

TCC – GENERAL EDUCATION ASSESSMENT REPORT

Scientific Literacy & Written Communication

2019-2020

The purpose of this report is to fulfill the State Council of Higher Education for Virginia’s (SCHEV) Policy on Student Learning Assessment and Quality in Undergraduate Education and the required public communication of assessment reports.

General Education Assessment (GEA) Plan

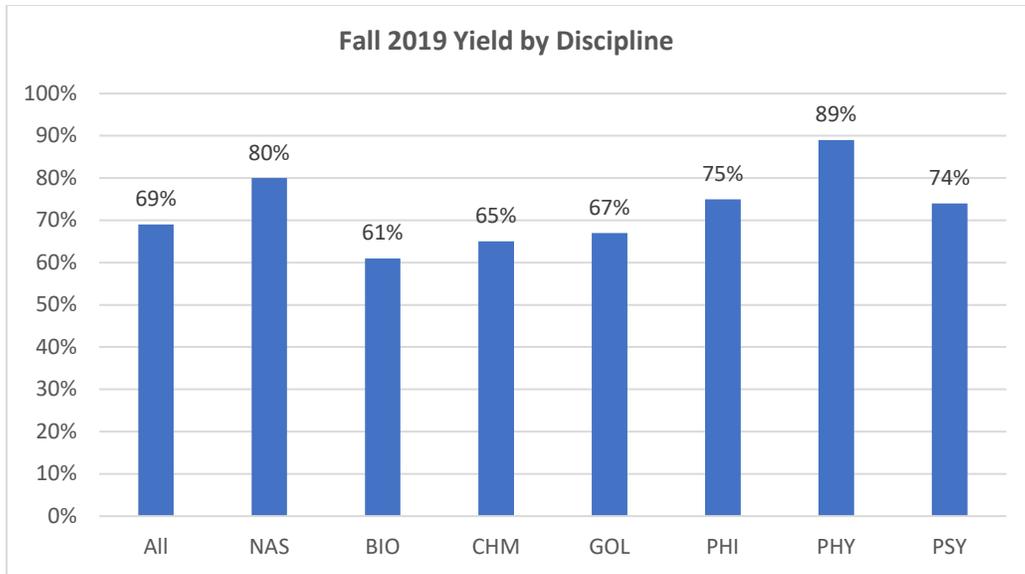
Each course offering at Tidewater Community College (TCC) develops students in one or more of the following core competencies: Critical Thinking, Written Communication, Quantitative Literacy, Civic Engagement, Professional Readiness, and Scientific Literacy.

For each course at TCC, faculty identify the competencies students should develop and document those on the Official Course Outlines. Then all faculty members must incorporate course activities and assignments to facilitate student development for the applicable competency learning outcomes identified on the TCC-adapted Association of American Colleges and Universities (AAC&U) VALUE Rubrics. (<https://www.tcc.edu/about-tcc/academics/general-education-assessment-resource-system/>)

Evidence of Student Learning

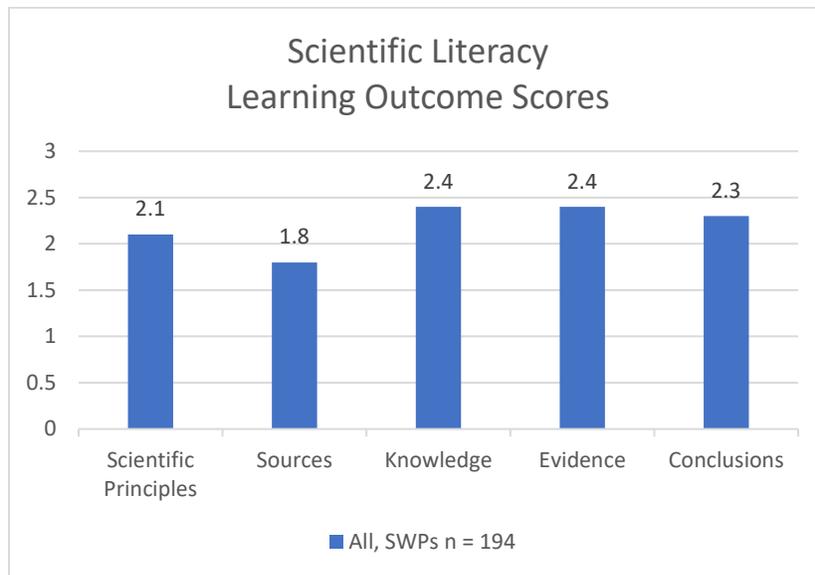
Scientific Literacy

A random sample of students was selected to assess scientific literacy (n=281). Of the students selected, faculty submitted student work products for 69% (n=194). Student withdrawals and non-submittals accounted for 31%. A breakdown of scores by course, faculty participation and score expectations, and assignment support are reviewed by discipline faculty to identify strengths and areas of concern. A breakdown of results by course offers faculty the opportunity for 1) focused analysis of their disciplines’ contribution to student learning; 2) targeted professional development in instructional methodology; and 3) establishing benchmark thresholds within the discipline that support and improve student development in core learning outcomes.



Scientific Literacy Learning Outcomes

Students met or exceeded learning outcomes of Scientific Principles, Knowledge, Evidence, and Conclusions (Benchmark 2.0).



- ❖ Strongest Learning Outcome – Knowledge and Evidence
- ❖ Weakest Learning Outcome – Sources

Comparison of Transfer and Career/Technical Results in Scientific Literacy

As a community college, TCC is home to students looking for immediate job placement in a career field or the freedom to transfer to a four-year university for continued education. A comparison of student learning between those enrolled in a transfer associate degree versus a career/technical associate degree shows a slight but statistically insignificant difference. Both groups exceeded the established benchmark of 2.0 for four outcomes and less than the benchmark of 2.0 in the Sources outcome.

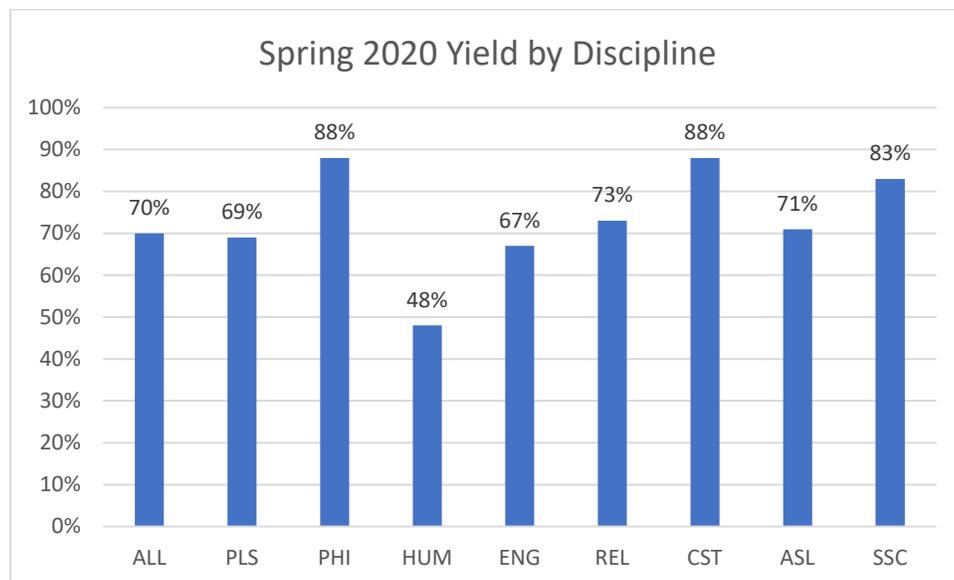
Underrepresented Students

Of the students assessed for Scientific Literacy, 78% are considered underrepresented, defined as being a minority, age 25 or older, or receiving a Pell Grant. TCC considers these results within an acceptable range as there are no significant differences between these subgroups.

Evidence of Student Learning

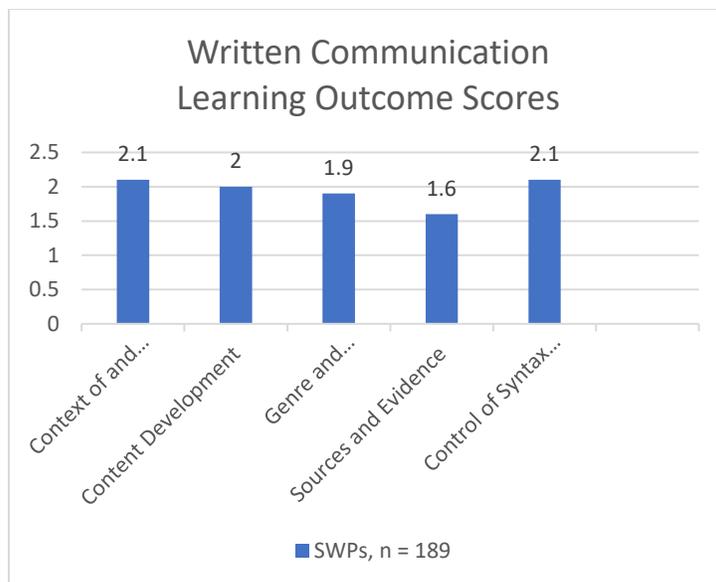
Written Communication

A random sample of students was selected to assess written communication (n=271). Of the students selected, faculty submitted student work products for 70% (n=189). Student withdrawals and non-submittals accounted for 30%. A breakdown of scores by course, faculty participation and score expectations, and assignment support are reviewed by discipline faculty to identify strengths and areas of concern. A breakdown of results by course offers faculty the opportunity for 1) focused analysis of their disciplines' contribution to student learning; 2) targeted professional development in instructional methodology; and 3) establishing benchmark thresholds within the discipline that support and improve student development in core learning outcomes.



Written Communication Learning Outcomes

Students met or exceeded learning outcomes of Context of and Purpose for Writing, Content Development, and Control of Syntax and Mechanics (Benchmark 2.0).



- ❖ Strongest Learning Outcome – Context of and Purpose for Writing, Control of Syntax and Mechanics
- ❖ Weakest Learning Outcome – Sources and Evidence

Comparison of Transfer and Career/Technical Results in Written Communication

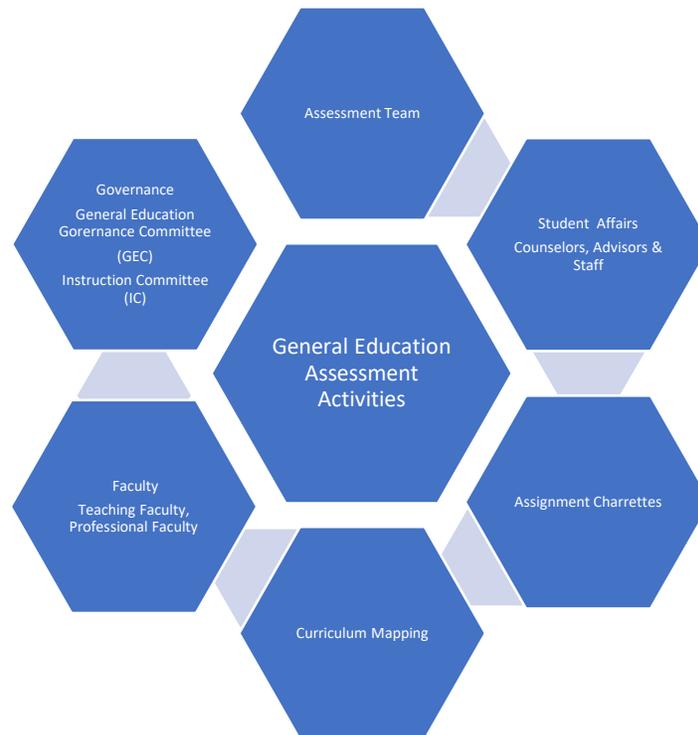
As a community college, TCC is home to students looking for immediate job placement in a career field or the freedom to transfer to a four-year university for continued education. A comparison of student learning between those enrolled in a transfer associate degree versus a career/technical associate degree shows a slight but statistically insignificant difference. Both groups exceeded the established benchmark of 2.0 for three outcomes and less than the benchmark of 2.0 in the Sources and Evidence and Genre and outcomes.

Underrepresented Students

Of the students assessed for Written Communication, 76% are considered underrepresented, defined as being a minority, age 25 or older, or receiving a Pell Grant. TCC considers these results within an acceptable range as there are no significant differences between these subgroups.

Summary

Student learning in general education is influenced by a breadth of people, departments, and processes comprised of individuals from Academic Affairs, Student Affairs, Institutional Effectiveness, Governance, Libraries, teaching faculty, and students.



In the 2019-2020 academic year, TCC utilized assessment data to improve students' educational experience and enhance future achievement by implementing the following:

❖ **Libraries**

TCC's campus libraries collaborated to improve Sources and Evidence, including 1) development and publication of librarian-created instructional videos and content, on information literacy concepts such as finding, evaluating, and citing information, <https://libguides.tcc.edu/stepbystep>; and 2) creating customized research guides in TCC's learning management system, Canvas. The Libraries also used the GEA results for Written Communication and Scientific Literacy to identify areas where additional library instruction would reinforce a scaffolded approach to student achievement in "Demonstrating proper usage of credible and relevant scholarly sources in support of inquiry" (Scientific Literacy) and "Sources and Evidence" (Written Communication). Specifically, Libraries looked at the discipline-specific results and changed teaching and instruction to increase opportunities for student learning in select general education courses. Librarians engaged with faculty from ENF 3 and the connected ENG 111 course and shared Canvas modules with faculty that supported learning outcomes

regarding source evaluation. Scaffolded course modules were also created in collaboration with faculty to address the credibility of sources in Communications courses such as CST 100.

In addition, specific librarians were identified and assigned to each of TCC's eight academic pathways (Arts & Humanities, Business/Computer Science & IT, Engineering, Science & Math, Health Professions, Manufacturing & Transportation, Maritime & Skilled Trades, Public & Professional Services, and Social Sciences & Education) to assist students and faculty in core learning outcomes that develop concepts integral to information literacy.

- ❖ **Shared Governance** at TCC is an integral part of developing our students.

The General Education Committee's (GEC) goal is to improve the quality and relevance of the general education curriculum.

During the 19-20 academic year, the GEC reviewed 41 Humanities courses for satisfying core competencies and transfer suitability. Recommendations from the GEC resulted in the disciplines of Religion, Art, Foreign Language, Music, and Philosophy reviewing and updating general education competencies and creating assignments to support stated learning outcomes.

The Instruction Committee (IC) makes recommendations on instructional matters that impact the college's mission.

During the 19-20 academic year, the IC approved and published 25 assignments intended to develop students in knowledge, skills, and abilities relative to Scientific Literacy on the General Education Assessment Resource System (GEARS) website. GEARS is a faculty-created site that serves as a resource to faculty who wish to improve student learning (see www.tcc.edu/GEARS).

- ❖ **Assignment Charrettes**

An assignment charrette incorporates assignment design and structured peer review of assignments in support of student development in core competencies.

Charrettes were conducted for faculty in Nursing, Emergency Medical Services, Studio Arts, and the Business Pathway. Consequently, the faculty in these programs adopted assignments that support student learning and are available for all faculty members to adopt.

- ❖ **General Education Curriculum Mapping of Learning Outcomes**

General education competencies were mapped to ensure all competencies are represented in the following programs: Computer Science, Information Systems Technology, Nursing, Emergency Medical Services, Business, Automotive, Funeral Services, Heating, Ventilation, Air Conditioning, and Refrigeration; Horticulture, and Nurse Aide.

History faculty identified Critical Thinking for all history courses, foreign language faculty selected Civic Engagement as a core competency for all foreign language courses, and the natural sciences faculty agreed that all natural science general education courses support Scientific Literacy.

All associate degrees at TCC develop students in the Written Communication core competency. Scientific Literacy is supported in all transfer programs.

Currently programmatic gaps exist in some applied degree programs because math and a science general education course are not always required. Where programmatic differences occur, the faculty are reaching out to those disciplines to discuss curriculum alignment.

❖ **Assessment Team**

The Assessment Team promotes best practices in assessment and fosters communication pertaining to college-wide assessment activities including evaluation of general education. The team is comprised of representatives from Institutional Effectiveness and Academic Affairs and supports SACSCOC accreditation standards, SCHEV requirements, VCCS reporting, and specialized accreditation efforts through collaborative sessions with academic pathways and programs at TCC.

At the January 2020 Learning Institute (an annual college-wide faculty professional development program at TCC), the Assessment Team launched a campaign to review and align college-wide assessment initiatives. This campaign is an ongoing process that will include a review of program learning outcomes, assessment measures, and subsequent steps for improvement within a recent college-wide academic reorganization. Actions have included: 1) the AS Liberal Arts faculty adopted Written Communication, Critical Thinking, and Civic Engagement core competencies as measurable program learning outcomes and the faculty are in the process of aligning the outcomes with core competencies; and 2) the Social Sciences & Education Pathway are identifying core competencies as program learning outcomes for the AS in General Studies, specializations in Professional Communication, and Teacher Preparation, and AS in Social Sciences.

In addition, the career/technical (CTE) program in Human Services, is mapping core competencies to each program course and identifying program learning outcomes, and the Horticulture program has identified student development in the library, internet, and professional resources to prepare and write an informational, research, or opinion paper as a program learning outcome.

Planned activities in the 20-21 academic year in support of student development in general education include:

- Revise the Written Communication general education competency rubric utilizing previous assessment data.
- Continue assessor training for faculty scoring of student work products. Assessor training includes full-time faculty that are new to the college.
- Dedicate an assessment day each assessment cycle to score student work products.
- Promote dialogue with those faculty submitting student work products and associated assignments that support student development to identify best practices for sharing.
- Facilitate assignment charrettes to identify and peer review assignments that develop students in the core competencies of Scientific Literacy and Written Communication.
- Begin planning a college-wide campaign in support of finding, evaluating, and citing information.