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Leading Through Difficult Conversations: Developing Students' Leadership Communication Skills

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Leading through Difficult Conversations:

Developing Students' Leadership Communication Skills

As engineering educators, we are now familiar with the calls for change in the skills that our students should acquire by the time of graduation. While the impetus for such change has been driven from several quarters—ABET, Inc., and industry, to name just two—the results are visible in engineering programs across the United States. Capstone design courses, integration of communication across the engineering curriculum, the consideration of social, economic, and environmental issues in the solution of engineering problems, the use of assessment to measure the impact of pedagogy on student learning: these are all evidence of change in engineering education. As such, they are hallmarks of what Froyd, Wankat, and Smith have identified as five major shifts in engineering education over the past 100 years, which include "a shift to outcomes-based education and accreditation" and "a shift to applying education, learning, and social-behavorial sciences research."[1]

Now that the ABET Engineering Criteria have been in place since the mid-1990s, we may expect further shifts, specifically in the outcomes (also known as "ABET a-k") that engineering program must assess. These shifts appear to relate less to revisions needed in the technical curriculum and more to revisions that will allow students to develop interpersonal skills, global awareness, and other abilities before graduation.[2-4] For instance, the National Academy of Engineering's *The Engineer of 2020* points out the need for leadership training for engineers in order to bridge public policy and technology, as well as to encourage engineers to take on roles that they have traditionally been reluctant to take.[5]

At Rose-Hulman Institute of Technology, we believe we are anticipating change in adopting an outcome for leadership even before it has been incorporated into the ABET Engineering Criteria. The decision to add an outcome for leadership occurred following Rose-Hulman's ABET re-accreditation visit in 2006 and was created in response to a demonstrated need on the part of Rose-Hulman alumni. Graduates of Rose-Hulman are recognized in industry for their superior technical skills, a result of the Institute's technical curriculum. Based on their problem-solving abilities, many of our graduates advance quickly, often assuming leadership roles in their organizations. Assessment of Rose-Hulman alumni (through an Academic Alumni Survey conducted in 2008 and again in 2010) indicated that while alumni felt well prepared to meet the technical challenges of their professions, they felt less prepared to take on the challenges associated with leadership responsibilities.

Given the national discussion regarding leadership in engineering education and as a response to alumni input, a group of faculty and staff instituted a program that would provide support to students in their leadership development. Now in its fifth year of existence, the Rose-Hulman Leadership Advancement Program (LAP) provides undergraduate students with co-curricular opportunities for leadership development that match their opportunities for developing technical skills in the academic curriculum. The centerpiece of LAP is the annual Rose-Hulman Leadership Academy which provides students the opportunity to develop their personal leadership style and equip themselves with tools to make a difference in society. The Academy is open to all students, with or without previous leadership experience. The two-day Academy is

an intensive workshop designed by Rose-Hulman faculty and staff to build each participant's confidence in their ability to lead, consciousness of various leadership approaches, and connection to leadership resources and mentors. The curriculum cultivates skills through lectures, guest speakers, team interactions, team building activities, and assessment through self-reflection. Topics include character development, leadership theories, and personal leadership development, with an emphasis throughout on leadership communication.

The need for engineers to take leadership roles is clear. These leadership roles are diverse, everything from getting more engineers into public office to encouraging engineers who are successful in their technical careers to aspire to leadership in national organizations (such as ASEE). The problem remains, however, that engineers in general may feel less prepared to pursue leadership advancement because of their lack of confidence in their leadership communication skills.

Recognizing that communication plays a central role in leadership, faculty and staff at Rose-Hulman have made communication a focus for the Leadership Advancement Program events that are planned each year. In particular, we are using the notion of "difficult conversations" as a way to emphasize the importance of communication in effective leadership.

"Difficult Conversations" Approach to Leadership Communication

The focus on communication has been a part of the Rose-Hulman Leadership Academy since its inception. Recently we have adopted the "difficult conversations" approach as a way to give students' development in leadership communication special attention. Specifically we saw that we had an opportunity in the Leadership Academy to move students beyond the communication tasks and projects that are a part of our two required writing courses (Rhetoric and Composition—for first year students, Professional and Technical Communication—for third year students). We wanted to provide to students concrete strategies they could use as they negotiated "difficult conversations" that are often a feature of leadership interactions.

The book *Difficult Conversations: How to Discuss What Matters Most* is the basis for this particular aspect of the Leadership Academy.[5] Using the work of Stone et al, we introduce students to the notion of "3 Conversations" as a way to show them the context and emotions that underlie most difficult conversations. We also ensure that students have a hands-on experience with this material, since the learning mode emphasized heavily at Rose-Hulman is hands-on and practical.

First, we provide a general introduction to difficult conversations by summarizing the main principles of the text. In particular we focus on the notion of each conversation being "three conversations": 1) the "what happened" conversation, 2) the feelings conversation, and 3) the identity conversation. [5] We argue that every difficult conversation is comprised of these three elements, and we maintain further that being able to recognize these conversations is central to reaching understand with another person and to using effective leadership communication.

Next, we ask students to apply these principles to a short video, in which a technical manager must give a poor performance review to an employee who expects to get a very good review (http://www.youtube.com/watch?v=gdp4sPviV74). The situation illustrated in the video is one that many of our students will encounter after graduation, given the celerity with which our students

advance up the management ladder. After students watch the video, they are divided into teams of 4; each team is asked to write a short scene in which the technical manager uses the principles of difficult conversations to conduct a performance review that benefits the employee and reflects good professional practice. Each team then selects two of its members to act out the scene in front of the entire Leadership Academy. After the performance, the non-performing members of the team are asked to provide an explanation of how the team applied the principles and how the strategies are employed. The performances and accompanying glosses are conducted before the entire Academy, and all students and Academy faculty and staff are invited to share their insights and input.

We see several important benefits of this activity. First, students are asked to apply their learning immediately to the scene that they must write. Based on their scenes, we can see whether they understand the principles and how to use them. Second, the act of performing is itself a strategy for improving students' oral communication skills, and it is in a form unlike the conventional oral presentation that they are required to do for technical courses.

Preliminary Assessment

Because the difficult conversations approach is a new addition to the Rose-Hulman Leadership Academy, we have only begun to assess the impact of the pedagogy on our students. In general students react positively to the exercise, and the Rose-Hulman faculty and staff who teach in the Academy are pleased with the activity and student performances. As part of our presentation at ASEE, we plan to show the survey results of students' feedback, as well as show feedback from faculty and staff who teach in the Academy. We also plan to put our work with difficult conversations into the broader context of leadership development programs that are emerging in engineering programs across the United States. In doing so, we plan to give attendees insight into how this exercise can provide real benefits for students.

[1] Froyd, J.E., P.C. Wankat, and K.A. Smith, "Five Major Shifts in 100 Years of Engineering Education<' *Proceedings of the IEEE*, vol. 100 (May 13, 2012): 1344-60.
[2] "Educating Engineers for the New Market," Bloomberg Businessweek, February 27, 2007.
[3] Sheppard, S.D., K. Macatangay, A. Colby, W.M. Sullivan, and L.S. Shulman. *Educating Engineers: Designing for the Future of the Field*. New York: Jossey-Bass, 2008.
[4] *Educating the Engineer of 2020: Adapting Engineering Education to the New Centur.* Committee on the Engineer of 2020, Phase II, Committee on Engineering Education, National Academy of Engineering 2005.
[5] Stone, D., B. Patton, S. Heen, and R. Fisher. *Difficult Conversations: How to Discuss What Matters Most.* New York: Penguin Books, 2010.