For the past few years, we have had the opportunity and reward to work with faculty members from across the country who are part of Project Kaleidoscope's Faculty for the 21st Century. Some of our efforts have been related to leadership development in support of reforming and improving science, technology, engineering, and mathematics (STEM) education for undergraduate students. We have been concerned with what leaders need to learn to be effective, especially when encountering barriers and stonewalls within their own departments and isolated departmental silos.

In a session with a group of faculty members designed to look at a series of issues and how they might be addressed, we discussed how a department might use the development or revision of a mission statement to refine a common, shared vision for a department. When asking the simple question of how many departments had such statements, only half of the group responded yes. Of those who did, some indicated that it was written somewhere but never used. Others indicated they had such statements and they had been discussed by the department, but that faculty members left the sessions each with different interpretations of what was meant. This realization was surprising and a bit unnerving. It was a light bulb moment with one of the participants suddenly realizing why his department had gone through a process but had failed to make any fundamental changes. He referred to a condition of "terminal niceness," where nothing really changed. Others commented on faculty who were stonewalls, unwilling to change or consider anything new.

As we continued to explore the notion of developing a shared vision in a group, we discussed several opportunities for such efforts. These included accreditation or external reviews of departments and their related self-study materials, defining goals as learning outcomes for students, and making positive use of crises related to budgets or changes in personnel. The notion that an event that appears negative might be an opportunity for positive change seemed foreign. But most noticeable was the rarity of departments that had defined goals for their students that were being effectively assessed. The faculty members attending felt very comfortable defining goals for their own courses, but often saw little structure in their units or institutions organized to accomplish a collective mission and virtually nothing that involved evaluation of an entire unit.

As we continued to explore the dilemma of faculty interested in improving STEM education for nonmajors and majors, but facing barriers in their own departments or institutions, we suggested the focus be shifted away from individual faculty and "their" courses to student learning through a series of
experiences and measuring outcomes related to specifically identified goals. The participants were energized by the conversation and movement away from something disaggregated and difficult to deal with to a topic of interest to all faculty members. They also felt it an appropriate movement away from disputes over turf or the importance of this or that course. Several of the participants spoke of breakdowns in communication or how dynamics in their departments were causing them to be less effective or successful than they might be. They talked of excessive attention to minor issues, never getting to the important ones, and in many cases not seeing any bigger picture. They also expressed concerns that often faculty members failed to have a common understanding of what they mean by scholarship or effective teaching.

Coming out of the conversation were a series of observations that were centered on creating a better learning environment for students. Interaction and communication became critical, as did explicit, written goals and objectives that were commonly understood. Faculty discussed the tools required, what kinds of discussions were necessary, and the possibilities of having one or two members of a group serving as process observers. Trust became important, but so did decision making. They saw departments as needing the ability to air and discuss issues, but also to make timely decisions that were accepted by all members of a unit.

We explored ways to give everyone voice and realize different roles, but also ones that lead to the best outcomes for students. We encouraged proactive ways to create new opportunities for departments to come together to form a common understanding and vision.

We submit that the groups of faculty we have interacted with are not unusual. Few individuals have training related to group behavior or the development of strategic vision for the future. Everyone sees examples around them for how to operate and newer faculty look to role models. But rarely, particularly in larger units, do faculty see examples of the best interactions that produce powerful environments designed to support student learning. If such learning does occur, it is sometimes in spite of the lack of focused efforts to support it. In trying to improve student learning and planning for the future, we need collective efforts that produce measurable outcomes. In order for this to occur, we see no way it can or will develop accidentally. Rather, it will require concerted effort, commitment, conversation, and collective vision and attention by an entire unit that can address the many issues, resulting in the ability to make decisions that are understood and can be implemented.

Especially in the current economic climate, developing consensus around a group's mission and the resulting priorities is essential. Building trust within a group is not easy to accomplish. It requires individuals (and leaders) to set aside their own personal agendas in favor of a set of objectives that serve a common purpose. Most of the departments in higher education institutions have little practice
operating as a team, but even if it is not easy to attain trust within a group, it becomes even more important when systems are stressed and resources are constrained. Trust will matter most, but be most difficult to attain, as institutions wrestle with declining revenue and pressures to take in more students. It is likewise a time when individuals can lose sight of future goals. Having established a clearly defined set of objectives that are understood and can be articulated by all members is perhaps the strongest tie that will create possibilities for the future and be a bond that helps buffer a group through difficult times.

David F. Brakke is dean, College of Science and Mathematics, James Madison University. E-mail: brakkedf@jmu.edu. Judith A. Dilts is Dr. Burnell Landers Chair of Biology, William Jewell College. Sylvia Nadler is director, Pryor Leadership Program, William Jewell College. Jeanne A. Narum is executive director, Project Kaleidoscope.