers have to oversee and hire engineers from different engineering disciplines. Managers have to be able to negotiate the terms of the project including legal aspects of the project. Project managers also have to manage budgets and make sure payments come in and go out on time. "I see the future being very much multi-talented and because of the economy you're going to have to do more with less head count so [workers are] going to have to be able to cross disciplines."

Third, workers need to flexible enough to adapt to different situations on the job. Specifically, Diane also noted that young workers need to be more inquisitive and better at asking questions to be more prepared for jobs in technology. She gave an example of two new technician interns using their in-house time keeping system. One student, Jake, quickly asked a

few questions up front, ran into some problems, asked more questions and got it resolved. Diane did not hear from him again and his timesheets were processed properly. Things were not as smooth for the other student, Kyle. "Critical thinking is really where I think that happens" which is why it is important to ask questions. Diane does not expect young workers to easily pick up a new system, but she does expect students to "sit down with it, try to work their way through it, not be afraid to get in there and do it." Kyle was "very hesitant." "I bet I had him in my office 12 times before he got his time sheet done." Diane said he was "quick to stop and ask" but he did not think about "Well what's going to happen if I go past this." He was afraid he would do something wrong in the system. Diane reassured Kyle saying, "There's nothing you can do in there that can't be fixed, so don't worry about that." According to Diane, Kyle was a technician but did not behave like a technician. She predicted that if she gave each one a personality assessment, both would have a strong IQ but the Jake would rate as an analytical thinker whereas Kyle would rate as a "relational person," opposite end of the spectrum on popular assessments. "Technically they're both very smart but their brains work differently. One is visual and the other is not… It's just how they are so I don't think one is right or wrong."

Diane identifies workers with these skills through the recruiting and hiring processes. Her specialty is behavioral interviewing, a strategy to get applicants to demonstrate how they've responded to past situations.

I would say "Tell me a time when you specifically ran into a problem." I want to know what the problem was… Maybe they found something that was mislabeled or misconnected, wasn't going to work the way that they knew it should be designed, and so then I'll further and I'll ask them "Well what did you do at that point when you found it?" And what I'm usually looking for is that, you know, they thought about what the

corrective action needed to be, "What do I need to do to resolve it? Is there more than one option?" And I'm looking for them to tell me that they're thinking first and then they're communicating with others and that's what I want them to tell me.

Diane wants workers who can demonstrate how they solved problems in group as an indication of how they will communicate with their co-workers. "If they give me a short answer, that's usually not a good thing and I'll try to probe without giving them too much of a lead. But if they don't tell me that they thought first and then collaborated with their teammates, they didn't get the answer right." Diane credits the local four-year university and community college for preparing students for behavioral interviews. Students are no longer surprised by these questions and more students than ever respond positively resulting in increased hiring from local colleges.

Diane would like to see more personality assessments in college in line with the personality assessments employers use. She does not use personality assessments at her current company although she used cognitive testing at her previous job. She used the popular Wonderlic test to determine if applicants had a "minimum cognitive level to learn and problem solve" and to understand their learning style. "Are they hands on? Do they have to see it done or do they like to read and apply?" She also used the Big Five personality test to assess the five basic dimensions of personality (extraversion, neuroticism, agreeableness, conscientiousness and openness to experience). She believes more and more employers will be using similar assessments in the future.