A top priority for the members of the biology department at Morehouse College is creating a research- and resource-rich learning environment. A major objective is to engage the majority of our students in research and to increase the number of students who pursue graduate studies.

In 1989, department faculty revised the biology curriculum. Three new required courses were added (plant sciences, ecology, and senior seminar, a capstone course), along with a requirement that student majors take three laboratory courses beyond general biology. In addition, a sequence of three elective courses in research was introduced.

This was a significant change in our curriculum and thus, early in the process, we decided to develop a mission statement for the department. A chapter in Ernest Boyer’s book: Specialization: The Enriched Major, College: The Undergraduate Experience in America (1987) helped in developing the mission statement. The mission statement helped us to think about the breadth of the educational experience that our students should have and the importance of research in the department as a whole.

Our mission statement frames our strategic planning and assessment efforts and reminds old and new faculty members why we are here. Extracurricular student development activities are consistent in both spirit and priority with goals in the mission statement. It is widely posted around the department and provides an incentive for faculty and students to function as a community working towards achieving mission goals.

Most important, our department mission is consistent with and supports the overall mission of the college. It seemed clear from the outset that department goals that were not aligned with institutional goals were unlikely to be achieved and were probably not worth achieving in the first place.

There were a number of objectives that we wanted to capture, two of which were paramount: to provide students with a broad understanding of the field of biology and to assist in developing their creativity and reasoning skills. Both objectives are essential to the mission of liberal arts colleges, like Morehouse, and we believed that providing students with opportunities to perform inquiry-driven laboratory experiments in teaching and research laboratories was an important mechanism to achieve these ends.

Yet a number of barriers had to be overcome in developing a mission statement that we could agree upon and which served our students well. Based on this experience, the following guides to developing a mission statement are recommended:

- Involved all department faculty members and interested students in the process.
- Know the mission of the college and seek to reinforce as many of the colleges’ goals as possible.
- Adopt reasonable goals that are congruent with department resources.
- Make clear to all involved in developing the mission statement that it is a “living mission,” subject to change upon annual review.
Develop an assessment plan that includes measurable objectives and performance indicators.

Today, the mission statement is discussed regularly throughout the academic year and is included in department publications and posted on bulletin boards throughout the department. It is also discussed during freshman orientation with biology majors. Our students now have a better understanding of what we expect of them. An additional benefit is that the mission statement and attendant planning and assessment have strengthened our sense of community.

Mission of the Morehouse Biology Department

The mission of the department is to:

- Provide students with a fundamental knowledge of biology.
- Prepare students for and assist them in entering the workforce and graduate and professional schools.
- Strengthen the reading, writing and quantitative skills of our students.
- Develop the analytical reasoning skills and creativity of our students – expose students to contemporary research techniques in biology and enhance their understanding of the scientific method.
- Conduct meritorious research, within this community, in the field of biology.
- Acquaint students with the history of biology, including the contributions of African-American biologists.

Engender an appreciation among our students of the social and economic implications of discoveries in biology.

Build the awareness of our students of the ethical and moral issues related to tenets in biology.

This mission provides a framework for the student support programs that we have developed, as well as grants for extramural support. Based on the mission, we have established a national program in the summer for high school students interested in research careers. We have also developed a weekly seminar series that brings leading scientists to our campus to talk about their work and to interact with our students.

A key component of the Morehouse biology experience that derives directly from the mission statement is our mentoring program. Many students are mentored by faculty members while serving as research or teaching assistants and tutors. Additionally, there are three career counseling offices associated with the department that in addition to providing counseling, offer opportunities for students to serve as apprentices to professionals in areas of their career interest. The career counseling offices also sponsor a number of activities that provide extracurricular support for the entirety of our program. For example, the research careers office sponsors an annual research symposium. Here, students from all scientific disciplines give poster presentations, and a research club sponsors talks by scientists plus visits to science facilities.

Today, the sense of community is significantly more visible. Departmental committees for curricular and facility evaluation and for grant development are more active and focused. The involvement of students as colleagues in research is greater and we have a far more integrated counseling apparatus, funded by external grants, to help students make the move from our campus to graduate school or the workforce.

As we continued to translate our mission into action, we began to realize some gaps in our work. We had not clearly enough established a detailed assessment plan that was intimately linked to departmental goals. We did not have performance evaluation measures in place nor assessment tools or procedures to document outcomes and impacts on student learning. We have started the process. Departmental goal three, for example, states: to enhance research activity we have established the following objectives, outcomes and performance evaluation measures:

Objectives

- To increase research productivity of departmental faculty
- To increase student participation in research

Outcomes

- Increased faculty research funding and publications
- Increased numbers of student research publications at scientific conferences
LINKING DEPARTMENTAL AND INSTITUTIONAL MISSION: THE MOREHOUSE EXPERIENCE

Performance Evaluation Measures

- Each faculty member with a research laboratory will hold at least one research grant and publish at least two refereed articles per year.
- Each faculty member with research students should have at least one student present his research at a meeting each year.

Several years ago, the college began an assessment program that ties curriculum planning to college mission and budget. Each department is required to submit an annual assessment report to a college-wide assessment committee. This report indicates its success in achieving annual goals (milestones in a five year comprehensive plan) and the plan for the following year. This report is transmitted through the office of the vice president for policy and planning. S/he review it to ensure that information is complete and in the appropriate format. The assessment council, which consists largely of faculty members, review individual plans to see how reasonable they are, based on assessment data and department/institution goals. Then the council submits an evaluation and recommendation to the vice-president for academic affairs. The vice-president for academic affairs then holds discussions and engages in negotiations with department heads before submitting recommendations from the assessment council and vice-president for academic affairs, making any budget adjustments based on strategic imperatives at the college. By and large, departments that are successful in planning and achieving their goals will be rewarded in their budget allocation for the next academic year.

This plan, which couples department planning with college-wide planning and budgeting should put teeth into the effort to make departments take planning and assessment far more seriously than at present. We have more to do, but our experience might be helpful to other departments.