This interview with Roderick Taylor, Installation and Qualification Functional Area Leader for Intel, took place on the campus of Arizona State University on May 14, 2001.

Susan Ledlow: Hello, I'm Susan Ledlow here with Roderick Taylor, who is an Installation and Qualification Functional Area Leader for Intel. Roderick, I'd like to start by asking you a little bit about your background in engineering.

Roderick Taylor: I'm a graduate of Southern University out of Baton Rogue, Louisiana, in electrical engineering. I came to Intel to do an internship in 1993. I started as a Process and Equipment Engineer; from there I became Team Leader at Intel. My current position is a Functional Area Leader for one of the groups at Intel, within one of the manufacturing sites.

Ledlow: How important is teamwork at Intel? For example, how much time in a typical day would an engineer spend working with people?

Taylor: At Intel we have an environment where we constantly work in teams. I would say that I spend up to six hours a day in teams, or in some type of meeting dealing with teams. It improves the productivity at Intel by using teams, because you have all the people that you need in one place at the same time.

Ledlow: A number of engineers that I have interviewed have referred to teaming skills as "soft skills." How important are these soft skills, and what kind of skills do you need to work in a team in industry?

Taylor: These skills are important because they basically allow you to . . . communicate. They allow you get information transferred easily and allow people to focus on a certain project or tasks with those skills—versus working on several different things at the same time. They can center in on a focus [or] on the goal to get that task or project done.

Ledlow: In your experience does a new hire, fresh from college, have the sort of teaming skills that they need to be successful in industry?

Taylor: I don't think so, because most of the time when they just come out of college . . . [they are not] set up for that type of environment. [College] basically just gives you the technical skills that you need. But then, when you come into industry, most of the projects that you work on need to have a lot of people involved. . . . School doesn't really give you that. . . . It gives you the technical part . . . and then you come into industry and think, "Well, now I have this team I've got to be a part of." . . . On a school basis you can say, "OK, I'm going to be an individual contributor." When it comes to industry, you can't really be an individual contributor in some of the projects you are working on.

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Ledlow: How is that handled at Intel? When you have a new hire just in from college, and they are not necessarily trained in working in teams, what sort of training is provided?

Taylor: Well, the training that is provided . . . I wouldn't call it training—it is more like on-the-job training. We get someone new and . . . they become a member of a team [and are] given responsibilities on that team. [From] each team that he becomes a part of—we've got a term at Intel we call AR or "action required"—by being a member of that team, that person gets the AR to go and perform some task.

Ledlow: Is there any sort of training or professional development in things like communication, teaming skills, conflict resolution skills?

Taylor: Well, the training that we do have . . . and again, I wouldn't call it training—Intel tries to practice effective meetings. So, when they're on a private team, they say, "Ok, this is an effective team I'm on, and they have a little questionnaire to determine . . . "Is this is an effective team I'm on? I'm I doing the right thing? Do I have the right people on this team? Do I have the right things that are moving for this team?" You know, just to make sure that this is the right team to be on. Again, it is not really a formal training we provide—it's just more of on-the-job [training]. You can kind of "buddy-up" with some person in the beginning, where they'll take a buddy . . . [and] that buddy may be someone who has been with Intel for more than a year or so. That person will buddy with that [experienced] person and then they go to different teams that this person is on to get recognized and get introduced to the team that this [experienced] person is on. So then they, the team, will know the responsibilities of each person.

Ledlow: More like a mentorship.

Taylor: Yes, a mentorship.

Ledlow: In my experience a lot of our faculty resist doing teaming in the classroom, because they are afraid they are not prepared to deal with team issues, especially team conflict. How much is conflict a part of the work environment, and how is it handled?

Taylor: Conflict is very much a part of the work environment, because you have some people with strong personalities, some people that say nothing at all, and some people who are sort of in the middle. At Intel another [thing] we say is that, "We disagree and commit." Someone on the team may disagree, but yet the majority of the team will say, "Ok, we're going to try it this way. . ." We try to gather the data to make the right decisions in those teams. So, if the person who is disagreeing does not have the data to back up their argument, we'll leave that alone and then go work on the things that have data to back up our decision. And that kind of handles the conflict.

Ledlow: What would you like to see colleges or schools of engineering do, to better prepare students for the reality of work?

Taylor: I would say, create the type of work environment that you have [in industry]. When you're in school, you basically have individual projects that you are working on. If schools would . . . create a mini-environment, I would call it, where individuals work on a team, and grades would be based on how they perform on that team—they are given a certain task and in order to be successful on this team they have to complete the task in time that is given—and I think if schools do that and have more of a team concept, and create that mini team environment, it will better prepare students for the time when they get out of school.

Ledlow: You mentioned grading students together . . . is peer evaluation or team rewards . . . is that an important part of Intel's work environment?

Taylor: Yes, both are important. We have individual rewards, and then we have the team rewards. Again, most of the projects, most of the things that are done at Intel, are done as teams. And then you have that team award that goes along with that. I would say over half my work . . . maybe seventy-five percent of my work, or an Intel person's work, is done with teams. This means that the way a person is graded depends on his contributions to that team.

Ledlow: How you are rewarded individually versus how you are rewarded as teams?

Taylor: The individual award is basically your performance, your accomplishments for that year. And then, you're ranked within your group—and it's not the team, but you are ranked within your peers. Based on that . . . that's how they reward the individual. As for the team . . . when you get an award for your team . . . it's basically [for] the accomplishments for that team—if that teams succeeds and gets the job done, then that's when the reward comes for that team. And also, if you are part of a team, you can also make it an individual contribution as well. And then when you do your ranking and rating at the end of the year . . . you can say, "Well, I was part of this team and this was my contribution to that team."

Ledlow: And are these rewards financial . . . these team rewards?

Taylor: Mostly they are financial. Sometimes it's pretty much just being recognized for doing a good job. That recognition is basically a presentation before the whole group, or it could be a divisional recognition.

Ledlow: Final question. What do wish you had known when you started in industry? [Something] that you know now that you didn't know when you started.

Taylor: I think you mentioned earlier about soft skills, and I think the soft skills are communication—[being] able to present your ideas . . . get your ideas out into the field . . . [being] able to say, "OK, this is my idea and this is what I want to do." Some people have that naturally; some people don't. I think one thing that I would have liked more in school is more presentation—more communication to get information out to people, communicating my ideas. That's what I would have done different in

school: . . . taken more communication type courses. With most of the teams, if you communicate well in the team environment, then people listen and you can get the work done.

Ledlow: Thank you.