



Opening Wide the Gateways: Enhancing Student Learning and Promoting Inclusion in the Quantitative Disciplines

Opening Wide the Gateways is a reflection of Davidson's Statement of Purpose, a culture of action informed by assessment, and the value the College places on an inclusive community. The plan recognizes an intentionally changing student profile and the important role faculty will continue to have in creating an academic environment in which all students can thrive.

Davidson's Quality Enhancement Plan focuses specifically on disciplines where we have seen differential performance between majority and underrepresented students and where the literature about the positive effects of inclusive pedagogical practices is robust. The experiences of Davidson faculty strongly suggest that connecting new pedagogies to gateway courses in six quantitatively-oriented departments would lead to measureable improvement in learning outcomes.

Specifically, the QEP focuses on:

- the quantitatively-oriented disciplines of Biology, Chemistry, Economics, Mathematics/Computer Science, Physics, and Psychology,
- gateway courses in those disciplines that serve as an introduction to concepts and analytical methods that build sequentially, and
- learning outcomes in those gateway courses that are critical to achievement in the discipline and that reverberate throughout more advanced work in it

In addition to discipline-specific learning outcomes (these are detailed below), we specifically target *application learning* in the gateway courses. Application learning refers to skills that enable students to apply information learned in one context to new situations. These skills are crucial to later success and students who struggle with them tend to falter.

In addition to the discipline-specific learning outcomes described in the following pages, the QEP defines a broad application learning outcome that functions as a bridge between discipline-specific learning outcomes discipline and those that bring extrapolate beyond it. It is:

- All students will be able to recognize under what conditions theories, models, or quantitative evidence should be applied and to use them appropriately to explain phenomena or solve problems.

Opening Wide the Gateways is further concerned with how instructors in the quantitative disciplines can foster diversity and inclusion in their gateway courses. Enhancement of student learning will go hand-in-hand with the enhancement of faculty knowledge of inclusive pedagogical practices. Two important components of faculty participation are the May Workshop and the learning community in which instructors can share experiences, discoveries, successes, and challenges.

The QEP's assessment will depend on a multi-method, multi-year protocol. In addition to assessment of learning outcomes, a program evaluation will look at the overall learning environment and the degree to which a sense of inclusive community is fostered.

Davidson is fortunate to have the resources and organizational structure that the QEP requires for success. Our most important resource is the campus community's commitment to inclusivity and academic success of all students.

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