



Administrators and faculty at Tidewater created “curriculum maps” for each academic program to show how core competencies and course goals overlap.

FEATURE: AAC&U MEMBER INNOVATIONS

Creating the ‘On-Ramp for the Baccalaureate Degree’ at Tidewater Community College

Tidewater Community College mathematics instructor Joseph Joyner knows that many of his students aren’t exactly thrilled to be in one of his classes. “A lot of my students come to math without a feeling of security, and they don’t want to be here. They’ve had bad math experiences,” he explains. So Joyner, who teaches applied calculus, algebra, and statistics, starts by showing his students how mathematics fits into the bigger picture. “Math is a language and a form of communication,” he says. “People who use math are trying to communicate something. Every chance I get, I try to show how math helps us explain relationships—be it blood-sugar monitoring or juvenile delinquency statistics.” Joyner’s colleague Kim Bovee, an assistant professor of English at Tidewater, tries to show her students the bigger picture, too. “I refer to English as your toolbox to help you with audience and purpose, to determine what kind of writing you’ll do. You may be writing a two-page compare and contrast paper now, but the same concept will be used in higher-level papers after you transfer.”

Teaching students to look beyond single-course objectives to larger learning goals is still somewhat unusual in community colleges, many of which, like Tidewater, offer both transfer degrees and narrower career training programs. But Tidewater Community College sees itself as “the on-ramp to the baccalaureate degree,” says Tidewater president Deborah DiCroce. “We consistently hear from business and industry that what they want is the intellectual habits of mind that are rooted in the liberal arts and liberal education. To be successful, one has to know how to think, and you need exposure to things to think about—a body of knowledge rooted in great works and lessons of history. That should be the foundation of a strong general education program, whether it’s two year or four year.”

Mapping General Education Outcomes

In the past two years, Tidewater has moved away from the “distribution requirements” general education model toward a “core competencies” model. It’s an important part of Tidewater’s mission to be a national exemplar for a comprehensive community college for the twenty-first century, DiCroce explains. These competencies, which students are expected to possess upon graduation, include communication, critical thinking, cultural and social understanding, information literacy, personal development, quantitative reasoning, and scientific reasoning. The move is part of a larger initiative by the Virginia Community College System to ensure institutional effectiveness across the system’s twenty-three community colleges. “We’re trying to ensure that in all our programs, existing and new, there are corresponding goals and objectives, and that they are embraced as part of our larger institutional effectiveness program,” DiCroce says.

Starting in 2005, Tidewater began the process of “mapping” each of its fifty-two programs to show how the general education competencies and each program’s objectives fit together and overlap, explains Tidewater’s Vice President for Academic and Student Affairs Michael Summers. By 2006, the mapping was complete, and in subsequent years, administrators and faculty have started assessing the competencies’ effectiveness at the course level, making changes as needed. “A lot of colleges do program reviews and tally what faculty they have, the number of graduates, where they’re going, things like that,” Summers says. “We’re trying to take it a lot further than that and look at our mapping as a perfect way to assess the whole.”

Tidewater’s core competencies, which closely mirror the [Essential Learning Outcomes](#) that guide the AAC&U LEAP initiative, are especially important in a community college setting because they help a diverse student body coming from many different educational backgrounds to “connect the dots” between disparate parts of their educational experience, DiCroce says. Students are presented with the objectives for learning at multiple points during their Tidewater career—at orientation, when choosing a program, and on individual classroom syllabi. “It’s rare, especially at a community college, to be showing how an applied science course meets the competencies in several different areas,” Summers says “When an instructor really embraces the competencies, students ‘get it.’”



Teaching methods like learning communities help students understand how different disciplines are connected.

Competencies in the Classroom

Joyner and Bovee are two of the instructors Summers is talking about when he mentions “really embracing” the core competencies. Both use a combination of pedagogical approaches, including some “high-impact practices” that research has shown are highly effective at producing learning gains in all students, and especially in underserved students. These practices include strategies such as learning communities, collaborative work, and writing-intensive courses.

In Bovee’s English 112 course, a writing-intensive transfer-level rhetoric and argument class, she’s mapped out how the material covers

several of the core competencies—some more obvious than others. “We cover the communication competency, obviously, but we also touch on deductive analysis, one of the scientific reasoning competencies,” she explains. “I’m not teaching hard statistics, but we learn to consider the logic of the statistics they encounter in their research for papers—Does this graph make sense? What is the spin of the person or group who put it together? Information literacy—do my students know how to access good, peer-reviewed information? And critical thinking—I show them that every time they assess something they read, that’s critical thinking.” In Joyner’s intermediate algebra class, he includes the course objectives he wants students to satisfy right on the syllabus. One of these, for example, “Use the Internet to find real-world uses of Algebra II,” incorporates the information literacy, quantitative reasoning, and critical thinking competencies. In his statistics class, the learning objective “Learn to distinguish ‘good statistics’ from ‘bad statistics’” touches on at least three of the core competencies. “I try every time I can to make parallels with what I’m teaching or how I’m teaching it,” he says.

Bovee and Joyner are both also exploring the benefits of learning communities for their students. Bovee has already participated in informal learning-community situations, where she and other faculty members who have many of the same students try to line up material that comes into play in both fields: if a biology

teacher is teaching the scientific method, Bovee can do induction and deduction in argument that same week. “Learning communities are the metaphor for looking at the core competencies across our little silos,” Bovee says. Joyner is planning to start a learning community with a history professor on the history of scientific enlightenment in the seventeenth and eighteenth centuries, looking at both the historical roles of Newton, Galileo, and their contemporaries, as well as the mathematics they used. “I want to show students that mathematics didn’t come out of a vacuum—it came out of a need to demonstrate something in the natural life,” Joyner explains. “I’m always interested in teaching math in context, because we learn best in context. Too often students see math as a bunch of discrete facts, when making connections is what gives it meaning.”

In the coming years, Summers says Tidewater will continue to work on measuring and assessing the effectiveness of the core competencies, both for students and for faculty. Ultimately, DiCroce says, Tidewater hopes that its strong general education program will take students back to “the Aristotelian idea of an educated person. It’s precisely the blurring of the lines between disciplines that takes us back to our educational roots.”

Tidewater Community College President Deborah DiCroce is a member of the Virginia Leadership Council for AAC&U's LEAP [Virginia Advocacy and Campus Action Initiative](#). More information about [Tidewater's general education program](#) and the [Virginia Community College System core competencies initiative](#) is online. See the [LEAP high-impact practices Web page](#) for the list of high-impact practices described in AAC&U's most recent LEAP publication, High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter.