Community College *of* Philadelphia

General Education Essential Skills Assessment Report
Fall 2022-Spring 2023

Approved by the Academic and Student Success Council 1/24/2024

Contents

Authors:

- Amy Birge-Caracappa, Director of Assessment
- Faye Allard, Department Head, Social Science
- David Bertram, Department Head, Architecture, Design, and Construction
- Jason Esters, Assistant Chair, College Writing
- Paul Geissinger, Department Head, Music
- Barbara Hearn, Course Coordinator, CIS 103
- Laurence Liss, Department Head, Computer Technologies
- Massah Nuni, Department Head, English
- Sean Sauer, Department Head, Art and Design
- The General Education Essential Skills Core Committee

I. EXECUTIVE SUMMARY

A. Overview of General Education Assessment, Fall 2022-Spring 2023:

Community College of Philadelphia revised the definition of Technological Competency effective Fall 2019 and revised the entirety of general education in Fall 2021. As with each of the Essential Skills, the Technological Competency definition was created in anticipation of assessment, and the general education measures (GEMs) used for assessment are derived from this definition. The second of six Essential Skills of general education assessed under the revised system, Technological Competency (TEC) assessment began with a pilot in Fall 2022 and included CIS 103, CSCI 111-112, and several Liberal Studies courses that meet the TEC requirement. Although the Fall 2022 TEC assessment indicated proficiency above the 80% benchmark in all of the GEMs (N = 392), Spring 2023 assessment data (N = 862) show proficiency above the 80% benchmark in TEC1 (95%), TEC2 (97%), TEC5 (87%), and TEC6 (98%), and proficiency below the benchmark in TEC3, "Use electronic spreadsheets and/or database management systems to organize, analyze, and/or retrieve data" (65%) and TEC4, "Use word processing and slide presentation software to design clear academic and professional documents that integrate design concepts, elements, applications, and objects" (73%). Recommendations and actions taken for continuous improvement generally focus on adjusting the materials, including more scaffolding and greater emphasis on selected topics (CIS 103), and creating assignments that integrate technology skills within students' disciplines to foster greater engagement.

B. Goals and Methods:

1. **Goals:** Competency in Technological Competency (TEC) is defined by six General Education Measures (GEMs) that come directly from the TEC Essential Skill definition.[1]

   ### General Education Measures (GEMs):

   - **TEC 1:** Identify, create, and manipulate technological tools and digital content.
   - **TEC 2:** Operate computers, peripherals, electronic devices, learning management systems (LMS), and other technology as related to their program of study.
   - **TEC 3:** Use electronic spreadsheets and/or database management systems to organize, analyze, and/or retrieve data.
   - **TEC 4:** Use word processing and slide presentation software to design clear academic and professional documents that integrate design concepts, elements, applications, and objects.
   - **TEC 5:** Use computer technology to collaborate and network.

[1] The definition was developed by a multidisciplinary group of faculty, approved by the College's governance structure in Summer 2021, and implemented in Fall 2021.

- TEC 6: Identify and respond appropriately to ethical and legal issues related to privacy and security in information technology and the handling of data.

Another goal of the assessment of the Essential Skills is the design and development of assessment tools and training for faculty use that are appropriate, accessible, well aligned, and valuable for faculty teaching and student learning both in and beyond general education. Assessment in this area comes from surveys of faculty and faculty reflections on the general education assessment process.

2. Methods: Methods of data collection included structural updates in AEFIS, faculty training in TEC assignments/TEC GEMs alignment, norming, and instructions on importing and linking the TEC rubric.

Structural Updates in AEFIS: The AY 2021-2022 assessment of the Essential Skill of Writing, Research, and Information Literacy (WRI) involved only one division, Liberal Studies; however, many subsequent Essential Skills, including Technological Competency, include courses from more than one division, necessitating a change in the structure of data collection using the Assessment, Evaluation, Feedback & Intervention System (AEFIS) system. To this end, in early Fall 2022, the Office of Assessment and Evaluation worked in concert with the Divisional Curriculum Facilitators (DCAF) from both Liberal Studies and Business and Technology[2] to create a College/Administrative Unit designated as General Education within AEFIS that situates Essential Skills as departments, specific Essential Skills (e.g., TEC Gen Ed) as programs within that unit and the GEMs as learning outcomes.

Alignment of TEC assignments and TEC GEMs: Unlike WRI assessment, none of the TEC courses included a summative assignment that addressed all six TEC GEMs. To ensure the alignment of the assignments used as assessment artifacts and the TEC GEMs, the OAE and DCAF worked with the three faculty cohorts (CIS 103 instructors, CSCI 111-112 instructors, and Liberal Studies TEC course instructors) to underscore the value of Technological Competency general education assessment and note its distinction from course assessment, to ensure that faculty understood the terminology used, norming tool, and data collection process; and to align specific assignments with the TEC GEMs. CIS 103 and CSCI 111-112 faculty received an information packet with these materials, including a “cheat sheet” demonstrating which assignments aligned with which specific GEMs. Liberal Studies faculty received an information packet that included a chart identifying which GEMs align with which courses and were instructed to review proficiency on previously completed assignments that they aligned with the TEC GEMs via the TEC assignment alignment tool. For four of the courses, not all

[2] There were no courses in the Division of Math, Science, and Health Careers that meet the TEC requirements in Spring 2023

GEMs were assessed because the GEMs are split between two courses that, together, meet the TEC requirement. [3] DCAF and OAE met previously with faculty to discern which assignments would be assessed in which courses in Liberal Studies. Please note that faculty did not link their assignments to the GEMs in AEFIS directly.

Data Collection via GEMs Assignment/Rubric: At the faculty level, the process worked similarly to WRI assessment, with faculty importing a specially created gen ed assignment/rubric into their Canvas courses, linking the assignment and rubric with General Education Measures (GEMs), and assessing student work using the imported assignment/rubric in SpeedGrader. The DCAF and the OAE trained faculty in this process, and the Technological Competency (TEC) pilot was conducted in Fall 2022. The pilot included thirteen faculty, twenty course sections, and 447 students. The same process was used in the Spring 2023 data collection at scale, which included twenty-one faculty, forty-three course sections (see Table 1), and approximately 1040 students.

Table 1

		Sections	
TEC Courses Assessed	Department	FL22	SP23
ADC 101: Introduction to Design and Construction	Architecture, Design, and Construction (ADC)	0	2
ADC 103: CAD Basics	ADC	1	1
ART 150: Introduction to Computer Art/Graphics	Art and Design	0	1
ART 290: Portfolio Development	Art and Design	2	0
CIS 103: Computer Applications and Concepts	Computer Technologies	13	33
CSCI 111: Computer Science I	Computer Technologies	1	2
CSCI 112: Computer Science II	Computer Technologies	1	1
JUS 131: Technology in Criminal Justice	Social Science	1	1
MUS 280: Music Entrepreneurship, Licensing, and Marketing	Music	0	1
PLS 115: Legal Technology	Social Science	1	1

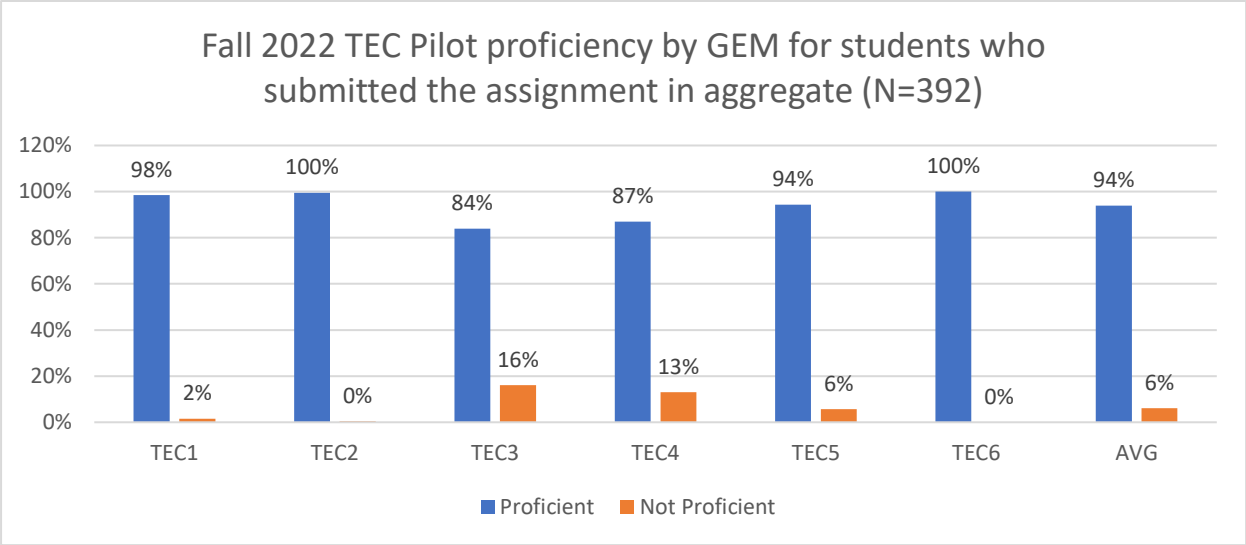
C. Key Findings

Fall 2022 Pilot: The Fall 2022 pilot of Technological Competency GEMS assessment shows average proficiency at 94%, with proficiency at its highest in TEC2, “Operate computers, peripherals, electronic devices, learning management systems (LMS), and other technology as related to their program of study” (100%) and TEC6, “Identify and respond appropriately to ethical and legal issues related to privacy and security in information technology and the handling of data” (100%). Proficiency was at its lowest in TEC3, “Use electronic spreadsheets and/or database management systems to organize, analyze, and/or retrieve data” (84%) and TEC4, “Use word processing and slide presentation software to design clear academic and professional documents that integrate design concepts, elements, applications, and objects” (87%). See Figure 1.

[3] ADC 103, ART 290, CSCI 111, CSCI 112

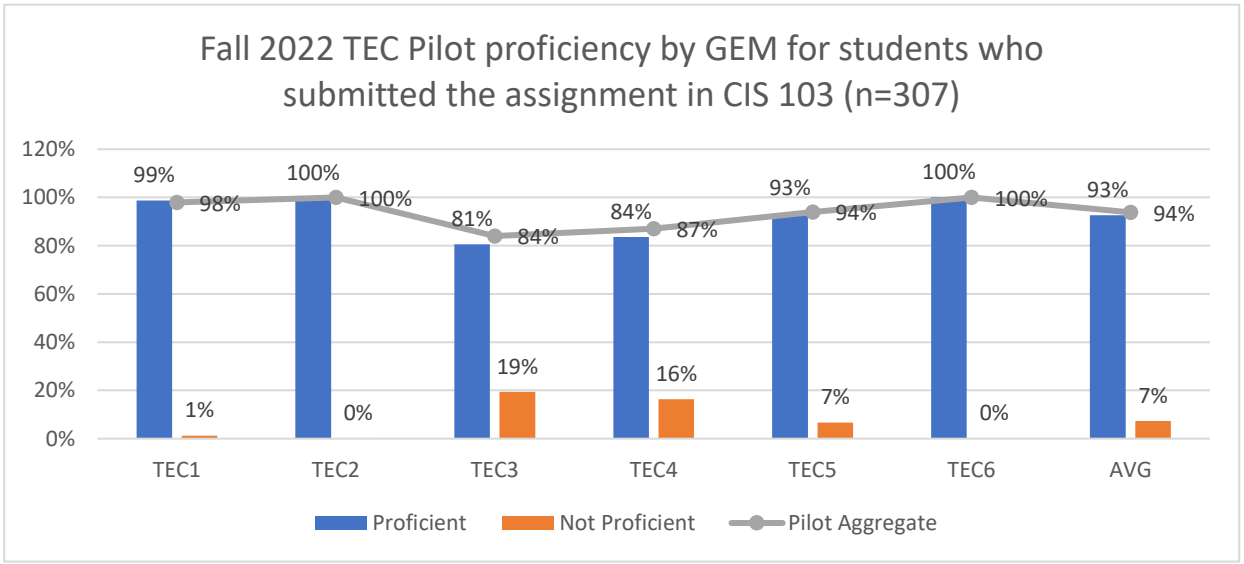
Figure 1

CIS 103: The majority of assessments in the pilot (78.3%) came from CIS 103; therefore, CIS 103 aggregate data is similar to the pilot aggregate data. The Fall



2022 pilot of TEC assessment in CIS 103 shows average proficiency at 93%, with proficiency at its highest in TEC2 and TEC6 (100%) and at its lowest in TEC3 (81%) and TEC4 (84%). See Figure 2.

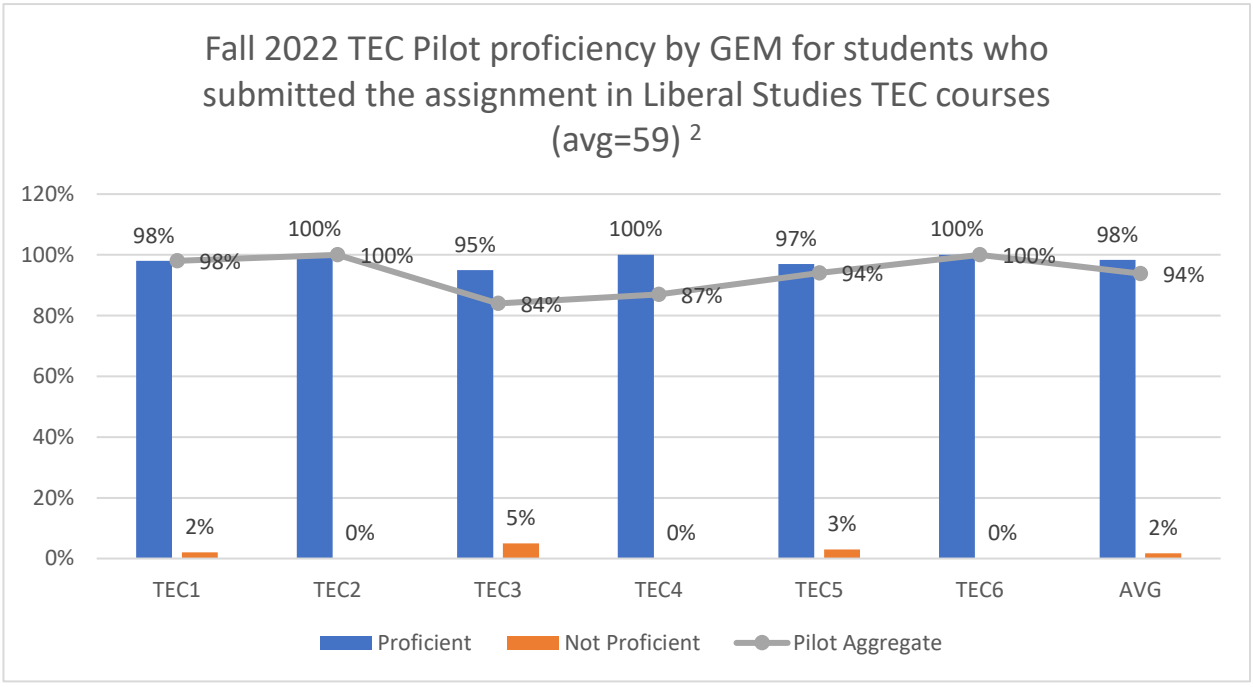
Figure 2



Liberal Studies: Aggregate data from the Fall 2022 pilot of TEC GEMs assessment in Liberal Studies courses shows average proficiency at 98%, with proficiency at its

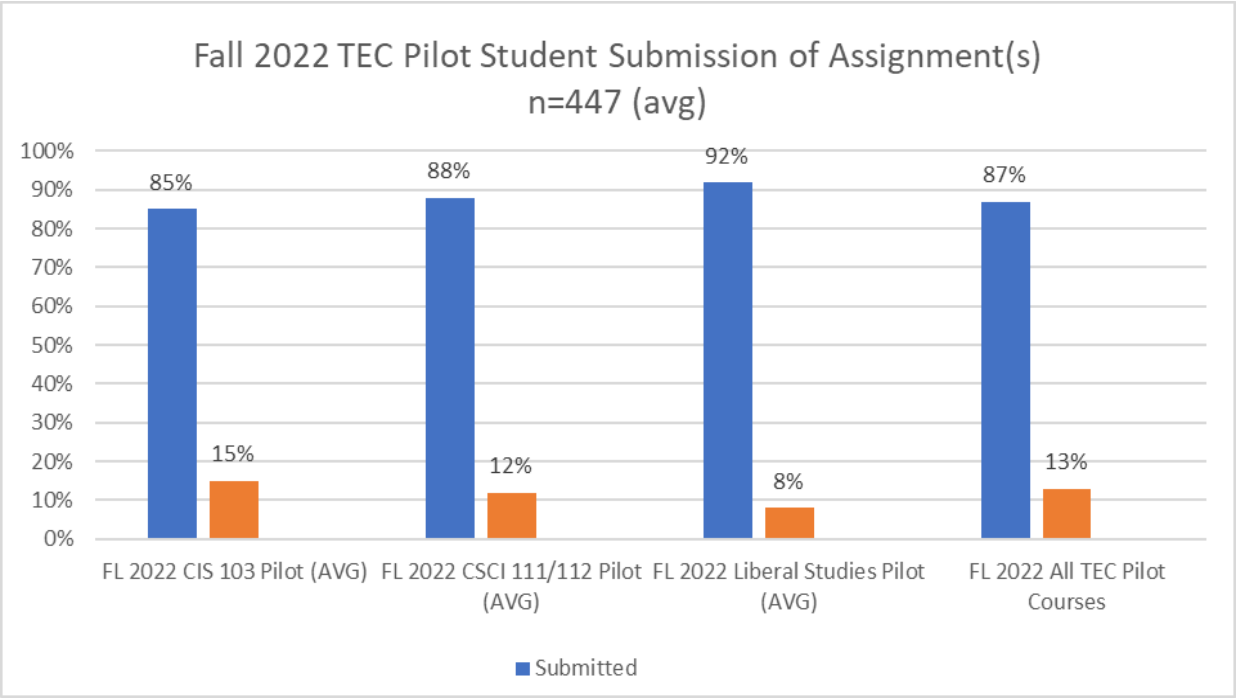
highest in TEC2, “Operate computers, peripherals, electronic devices, learning management systems (LMS), and other technology as related to their program of study” (100%), TEC4, “Use word processing and slide presentation software to design clear academic and professional documents that integrate design concepts, elements, applications, and objects” (100%), and TEC6, “Identify and respond appropriately to ethical and legal issues related to privacy and security in information technology and the handling of data” (100%). Proficiency was at its lowest in TEC3, “Use electronic spreadsheets and/or database management systems to organize, analyze, and/or retrieve data” (95%). See Figure 3.

Figure 3



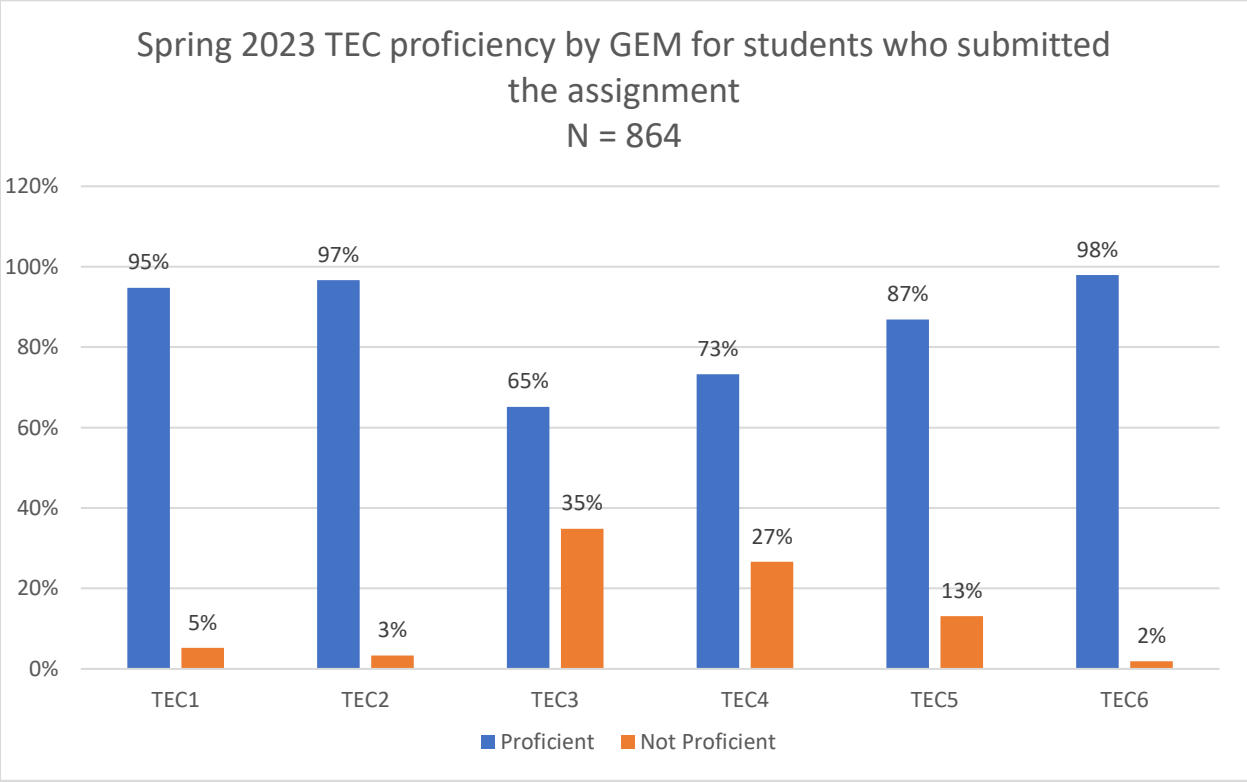
Student Submission of Assignment(s): The Fall 2022 pilot revealed that an average of 13% of students either did not complete or did not submit the assignment, with that number at its highest in CIS 103 (15%) and at its lowest in Liberal Studies (8%). See Figure 4.

Figure 4



Spring 2023 Assessment at Scale: Results of the Spring 2023 TEC assessment at scale (N=864)[4] for students who submitted the assignment, show proficiency far above the 80% benchmark in TEC1 (95%), TEC2 (97%), TEC5 (87%), and TEC6 (98%), and proficiency below the benchmark in TEC3, "Use electronic spreadsheets and/or database management systems to organize, analyze, and/or retrieve data" (65%) and TEC4, "Use word processing and slide presentation software to design clear academic and professional documents that integrate design concepts, elements, applications, and objects" (73%). See Figure 5.

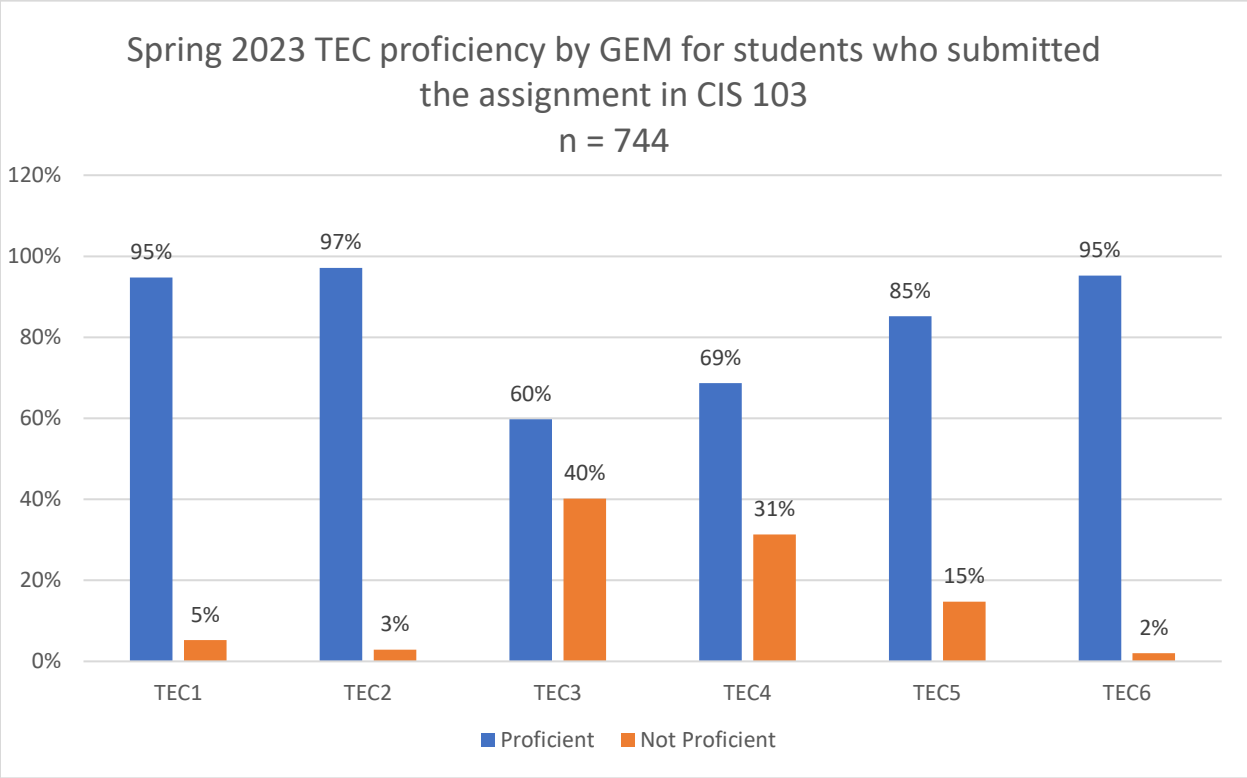
Figure 5



[4] Due to the large number of artifacts assessed and the variability of submissions from section to section, course to course, and GEM to GEM, for each GEM, the grand total of non-submissions was counted, then subtracted from the grand total of artifacts assessed.

CIS 103: Looking only at CIS 103 (n = 744)[5], results of Spring 2023 TEC assessment closely mirror the aggregate results, with proficiency far above the 80% benchmark in TEC1 (95%), TEC2 (97%), TEC5 (85%), and TEC6 (95%), and proficiency below the benchmark in TEC3, "Use electronic spreadsheets and/or database management systems to organize, analyze, and/or retrieve data" (60%) and TEC4, "Use word processing and slide presentation software to design clear academic and professional documents that integrate design concepts, elements, applications, and objects" (69%). See Figure 6.

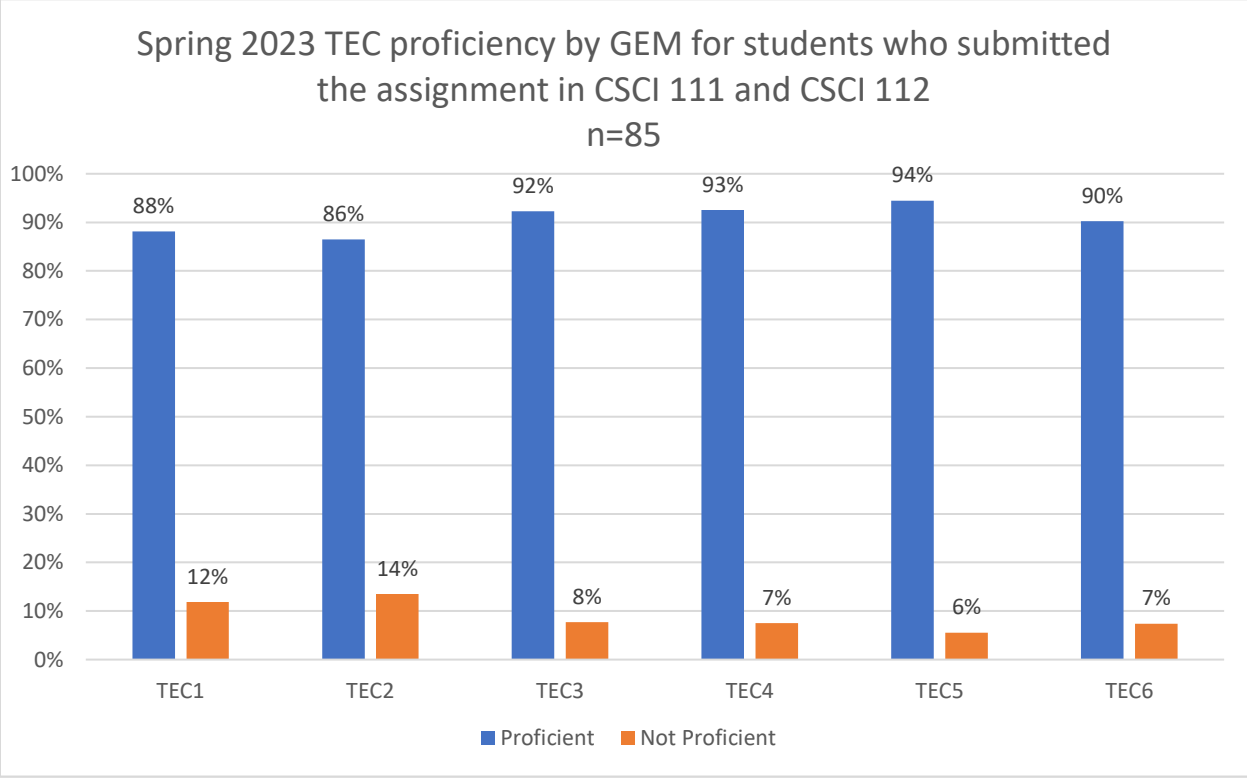
Figure 6



[5] Due to the large number of artifacts assessed and the variability of submissions from section to section, course to course, and GEM to GEM, for each GEM, the grand total of non-submissions was counted, then subtracted from the grand total of artifacts assessed.

CSCI 111-112: Looking only at CSCI 111 and CSCI 112, which meet the Technological Competency requirement for the Computer Science AS and the Mathematics AS (n = 85)[6], results of Spring 2023 TEC assessment show proficiency above the 80% benchmark in all six TEC GEMs, with the highest proficiency in TEC 5, "Use computer technology to collaborate and network" (94%), and the lowest in TEC2 "Operate computers, peripherals, electronic devices, learning management systems (LMS), and other technology as related to their program of study" (86%). See Figure 7.

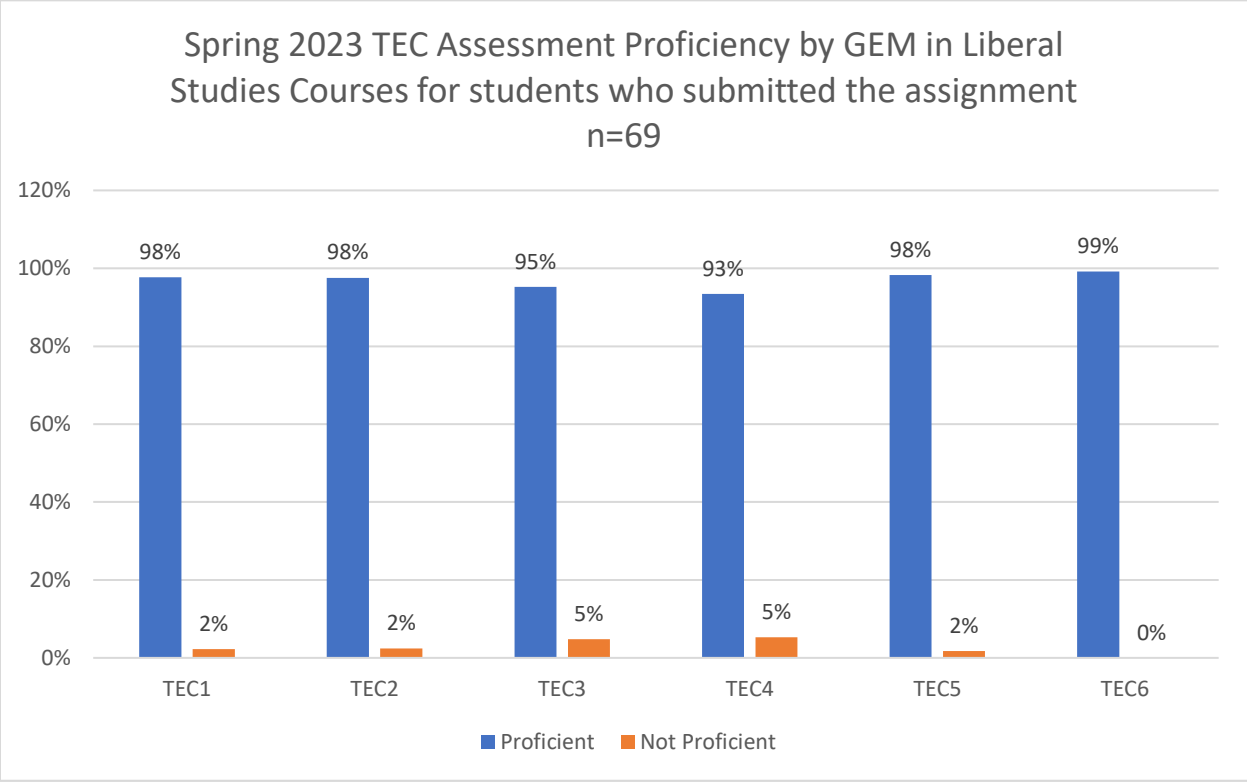
Figure 7



[6] Due to the large number of artifacts assessed and the variability of submissions from section to section, course to course, and GEM to GEM, for each GEM, the grand total of non-submissions was counted, then subtracted from the grand total of artifacts assessed.

Liberal Studies: For students enrolled in TEC courses in Liberal Studies in Spring 2023 (n=69)[7], assessment results show proficiency far above the 80% benchmark in all six TEC GEMs, with TEC6, "Identify and respond appropriately to ethical and legal issues related to privacy and security in information technology and the handling of data" the highest (99%) and TEC4, "Use word processing and slide presentation software to design clear academic and professional documents that integrate design concepts, elements, applications, and objects" (93%) the lowest. See Figure 8.

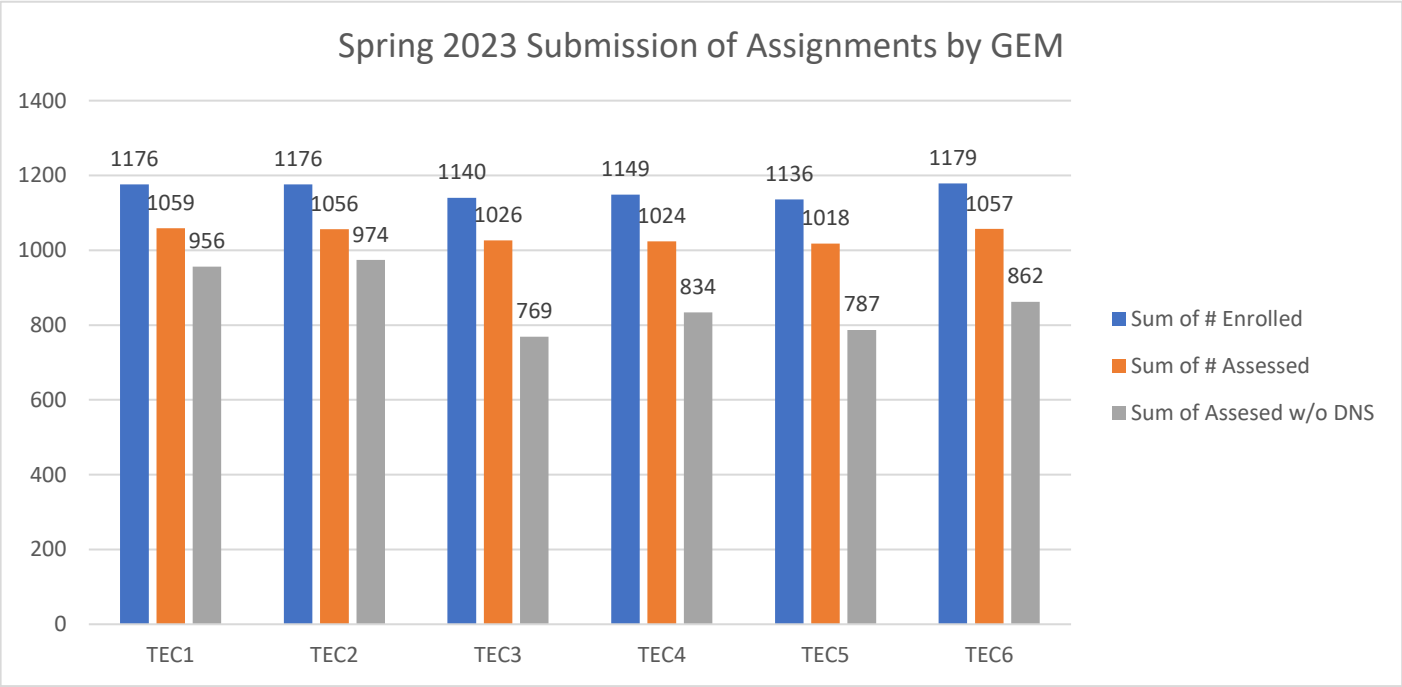
Figure 8



[7] Due to the large number of artifacts assessed and the variability of submissions from section to section, course to course, and GEM to GEM, for each GEM, the grand total of non-submissions was counted, then subtracted from the grand total of artifacts assessed.

Student Submission of Assignment(s): The Spring 2023 TEC assessment shows that of the students enrolled in the TEC courses (#Enrolled), 90% had artifacts assessed (#Assessed), most likely due to students no longer attending class. Of the number assessed, between 8% and 25% of students did not submit a particular assignment associated with the GEM, with the most non-submissions in assignments in aligned with TEC3, "Use electronic spreadsheets and/or database management systems to organize, analyze, and/or retrieve data" (25%) and the fewest in assignments aligned with TEC2, "Operate computers, peripherals, electronic devices, learning management systems (LMS), and other technology as related to their program of study." See Figure 9.

Figure 9



D. Recommendations and Actions Planned/Taken:

1. **Participating Department[8] Recommendations and Actions Taken:** In late September and early October of 2023, department heads and program coordinators from five of the participating departments were asked to review the TEC assessment data, respond to reflection questions, suggest changes, and describe innovations or changes that are already being addressed. Participants looked at Fall 2022 pilot results and Spring 2023 data, including aggregate data, course aggregate data for CIS 103 and CSCI 111-112, aggregate data for all Liberal Studies TEC courses, and non-submission data. Overall, this group noted proficiency above the 80% benchmark in four of the six GEMS (TEC1, TEC2, TEC5, TEC6) and, specific to Spring 2023, significantly below benchmark in TEC3 and TEC4. In all courses except for CIS 103, proficiency was well above the 80% benchmark in both Fall 2022 and Spring 2023. The recommendations below are derived from these reflections, except for the information about teaching and learning improvements already occurring in CIS 103.
    a. **Recommendation:** Several participants in the Liberal Studies division, in which proficiency was above the 80% benchmark in all GEMS in both Fall 2022 and Spring 2023, recommend embedding technological competency into course content that is relevant to students' career goals in order to improve outcomes. ***Action taken:*** *None. Technological Competency is already embedded in Liberal Studies TEC courses.*
    b. **Recommendation:** Several participants, again in the Liberal Studies division, recommend the use of hands-on activities and applications of principles. ***Action planned/taken:*** *None. Hands-on activities are already embedded in Liberal Studies TEC courses.*
    c. **Recommendation:** Liberal Studies division participants also recommend more scaffolding, for assignments that students might perceive as "dry" and expanding students' access to the full Microsoft Suite, especially PowerPoint. ***Action planned/taken:*** *None. PLS 115 already includes ongoing feedback from students regarding instruction, scaffolding, and transparency as well as revision opportunities and supplemental resources.*
    d. **Recommendation:** The department head for Art and Design noted a misalignment of the TEC gems and ART 150 and ART 290. ART 150 is an introductory course, which is a better place for students to learn TEC6, while ART 290 is a capstone, which better lends itself to TEC3 and TEC4. A course revision to correct this misalignment is recommended. ***Action planned/taken:*** *Course revisions for ART 150 and ART 290.*
    e. **Recommendation:** The department head for Computer Technologies, in which proficiency was above the benchmark in all GEMS in Fall 2022 but below the

[8] Architecture, Design, and Construction; Art & Design; Computer Technologies; Music; Social Science

benchmark in TEC3 and TEC4 in Spring 2023, did not recommend any changes. ***Action planned/taken:*** *See below re: CIS 103 actions taken*

f. Actions Taken re: teaching and learning improvements already occurring in CIS 103: The gaps in proficiency apparent in the Spring 2023 data for CIS 103 have also appeared in course assessment for CIS 103, and the CIS 103 Teaching Circle has made the following changes to the course:
    - TEC 3: It was decided after review by the CIS 103 Teaching Circle to remove one of the more problematic chapters in Excel and concentrate more on helping students to understand how formulas work in Excel. They also removed Access and replaced it with an assignment explaining what a relational database is and how to perform simple and complex queries.
    - TEC4: It was decided after review by the CIS 103 Teaching Circle to remove one of the chapters and concentrate more on the design features in PowerPoint. They are also focusing more on the collaborative features in Word and PowerPoint.
    - ***Action planned:*** *CIS 103 closing the loop planning to begin Spring 2024.*

2. GEES Core Committee Recommendations and Actions Taken: The General Education Essential Skills (GEES) Core Committee is an intentionally multidisciplinary committee made up of the Coordinator of General Education and faculty representing each of the six Essential Skills, [9] including Divisional Curriculum Assessment Facilitators from all three academic divisions. The GEES Core Committee is responsible for reviewing assessment data, discussing global assessment issues, directing professional development around GEES, and making recommendations for action items and improvement for GEES.
    a. Recommendation: In response to Fall 2022 data, based on the high rate of proficiency (two-thirds of the GEMS achieved higher than 90% proficiency) perhaps the definition of technological competency needs to be modified. The GEMs are based on the definition and without going into the assignments of the course, perhaps the definition is too simplistic and not achieving the vision of TEC as an essential skill. There seems to be a disconnect as students struggle using technology in their classes and yet there is a high rate of proficiency. ***Action planned/taken:*** *On GEES Core Committee agenda for Spring 2024.*
    b. Recommendation: Identify tech skills that are less Windows based and require more critical thinking in utilizing technology ***Action planned/taken:*** *On GEES Core Committee agenda for Spring 2024.*
    c. Recommendation: Create a placement test for TEC to give students who have the basic Word/technology skills as defined by the TEC definition the opportunity to take a more advanced course that satisfies the TEC competency. ***Action planned/taken:*** *On GEES Core Committee agenda for Spring 2024.*

[9] See appendix for a list of GEES Core Committee members

II. ANALYSIS

A. **Fall 2022 Pilot to Spring 2023 Assessment Comparison:** Results of GEMs TEC assessment in the Fall 2022 pilot show average proficiency more than ten percentage points above the 80% benchmark in four of the six GEMs (TEC1, TEC2, TEC5, TEC6) and above the benchmark in the remaining two GEMS (TEC3 and TEC4). In comparison, results of GEMs TEC assessment in scaled Spring 2023 assessment show proficiency from seven to eighteen percentage points above the 80% benchmark in TEC1, TEC2, TEC 5, and TEC6 but below the benchmark in TEC3 (65%) and TEC4 (73%). There is a marked difference between the aggregate results from CIS 103 in Fall 2022 in which all GEMs were above the benchmark and Spring 2023, in which proficiency TEC3 and TEC4 was distinctly lower. Proficiency in TEC3 and TEC4 in CSCI 111-112 and the Liberal Studies courses was at its lowest in TEC1 and TEC2 in CSCI 111-112 (88% and 86%, respectively) and above 90% in the rest of the GEMs in CSCI 111-112 and in all the GEMs in all participating Liberal Studies courses. Several factors may account for the difference between the Spring 2023 CIS 103 results and the results in the other TEC courses, including the larger number of individual of CIS 103 assignments, the significantly larger proportion of CIS 103 artifacts assessed, and the TEC GEMs being linked to assignments related to a specific discipline or major, which may result in more student engagement with the material.

B. **Comparison with previous Technological Competency assessment results:** Although the measures of assessment, populations, and sample size differ due to the revision of the Technological Competency definition effective Fall 2019 (removing library systems) and the general education revision effective Fall 2021 (which included the move from core competencies to essential skills)[10], comparisons may be made between the results of the Spring 2023 assessment of the Essential Skill of TEC and the results of the Fall 2018 assessment report for the general education core competency of Technological Competency. It should be noted that the Fall 2013-2017 Technological Competency benchmark was that "70% of students would achieve a minimum of 70% on the designated assessment instrument." Since then, that benchmark has been changed to 80% of students achieving proficiency in a given measure. As the 2018 report only included CIS 103, the comparison below is using the Spring 2023 CIS 103 data. See Figure 9.

III. FACULTY REFLECTIONS AND RESPONSES

A. **Reflections on and Responses to Fall 2022 Data:** In January 2023, pilot faculty (n = 13) were asked to provide their feedback on the rubrics and training materials as well as on their experience with the assessment process. Then, in February and March of 2023, pilot faculty reviewed the aggregate TEC data for Fall 2022 and were asked to share their reflections.

[10] See appendix for 2013-2019 Technological Competency goals

B. Pilot Faculty Questionnaire: Most participants either strongly agree or agree on the appropriateness of the design and content of the rubric and that they received adequate training in its use and the use of the assignment alignment tool. The majority also agree that the TEC rubric and assignment alignment tool had value to their own teaching, apart from general education.[11] Responses to questions #11 and 12 in the questionnaire, regarding recommended improvements in the process and their overall experience were overwhelmingly positive, with some comments about consolidating resources, increased faculty involvement in the development of the tools, and expanding the rubric. (See Appendix).

C. Pilot Faculty Data Reflections: Responses to question #2, regarding their general reflections on the aggregate data indicated high proficiency in all of the TEC GEMs except for TEC3 and TEC4, in which proficiency was still above the 80% benchmark but demonstrated room for improvement. Responses to question #3, regarding changes to the process for Spring 2023, mostly focused on changes to teaching methods regarding TEC3 and TEC4 but also included comments regarding basic software skills and the ease of collecting data. Responses to question #4, in which we asked pilot faculty to compare their individual course data with the aggregates for the whole pilot and CIS 103/Liberal Studies, generally found that their course data mirrored the aggregate data and focused on the use of database management systems and spreadsheets (TEC3) and word processing and slide presentation (TEC4) (See Appendix).

D. Reflections on and Responses to Spring 2023 Data:

During the period from August 28 through September 11, twenty faculty members submitted their reflections on the Spring 2023 data via Microsoft Forms. The response rate on the data reflections was 95%. Of the twenty faculty members, fifteen taught CIS 103 (75%), four taught TEC courses in the Liberal Studies Division[12] (20%), and one taught CSCI 111 (5%).

Individual faculty received a data reflection sheet that included the TEC GEMs, the aggregate data for all TEC courses in the Spring 2023 assessment, the course or division aggregate, as well as the data for their individual course sections and a comparison to the aggregate and course/divisional aggregate.

Participating faculty were asked four questions about their data, and their responses are summarized below:

[11] CIS 103, CSCI 111, and CSCI 112 faculty were asked to mark "no opinion" on question #10 of the questionnaire regarding the ease of linking assignments because their DCAF performed this function on their behalf.

[12] ADC 101, ADC 103, ART 150, JUS 131, MUS 280, PLS 115

- Looking at the aggregate data you received in your Word document, in what ways are we successful at helping students achieve the TEC general education measures (GEMs)? Where do you see achievement at or above the 80% benchmark? Fourteen faculty (70%) identified strengths in TEC 1, TEC 2, TEC 5, and TEC 6. These areas include identifying, creating, and manipulating technological tools and digital content; operating computers, peripherals, electronic devices, the LMS, and other technology; using technology to collaborate and network, and identifying and responding appropriately to ethical and legal issues related to privacy and security.

- Looking at the aggregate data you received in your Word document, in what ways do we need to improve at helping students achieve the TEC general education measures (GEMs)? What gaps do you see? Eight faculty identified achievement gaps in in both TEC 3 and TEC 4 (40%), while five faculty identified achievement gaps specifically in TEC 3 (25%), and one only in TEC 4 (5%). Several faculty posited that the achievement gaps are the result of students not participating or studying (15%) or of students' mathematics skills not being at college level (15%).

- Again, looking at the aggregate data, what changes do you think would be beneficial in closing those gaps (e.g., revise teaching strategies, make curriculum changes, professional development, more scaffolding, update assessment processes)? In response to this question, faculty offered a number of suggestions for closing achievement gaps. 60% of respondents suggested a focus on teaching strategies or professional development, including reducing the number of required projects, including more scaffolding, assignments in which students practice the skills in TEC 3 and TEC 4. Of respondents, 25% suggested changes to the course prerequisites or other means of having students better prepared in college-level mathematics. 15% put the onus on students spending more time studying or completing required assignments. Other recommendations included using Starfish to track students' progress and more coordination among TEC courses.

- Now considering the individual data from your TEC course(s), what do you see when you compare your own data to the aggregate data? What changes do you think you might implement? Although 15% of respondents said that the data indicated no need for changes, most either noted that they would continue to implement strategies that they have been using, such as having reasonable due dates, grace periods, and weekly announcements and reminders (35%) or intend to implement small changes to teaching strategies and lesson planning, including spending more class time on spreadsheets, dedicating more time to helping students understand the theory and importance of the material, particularly in real-world applications, reducing the number of assessments total to give more focus to the material covered in TEC 3 and TEC 4, making changes in the order of the assignments, and providing more encouragement in general. 15% of respondents put the onus on students to complete more projects, study more often, and take advantage of existing supports such as tutoring.

Additional Comments: It should be noted that a committee of CIS 103 instructors has previously met to address some of the issues related to TEC 3 and TEC 4. See I.D.1.f, above.

IV. CONTINUOUS IMPROVEMENT FOR 2021-2022 WRI ASSESSMENT

A. **Spring 2023:** In the first unit meeting of Spring 2023, College Writing faculty examined the WRI data generated in AEFIS from Spring and Fall 2022. A striking result from our initial collection of WRI data was that students are struggling with building information literacy. The Unit appointed a subcommittee whose charge was to develop a recommendation, strategy, or set of practices that would help the Unit integrate information literacy into the composition sequence more concretely and create more student opportunities to improve their information literacy skills in College Writing, particularly in ENGL 101. The sub-committee found that there was little alignment between WRI GEMs #3 and #4 and the CLOs within ENGL 101, the introduced level. The College Writing Unit decided that in order to properly address our approach to information literacy in ENGL 101 (and prepare to later assess our attempts at improvement), it needed to re-evaluate the CLOs, particularly ENGL 101 CLO #5, which most closely aligned with the goals of WRI GEMs #3 and #4. In Spring 2023, the Unit revised the scoring rubric for CLO #5.

B. **Fall 2023:** For Fall 2023, the Unit has initiated "closing the assessment loop" processes for the investigation of CLO #5 in ENGL 101. The Unit has begun an assessment project where it will collect artifacts this semester in order to norm the artifacts according to the revised CLO #5 rubric at the beginning of Spring 2023. The data generated will allow the Unit to recalibrate its assignments and language around information literacy for 101, determine its current integration of accessible information literacy activity, and help justify any recommendations for revised/new CLOs. At the conclusion of our assessment project, the Unit will resume WRI assessment through AEFIS. This is targeted for Spring 2024.

Appendix

Contents:

TECHNOLOGICAL COMPETENCY (TEC) RUBRIC				
Definition: *Students identify, create, and manipulate technological tools and digital content. Students operate computers, peripherals, electronic devices, learning management systems, and other technology as related to their program of study. Students use electronic spreadsheets and/or database management systems to organize, analyze, and/or retrieve data. Students use word processing and slide presentation software to design clear academic and professional documents that integrate design concepts, elements, applications, and objects. Students use computer technology to collaborate and network. Students identify and respond appropriately to ethical and legal issues related to privacy and security in information technology and the handling of data.*				
General Education Measure (GEM)	Proficient	Not Proficient	Did Not Submit	Not Applicable
TEC 1: Identify, create, and manipulate technological tools and digital content.	Correctly identifies the appropriate technological tools and creates digital content that meets a specific purpose.	Has difficulty identifying appropriate technological tools and creating digital content; does not meet specified purpose.	Student did not submit the assignment.	**TEC1** is not assessed in this course.
TEC 2: Operate computers, peripherals, electronic devices, learning management systems (LMS), and other technology as related to their program of study.	Effectively operates computers, peripherals, electronic devices, LMS, and other technology in ways that generally meet the goals of the assignment.	Attempts to operate computers, peripherals, electronic devices, LMS, and other technology, but does not meet the goals of the assignment.	Student did not submit the assignment.	**TEC2** is not assessed in this course.
TEC 3: Use electronic spreadsheets and/or database management systems to organize, analyze, and/or retrieve data.	Uses electronic spreadsheets and/or database management systems to organize, analyze, and/or retrieve data with clarity and depth to achieve a specific purpose.	Inconsistently uses electronic spreadsheets and/or database management systems to organize, analyze, and/or retrieve data; does not achieve the purpose of the assignment.	Student did not submit the assignment.	**TEC3** is not assessed in this course.
TEC 4: Use word processing and slide presentation software to design clear academic and professional documents that integrate design concepts, elements, applications, and objects.	Uses word processing/slide presentation software to design clear and professional documents that fully achieve a specific purpose for a specific audience and integrates design concepts, elements, applications and objects as appropriate and effective.	Documents designed using word processing/slide presentation software often lack clarity and/or professional quality, do not meet the purpose, or do not serve the audience. Design concepts, elements, applications and objects are not integrated.	Student did not submit the assignment.	**TEC4** is not assessed in this course.

TECHNOLOGICAL COMPETENCY (TEC) RUBRIC				
Definition: *Students identify, create, and manipulate technological tools and digital content. Students operate computers, peripherals, electronic devices, learning management systems, and other technology as related to their program of study. Students use electronic spreadsheets and/or database management systems to organize, analyze, and/or retrieve data. Students use word processing and slide presentation software to design clear academic and professional documents that integrate design concepts, elements, applications, and objects. Students use computer technology to collaborate and network. Students identify and respond appropriately to ethical and legal issues related to privacy and security in information technology and the handling of data.*				
General Education Measure (GEM)	Proficient	Not Proficient	Did Not Submit	Not Applicable
TEC 5: Use computer technology to collaborate and network.	Uses computer technology to collaborate and network efficiently and effectively to accomplish specific tasks.	Collaboration using computer technology is ineffective and/or does not result in the accomplishment of specific tasks.	Student did not submit the assignment.	TEC5 is not assessed in this course.
TEC 6: Identify and respond appropriately to ethical and legal issues related to privacy and security in information technology and the handling of data.	Correctly identifies and appropriately responds to ethical and legal issues related privacy and security in information technology and the handling of data.	Does not identify or respond appropriately to ethical and legal issues. Use of information technology and handling of data may lead to ethical and legal issues related to privacy and security.	Student did not submit the assignment.	TEC6 is not assessed in this course.

Glossary

The definitions that follow were developed to clarify terms and concepts in this rubric only.

- Audience: The person, group, or entity who will read and/or evaluate the assignment
- Digital content: Files, media, video, images, animation, etc.
- Integrate: Use the tools provided with various software packages to enhance academic and professional documents
- Purpose/Goals: Apply the tools, skills, and content appropriate for the intended audience
- Technological tools: Specific hardware and software applications

This rubric was created using the Association of American Colleges and Universities (AAC&U) VALUE rubrics.

General Education Assignment Alignment Tool
Essential Skill: Technological Competency

Purpose: The assignment alignment tool is designed to help you reflect on the clarity and effectiveness of an assignment **and** align an assignment with an Essential Skill for general education assessment. The tool is in two parts: **Part One** offers a checklist of assignment design elements that can help you clarify or strengthen the structural elements that make an effective assignment. **Part Two** urges you to reflect upon the range of Technological Competency (TEC) skills that you may ask your students to perform towards the completion of the assignment and align those skills with the TEC rubric.

PART ONE: ASSIGNMENT DESIGN ELEMENTS CHECKLIST				
Structural elements of this assignment	Clearly specified	Partially specified (incomplete/vague)	Not specified	Not applicable
Explains the purpose of/rationale for the assignment	☐	☐	☐	☐
Articulates what learning outcome(s) are to be learned	☐	☐	☐	☐
Articulates the assignment genre/type and the product(s) to be produced	☐	☐	☐	☐
Describes the intended audience for the assignment/product	☐	☐	☐	☐
Explains the assignment's relationship to intended course and/or program learning outcomes	☐	☐	☐	☐
Describes the required format, length, style, sources, etc.	☐	☐	☐	☐
Defines the evaluation criteria that will be applied to grade the student's work (i.e., a rubric)	☐	☐	☐	☐
Describes the required skills (i.e., analyze, collaborate, design, identify, integrate, manipulate, operate, retrieve, etc.)	☐	☐	☐	☐
Describes the roles and expectations for individual group members, including how group members will be assessed (for group projects)	☐	☐	☐	☐

PART TWO: ALIGNMENT with the TECHNOLOGICAL COMPETENCY RUBRIC					
Intended? Y/N	TEC Rubric Reference and Skills	Explicit and clear instructions	Explicit but vague or unclear instructions	Not present	Not applicable
TEC 1: Identify, create, and manipulate technological tools and digital content.					
☐Y ☐N	Identify appropriate technological tools	☐	☐	☐	☐
☐Y ☐N	Create digital content	☐	☐	☐	☐
☐Y ☐N	Meet a specific purpose	☐	☐	☐	☐
Notes / Feedback:					
TEC 2: Operate computers, peripherals, electronic devices, learning management systems (LMS), and other technology as related to their program of study.					
☐Y ☐N	Operate computers, peripherals, electronic devices, learning management systems (LMS), and other technology as related to their program of study.	☐	☐	☐	☐
Notes / Feedback:					
TEC 3: Use electronic spreadsheets and/or database management systems to organize, analyze, and/or retrieve data.					
☐Y ☐N	Use electronic spreadsheets and/or database management systems to organize, analyze, and/or retrieve data.	☐	☐	☐	☐
Notes / Feedback:					
TEC 4: Use word processing and slide presentation software to design clear academic and professional documents that integrate design concepts, elements, applications, and objects.					
☐Y ☐N	Use word processing and slide presentation software to design clear academic and professional documents.	☐	☐	☐	☐

PART TWO: ALIGNMENT with the TECHNOLOGICAL COMPETENCY RUBRIC					
Intended? Y/N	TEC Rubric Reference and Skills	Explicit and clear instructions	Explicit but vague or unclear instructions	Not present	Not applicable
☐Y ☐N	Integrate design concepts, elements, applications, and objects into academic and professional documents and presentations.	☐	☐	☐	☐
Notes / Feedback:					
TEC 5: Use computer technology to collaborate and network.					
☐Y ☐N	Use computer technology to collaborate and network.	☐	☐	☐	☐
☐Y ☐N	Accomplish specific tasks through collaboration or networking.	☐	☐	☐	☐
Notes / Feedback:					
TEC 6: Identify and respond appropriately to ethical and legal issues related to privacy and security in information technology and the handling of data.					
☐Y ☐N	Identify and respond appropriately to ethical and legal issues related to privacy and security in information technology and the handling of data.	☐	☐	☐	☐
Notes / Feedback:					

Technological Competency Definition*: Students identify, create, and manipulate technological tools and digital content. Students operate computers, peripherals, electronic devices, learning management systems, and other technology as related to their program of study. Students use electronic spreadsheets and/or database management systems to organize, analyze, and/or retrieve data. Students use word processing and slide presentation software to design clear academic and professional documents that integrate design concepts, elements, applications, and objects. Students use computer technology to collaborate and network. Students identify and respond appropriately to ethical and legal issues related to privacy and security in information technology and the handling of data.*

Glossary

The definitions that follow were developed to clarify terms and concepts the TEC rubric and this assignment alignment tool only.

- **Audience:** The person, group, or entity who will read and/or evaluate the assignment
- **Digital content:** Files, media, video, images, animation, etc.
- **Integrate:** Use the tools provided with various software packages to enhance academic and professional documents
- **Purpose/Goals:** Apply the tools, skills, and content appropriate for the intended audience
- **Technological tools:** Specific hardware and software applications

This Assignment Alignment Tool was created using the Association of American Colleges and Universities (AAC&U) Valid Assessment of Learning in Undergraduate Education Assignment Design and Diagnostic (VALUE ADD) tool. Retrieved from https://www.aacu.org/value-add-tools.

GEMs Essential Skills Assessment Norming Tool

Explanation of the Ratings System in AEFIS for General Education Measures (GEMs) Essential Skills Assessment	
RATING	EXPLANATION
Proficient	• The student's achievement of the GEM meets or exceeds the assignment's criteria. • The student's achievement of the GEM demonstrates at least average competence, but may have room to grow in proficiency.
Not Proficient	• The student's attempt to meet the GEM is discernable but inconsistently or only partially realized. • The student submitted the assignment, but does not meet the GEM.
Did Not Submit	• The student did not submit the assignment.
Not Applicable	• This GEM is not measured in this course/assignment.

GEES Core Committee Members (as of 1/24/2024)		
Name	Department	Division
1. Angela Barnes	Allied Health/DCAF	MSHC
2. Beena Patel	Biology	MSHC
3. Brent Webber	Mathematics	MSHC
4. Chris Popescu	Business Administration/DCAF	Business & Technology
5. Cynthia Paul	Foundational Mathematics	MSHC
6. David Prejsnar	History, Philosophy, Religious Studies	Liberal Studies
7. Dawn Janich	Biology	MSHC
8. Ilze Nix	Psychology/DCAF	Liberal Studies
9. Jason Esters	English/College Writing	Liberal Studies
10. Laura Davidson	Allied Health	MSHC
11. Lauren Leonard	Computer Technologies	Business & Technology
12. Laurence Liss	Computer Technologies	Business & Technology
13. Lisa Johnson	Nursing	MSHC
14. Lynsey Madison	Curriculum Development	
15. Massah Nuni	English	Liberal Studies
16. Rebecca Garvin	Business Administration/DCAF	Business & Technology
17. Richard Chu	Biology/DCAF	MSHC
18. Ruqayyah Archie	Business Administration	Business & Technology
19. Sean Sauer	Art and Design	Liberal Studies

Writing, Research, and Information Literacy GEMs: Competency in WRI is defined by five General Education Measures (GEMs) derived from the WRI Essential Skill definition developed by a multidisciplinary group of faculty, approved via the College's governance structure, and implemented in Fall 2021.[13]

- **WRI1:** Develop significant ideas in support of a thesis or research question
- **WRI2:** Appropriately reflect context and audience, using conventions of grammar, spelling, and formatting specific to the area of study
- **WRI3:** Use information to accomplish a specific purpose
- **WRI4:** Determine the extent of a need for information, access information effectively and efficiently, and evaluate information critically
- **WRI5:** Participate ethically in communities of learning

2013-2019 Technological Competency Goals

Goal 1 - Graduates will be able to use word processing software to produce academic and professional documents, individually and working in collaboration with others.

Goal 2 - Graduates will be able to use electronic spreadsheets to organize, analyze and present data.

Goal 3 - Graduates will be able to use library information systems.

Goal 4 - Graduates will be able to use collaboration and social networking software for academic, professional, and personal use. They will be able to create Web pages from application software documents, and share those documents with others by posting them on the Web.

Goal 5 - Graduates will be able to connect personal computers to related equipment, such as printers, cell phones, PDAs (Personal Digital Assistants) and digital cameras, and to a wireless computer network in a secure manner.

Goal 6 - Graduates will demonstrate an understanding of common ethical issues related to the use of information technology systems and the handling of data, including privacy and security issues.

[13] https://www.ccp.edu/college-catalog/general-education-requirements