TIDEWATER COMMUNITY COLLEGE
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Assessment of General Education at Tidewater Community College: Adapting the AAC&U Value Rubrics

In 2006, the State Board for Community Colleges, the governing body of the Virginia Community College System, approved in policy seven general education competency areas to include: Communication (oral and written), Information Literacy, Critical Thinking, Cultural and Social Understanding, Personal Development, Quantitative Reasoning, and Scientific Reasoning. General education competencies apply to all graduates in both transfer and career and technical degree programs. As a result of being selected by the Association of American Colleges and Universities (AAC&U) as a participant in its Roadmap Project, Tidewater Community College (TCC) has made it a priority to assess student learning across the seven general education competency areas.

Historically, the assessment process has neither adequately engaged TCC faculty nor yielded sufficient results to improve student learning. As a result, faculty have not taken ownership of the assessment process and student success has not been fully realized.

Despite minimal engagement in previous years, the majority of TCC's faculty would likely agree that developing student competencies in areas such as Critical Thinking and Written Communication is a goal of their curricula and disciplines. The faculty of four-year colleges and universities where our students transfer should expect that our students will arrive at their classrooms competent in these areas. In conversations with employers and through studies such as the national poll by Peter D. Hart Research Associates, Inc. (AAC&U, 2007), it is obvious that employers need college graduates equipped with key lifelong competencies such as the seven that are TCC's priority.

TCC's assessment initiative took significant shape in fall 2012 when a five-year assessment plan was drafted and piloted. The college has learned many lessons during this short period and is pleased to be making real progress. Involvement from key stakeholders, particularly teaching faculty, has grown significantly and general education assessment is gaining momentum in terms of perceived importance.

ASSESSMENT PLAN AND METHODS

The following outlines the college's activities and steps in the ssessment planning and implementation process.

1) Faculty developed course outlines that included elements such as the course description; prerequisites and co-requisites; the general education core competencies supported by the course; measurable learning outcomes; and methods of assessment. Each faculty member teaching the course is required to fully incorporate these agreed-upon elements.

***Kellie C. Sorey**, associate vice president for academic effectiveness, Tidewater Community College*

***Daniel T. DeMarte**, vice president for academic affairs/chief academic officer, Tidewater Community College*

2) A web-based curriculum portal, referred to as i-INCURR, was developed and implemented (see www.tcc.edu/iincurr). The portal houses all official curriculum materials for review and use by faculty, staff, administrators, students, and the public, including course outlines, curriculum guides that outline all certificate and degree curriculum requirements, syllabus templates that populate required course outline elements, and general education assessment information (e.g., TCC-adapted VALUE Rubrics, the assessment plan and timeline). Since its initial implementation, many features have been added including a tracking and reporting feature to identify courses selected for general education assessment and the ability to inventory courses as they align with the general education core competencies.

> *"Being a part of this process has caused me to reevaluate assignments I give to students. We have a responsibility as faculty to provide students with many and varied opportunities to demonstrate skills and we also have a responsibility to model those skills in the instructions within and layouts of those assignments."*
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> **— David L. Brandt,** Math Faculty

3) In May 2012 at the college's annual Learning Institute, faculty were encouraged to engage in conversations about the general education requirements and intended learning outcomes. They were reminded that the learning outcomes had to be incorporated in all curricula and disciplines college-wide. At this day-long event, the AAC&U Value Rubrics were also introduced to nearly 200 faculty in attendance. Drafts of adapted rubrics that align with VCCS outcomes were also developed for *Communication and Information Literacy*.

4) Fifteen 15 faculty members were recruited to serve as assessment coaches. Assessment coaches are charged with educating faculty in their disciplines and those of related disciplines about the college's assessment initiative, getting faculty involved in the process, sharing assessment findings, and helping faculty develop classroom assignments and projects that promote student learning. These assessment coaches also work with faculty in their disciplines and related disciplines to review every course offered by the college in relation to the general education requirements and to determine the appropriate learning outcome(s) for each course.

5) In fall 2012, a five-year assessment plan was drafted, shared with faculty at Convocation, reviewed by existing governance committees under the leadership of the Instruction Committee, and eventually finalized. Further, at a follow-up Learning Institute in October, faculty were provided the opportunity to shape the college's plans for assessment of three additional general education requirements: *Critical Thinking, Cultural and Social Understanding, and Scientific Reasoning*. Seventy-five faculty participated in adapting two rubrics created by AAC&U as well as developing an original rubric for Scientific Reasoning.

6) About 40 faculty volunteers completed training to assess student learning using the TCC adapted AAC&U Value Rubrics.

7) According to the plan and through a predetermined rotation, one to three of the seven learning outcomes are assessed each semester over the next five years. In each rotation, student assignments are collected from a variety of courses that contribute to the general education learning outcomes under assessment. The assignments are scored by faculty volunteers ("faculty assessors") who have received training in using the TCC adapted VALUE Rubrics. These rubrics are the framework TCC is using to assess cumulative learning outcomes in general education competency areas versus content mastery for a particular course—a major shift for many of our faculty.

> *"After 20+ years in higher education instruction, this has been the most valuable exercise I have been a part of to improve every aspect of what I do in and out of the classroom."*
>
> **— Frederick E. Stemple, Jr.,** Biology Faculty

Assignments used for assessment come from students who are representative of TCC's degree-seeking population in terms of such things as course format (traditional, hybrid, online) and degree type (career/technical and transfer), and who have earned 30 or more academic credits. Students are identified for participation by the college's Office of Institutional Effectiveness through a stratified random sample process. The assignments, or student work products, are not an additional requirement for a selected course; rather, the assignments are those required of all students, and the assignments are selected and submitted by the faculty member.

8) In the first assessment semester, fall 2012, the college launched the plan as a pilot project to assess Written Communication and Information Literacy. For each general education competency area, 50 students were randomly selected for inclusion. Uncertain of what to expect regarding the faculty response rate, student attrition, and the appropriateness of the work products submitted, an additional 25 students were randomly selected as "substitutes" for each competency area. The goal was to collect and assess 50 student work products for each competency.

9) Approximately 25 faculty assessors scored the student work products submitted for *Written Communication and Information Literacy*. Each work product was reviewed by two faculty assessors who assigned a score between 0 (no display of learning) and 4 (capstone-level learning) for each dimension constituting a general education competency area. When the score differential was one or less, the two scores were averaged so that the student had a final score for the dimension. If scores differed by more than one on any dimension, a third faculty assessor was requested and the third scorer's assignment was recorded as the student's final score for the dimension. A third assessment was also requested in cases where one of the first two assessors submitted an actual score value and the other responded that a score could not be assigned because the student was not instructed to display a particular dimension of the competency under study. Again, the assignment offered by the third scorer was recorded as the student's final score for the dimension.

10) The college has initiated the second phase of the assessment plan by identifying courses for spring 2013 assessment of *Quantitative Reasoning, Critical Thinking, and Scientific Reasoning*. As in the fall 2012 semester, 50 students and 25 substitutes have been selected for inclusion from the identified courses for each general education competency under study. The college recently started recruiting additional faculty assessors, and training will again be provided.

11) The college recently shared fall 2012 findings with the assessment coaches and faculty assessors, and is working with both groups to determine how to disseminate the findings with all faculty to promote advancement in the competencies under study. The goal is for faculty across disciplines to apply the findings through informed pedagogical changes. Further, the college has plans to conduct a focus group session with fall 2012 faculty assessors to obtain their feedback on several issues including the scoring process, assessor training, appropriateness of assignments in measuring the intended learning outcome, and recruitment and retention of faculty assessors.

PRELIMINARY FINDINGS OF THE COLLEGE'S PILOT SEMESTER

Of the 44 student work products assessed for *Information Literacy*, 33 were reviewed by a third assessor. In comparison, of the 50 work products assessed for *Written Communication*, 15 required review by a third assessor. A third assessor was frequently called to review instances where one assessor did not assign a score and the other did. This was often the case in assessing *Written Communication* where one of the five dimensions called for assessment of the student's use of high-quality, credible, relevant sources to develop ideas. Assignments like this were not indicative of a student's learning, but rather a weakness of the assignment and/or a VALUE Rubric in need of further adaptation.

> *"The experience I gained in assisting to develop the assessment process and rubrics that are being used at TCC was one of the high points of my committee work. I believe that this initiative will give TCC the opportunity to have a shared vision of where the college is headed."*
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> **— Karla O. Guilford-Shipp**, English Faculty

The college anticipates learning a great deal more about the faculty assessors' experiences and their perceptions of the assigned work products in relation to the VALUE Rubrics during the scheduled focus group session. However, some preliminary findings based on notes made by them on the fall 2012 assessment day reveal that some assignments yielded better results in terms of assessing student learning than others. There is much more to learn in this area as the college begins sharing the data with all faculty.

TCC's Office of Institutional Effectiveness analyzed student data to arrive at a mean score, for possible rating on a scale from 0 to 4, on each dimension constituting the two general education competencies under study. An overall mean score for each dimension was computed, as were two independent mean scores for comparison of students in career and technical degree programs and transfer degree programs—a comparison of interest to TCC.

Table 1 illustrates student performance on the *Written Communication* learning outcome. Considering that students selected for participation had earned 30 or more academic credits and were therefore considered sophomore students, performance was as expected. TCC students' greatest strength in terms of *Written Communication* and as scored by faculty assessors was on the Context and Purpose for Writing dimension. As expected, through informal conversations with faculty assessors and as supported by preliminary findings, TCC students need assistance in the Sources and Evidence area.

TABLE 1

Written Communication Average Score as a Function of Dimension and Curriculum Type (with Standard Deviations in Parentheses)

	Curriculum Type		
Dimension	Overall	Career/Technical	Transfer
Context of and Purpose or Writing	2.20 (.90) N=50	2.30 (1.08) N=23	2.13 (.72) N=27
Content Development	1.87 (.85) N=50	1.91 (.93) N=23	1.82 (.80) N=27
Genre & Disciplinary Conventions	1.95 (.64) N=49	1.89 (.89) N=22	1.98 (.67) N=27
Sources and Evidence	1.73 (1.00) N=28	1.63 (.86) N=12	1.81 (1.15) N=16
Control of Syntax and Mechanics	1.86 (.68) N=50	1.94 (.92) N=23	1.78 (.75) N=27

Students demonstrated greatest need of development in the evaluation of information and its sources for the *Information Literacy* competency (see Table 2). This is comparable with the results for the *Written Communication* competency, where the data show a weakness in sources and evidence, which involves the use of "quality, credible and relevant sources." With an overall mean value of 2.5 for determining the nature and extent of information needed, it was apparent that this is a student strength in terms of learning.

TABLE 2

Information Literacy as a Function of Dimension and Curriculum Type (with Standard Deviations in Parentheses)

		Curriculum Type	
Dimension	Overall	Career/Technical	Transfer
Nature and Extent of Information Needed	2.48 (.83) N=33	2.39 (1.08) N=14	2.55 (.64) N=19
Access of Needed Information	1.98 (.71) N=25	1.94 (.58) N=9	2.00 (.82) N=16
Evaluation of Information and its Sources	1.67 (.77) N=27	1.60 (.78) N=10	1.71 (.81) N=17
Use Information Effectively	2.09 (.86) N=32	1.96 (1.19) N=11	2.17 (.68) N=21
Use Information Ethically and Legally	1.78 (.83) N=27	1.67 (.90) N=9	1.83 (.84) N=18

Further analyses are being conducted by the college, but these preliminary findings offer a glimpse of student learning and provide benchmark "scores" for our students. More importantly, they also serve as a springboard for discussions with faculty and subsequent curriculum changes.

LESSONS LEARNED AND NEXT STEPS

College officials responsible for collecting and preparing student work products and notifying and reminding faculty of their responsibilities learned early on that these processes were arduous and could be accomplished more easily through automation. With support from the college's Office of Information Systems, a software tool is being developed that will allow for student work products to be scanned and randomly directed to two faculty assessors for scoring. When a third scorer is needed, the work product will be assigned to a third scorer for review. More promising, when faculty have not submitted the required work products for selected students, they will receive automated notices and reminders. This tool, which automates much of the process and also allows faculty to assess student work products at any time and from any computer will be available fall 2013. Another lesson the college has learned is that piloting the process was the right thing to do. Having a larger sample size would have only compounded the arduous nature of this initiative.

Once each general education competency has been pilot tested and improvements made based on the first round, the college plans to select a larger sample of students for participation.

Educating faculty about the initiative evolved into what the assessment coaches have referred to as a "marketing blitz." Even after several opportunities to learn about the initiative, through various modes such as two Learning Institutes dedicated solely to the initiative, information sessions as part of Convocation, several faculty governance committee meetings, and numerous emails by college leaders, some faculty seemed unaware and/or unclear of the initiative and its intent. Faculty who have been actively engaged in the process understand the reasoning behind the initiative and know how critical the initiative is to the college. One significant lesson learned is that faculty on the leading edge of this initiative need to be ambassadors to their colleagues.

While the college has only recently begun this journey, it is apparent that we are on the right path to understanding more fully whether our students are learning what we think is important. We are also eager to take that next step to close the loop on the first cycle by actively engaging all faculty to improve student learning in these critical areas. What is learned from faculty in our classrooms is increasingly important to area employers and the institutions to which our students transfer.

REFERENCES

Association of American Colleges and Universities (2007). College learning for the new global century: A report from the National Leadership Council for Liberal Education and America's Promise. Washington, DC: Association of America Colleges and Universities.