Written Communication Assessment Report - Tri-University Overview

Assessment Goals

Overall Goal of Tri-University General Education Assessments:

- Accountability: to measure student achievement in the four areas identified by the Arizona Board of Regents (written communication, quantitative reasoning, critical thinking, and civic knowledge)
- **Improvement**: to understand what can be done on individual campuses to support and improve teaching and learning in the four areas

The Tri-University team has designed an improvement-focused assessment that also provides accountability to ABOR.

Guiding Questions

- How well are undergraduates at each institution meeting student learning outcomes for written communication?
- How well are undergraduate students supported in developing effective written communication?
- What opportunities do we see for supporting and enhancing student writing on our campuses?

Development Process

Representatives from the three universities were first convened by ABOR staff in March 2020 to develop the first of four ABOR-required assessments. The group decided to draw on the well-established AAC&U VALUE Rubric for Written Communication, 1 revising the language to make it relevant to the writing curricula at the three universities. The AAC&U VALUE rubric was designed by well-established experts in writing assessment, and it effectively operationalizes different dimensions of writing that are each important for effective written communication. The three universities also drew on the process used by AAC&U in their VALUE Institute to ensure validity and reliability in the scoring of the assessments on each campus.

Connecting the Written Communication Assessment to ABOR Policy 2-210

The Tri-University Written Communication assessment rubric is included in Appendix A. In the table below, we map the criteria on the rubric with the learning outcomes related to written communication in ABOR Policy 2-210.

During the 2020-2021 academic year, the Tri-University Written Communication Assessment team, consisting of representatives from assessment, General Education, and writing studies/English from all three universities, defined methods that would be employed by all three universities. Essentially, the three universities would conduct their assessments of student writing independently but would share a subset of student writing samples from each university to the other two for scoring. Exchange of artifacts was incorporated to increase reliability in the scoring of the writing artifacts. Each

¹ https://www.aacu.org/initiatives/value-initiative/value-rubrics/value-rubrics-written-communication

university also agreed to determine a way to train assessors scoring the artifacts to increase reliability in the assessment.

Mapping ABOR General Education Policy 2-210 with the Tri-University Written Communication Rubric

ABOR Written Communication Learning Outcomes	Tri-University Written Communication Rubric
Students will engage in civil discourse through writing.	Context of and purpose for writing. The writer clearly and consistently defines a
Students will be able to understand and use rhetorical skills.	purpose that addresses a target audience and responds to a precise writing situation. The purpose, audience, and writing situation are
Students will demonstrate intellectual skills and habits of mind that define an educated person.	carefully articulated through effective alignment of elements such as structure, language, and use of information.
nables of filling that define all educated person.	inormation.
Students will be able to communicate effectively through writing.	Content Development. Using narrative, description, analysis, critique, and/or synthesis, the writer formulates a
Students will be able to understand and use rhetorical skills.	knowledgeable and nuanced perspective about the selected topic. The writer integrates credible,
Students will be able to demonstrate critical, innovative and creative thinking.	sufficient, timely, and relevant evidence or sources that offer substantive support of the purpose.
Students will be able to communicate effectively through writing.	Conventions of Organization. The writer sustains purposeful attention to and applies genre or disciplinary features of
Students will be able to understand and use rhetorical skills.	organization in cohesive support of the writer's purpose.
Students will be able to communicate effectively	Conventions of Syntax and Mechanics.
through writing.	The writer sustains precise attention to grammar,
	mechanics, and syntax in a manner consistent with
	the purpose, audience, and writing situation and that enhances the clarity of the writer's message.

Both the rubric and general assessment plans were approved by the Regents. In the institutional reports included here, each university describes its methods of sampling and scoring student writing as well as implications of the results.

Learning Opportunities

The process of working as a team across the three universities to design the first of the four assessments has been a challenging and rewarding experience. The rewards have included the opportunity to share data, research, goals/objectives, and knowledge across campuses to make Arizona's public universities stronger. We do not know of any other states that have collaborated on undergraduate assessment in this way. Representatives from other states have reached out to us to ask about our process, assessment instruments, and outcomes. We learned that Arizona is positioned to be a

leader in General Education assessment because of the unique and powerful nature of our collaboration.

The challenges of the process present important learning opportunities that will positively impact the development and rollout of the remaining three assessments (and the subsequent revisiting of the Written Communication assessment in four years). Some of the lessons learned include:

- The potentially problematic nature of comparing early-career and late-career
 writing samples from students. The level of complexity in the late-career samples
 and the more focused disciplinary nature of the writing create significant
 limitations in comparing the samples to make claims about growth over time.
 Instead, we found it more useful and valid to assess the late-career samples to
 determine how well students were able to achieve the identified learning
 outcomes
- Some elements of the process for collecting and scoring samples may need to be adjusted on each campus to create a more reliable process.
- All late-career and many early-career samples were collected from students who
 completed coursework in the not-yet-revised General Education programs on the
 campuses. These data represent a baseline assessment result to understand
 where students are prior to the changes in General Education, and they can be a
 point of comparison for future assessments.

Institutional Reports

The General Education programs and curricula at the three universities are unique in their design and implementation. Following are individual reports from each institution.

Guided by feedback from our individual Institutional Review Boards for Human Subjects Research, this report is intended for program assessment only for each of the three institutions and may not be used as a published report to contribute to generalizable knowledge.

Appendix A: Tri-University Written Communication Assessment Rubric

Criteria	Accomplished [4]	Expanding [3]	Developing [2]	Emerging [1]
Context of and Purpose for Writing	The writer clearly and consistently defines a purpose that addresses a target audience and responds to a precise writing situation. The purpose, audience, and writing situation are carefully articulated through effective alignment of elements such as structure, language, and use of information.	The writer <i>clearly</i> defines a purpose, audience, and writing situation. There <i>is alignment between the writing situation and most elements</i> such as structure, language, and use of information.	The writer communicates a purpose, audience, and a sense of the writing situation, but evidence of awareness of these contextual features is inconsistent. There is minimal alignment between elements such as structure, language, and use of information.	The writer references a vague purpose, audience, or writing situation and relies on patterns or models that are not appropriate to the writing situation. The context and purpose are inadvertently reduced to the self.
Content Development	Using narrative, description, analysis, critique, and/or synthesis, the writer formulates a knowledgeable perspective, integrating diverse points of view about the selected topic. The writer integrates credible, sufficient, timely, and relevant evidence or sources that offer substantive support of the purpose.	Using narrative, description, analysis, and/or critique, the writer demonstrates a nuanced perspective of the selected topic. The writer discusses credible, sufficient, and relevant evidence or sources in support of the purpose.	Using narrative, description, and/or analysis, the writer demonstrates a developing, although perhaps inconsistent, understanding of the selected topic. The writer incorporates relevant evidence or sources that connect to purpose.	The writer demonstrates <i>minimal understanding</i> of the selected topic. The writer <i>references or is informed by evidence or sources</i> related to the purpose of the writing situation.
Conventions of Organization	The writer sustains purposeful attention to and applies genre or disciplinary features of organization in cohesive support of the writer's purpose.	The writer demonstrates <i>purposeful</i> The writer presents an attention to features of organizational strategy that <i>is</i> organization consistent with genre inconsistent with the genre or or discipline in support of the writer's purpose.	The writer presents an organizational strategy that is inconsistent with the genre or disciplinary features of structure in support of the writer's purpose.	The writer illustrates an organizational strategy, but some features of organization detract from meaning and/or are not appropriate for the writing situation.
Conventions of Syntax and Mechanics	The writer sustains precise attention to grammar, mechanics, and syntax in a manner consistent with the purpose, audience, and writing situation and that enhances the clarity of the writer's message.	The writer develops grammar, mechanics, and syntax in a manner that clearly aligns with purpose, audience, and writing situation.	The writer uses grammar, mechanics, and syntax that convey purpose, audience, and context with a few instances where meaning is unclear.	The writer uses grammar, mechanics, and syntax with frequent instances that impede meaning and that sometimes do not align with purpose, audience, and context.

ARIZONA STATE UNIVERSITY ABOR WRITING ASSESSMENT

INTRODUCTION

The primary goal of this assessment exercise is to assess the competency of early career ASU students in written communication. A standardized rubric, based on the AAC&U Value rubric, was developed collaboratively with the University of Arizona and Northern Arizona University for this purpose. Subsequently, a secondary goal to use the same rubric to assess the competency of late career ASU students in written communication was established. This study was not designed to draw direct relationships between early and late career students. Instead, results are considered independently at each level.

METHODS

Faculty writing program directors from the three universities developed a common rubric for this project in collaboration with ABOR staff by adapting the AAC&U's Written Communication rubric. The modified Value Rubric has four dimensions, each of which is given equal weight. There are four levels for each dimension: Accomplished (4), Expanding (3), Developing (2) and Emerging (1).

Data collection commenced during the fall 2021 semester. Early career artifacts were collected from first-year composition courses in Tempe (348 artifacts collectively from English 101 and English 105) and online (119 artifacts from English 101). These artifacts were the last assignment students completed in the course.

For completion of a baccalaureate degree, ASU requires students to complete at least three upper division credits with the literacy designation. Courses are available through the various disciplines offered at ASU, and students are encouraged or required to complete a course in the field of their degree. Late career writing samples (412) were also collected from 11 distinct upper-division courses with the literacy designation from students who had completed at least 75 credit hours towards a degree.

Assessors used the standard rubric designed collaboratively by all three universities to assess course-embedded student artifacts. Training was required of all assessors to ensure inter-rater reliability and validity of the rubric. The training program consisted of (1) a training video explaining the project and the assessment software; and (2) individual or small group discussions to 'norm the rubric.' Assessors were considered normed when everyone was within one point on a four-point scale on each dimension of the assessment rubric. Although assessors used the same student writing samples for norming, separate norming sessions occurred for Tempe instructors, online writing faculty and upper division literacy course instructors.

RESULTS

Table 1 summarizes the assessment data for early and late career samples across all dimensions assessed. Assessment scores average a level of Expanding (3) or higher for all dimensions. These scores exceed our expectations for incoming students completing their first writing course.

Table 1: Assessment Data				
Sample	Context	Content	Organization	Syntax
Early Career Sample (N=437)	3.20	3.01	3.17	3.26
Late Career Sample (N=412)	3.13	3.06	3.00	2.95

In interpreting results, it is important to recall that student artifacts are drawn randomly from all students enrolled in the classes. On average, approximately 20% of the students withdraw from these courses, or earn a D or E. To graduate, these students must repeat the course. Table 2 provides the rubric levels for early career students in Tempe who earned a C or above. Of students who earned a C or better, nearly 99% of the students are classified as Level 2 or better; and 94% average Level 3 or better. We conclude that the proficiency level of students who pass their lower division general education course in composition is extremely high. Aside from the performance, this adds evidence that the rubric is calibrated quite well. Students who pass the course overwhelmingly are assessed at Level 3 or higher. If they do not pass the course, their scores on the rubric are also lower.

Table 2: Rubric Levels for Tempe Early Career Students Who Earn a C or Better					
Dimension	% Level 2 or Above	% Level 3 or Above			
Context	98.9	96.5			
Content	99.3	91.8			
Organization	99.7	92.6			
Syntax	100.0	96.1			

As a result of study design, comparisons between the early and late career data sets cannot be made. There are two primary reasons. First, as a result of selecting course sections for assessment, the distributions of majors present in the early career and late career sample are different. Since upper division literacy courses are embedded in disciplines, student growth in writing may be discipline specific. Second, growth of the writing of individual students is not tracked. In fact, many students in the late career sample may not have completed first-year composition at ASU.

These results demonstrate ASU students are meeting outcomes for written communication well. Students can communicate effectively in writing at the level expected for undergraduate students across all dimensions assessed. Scores for

artifacts from both early career and late career ASU students are consistently high, indicating students are developing or expanding as writers as expected.

CONCLUSIONS

This project has revealed three distinct opportunities for programmatic changes to enhance students' writing skills.

- Better alignment between the rubric used to assess writing and programmatic outcomes will improve student learning. By design, this project created a single assessment to be used in diverse disciplinary contexts at three distinct universities. That results in less than ideal alignment with course outcomes, especially in the upper division literacy courses used for late career assessment. The rubric used in this project was not matched to the learning outcomes of these courses, and the scores, although excellent, likely reflect that disconnect. As this assessment exercise continues, there is an opportunity to align the expectations of those courses with the assessments. Transparently presenting learning outcomes and assessment expectations to students will create awareness for students of the skills and competencies they are developing.
- Incorporating students in the process more deliberately will provide additional benefits. Best practice in writing pedagogy and assessment engages students in learning to examine and evaluate their own work and provides multiple opportunities for feedback in different contexts. Transparent communication of learning outcomes that span across multiple contexts enables this learning.
- Our next steps in the assessment of student learning will be to develop communities of practice. This assessment exercise reveals new opportunities to enhance the existing culture of collaboration among ASU faculty and to catalyze creation of new communities of practice to support the teaching of writing across the entire curriculum and in all disciplines. There is an opportunity to create connections more deliberately between faculty teaching writing across different levels and disciplines. Strengthening such faculty communities of practice also supports professional development of faculty.

Finally, engaging in assessment collaboratively with University of Arizona and Northern Arizona University provided ASU an opportunity to evaluate university-level assessment practices critically with the goal of supporting and improving teaching and learning. We have evaluated our assessment infrastructure with an eye toward modifications necessary to support our new general education program. Articulating and communicating clear expectations for both faculty and students in that new framework will be essential for its success.

Northern Arizona University Written Communication Report

I. Method of Assessment

The following evaluation of written communication at Northern Arizona University (NAU) is designed to meet the Arizona Board of Regents' (ABOR) expectations for general education assessment and NAU's Liberal Studies Learning Outcomes for Effective Writing. It follows the guidelines for written communication assessment developed by the Tri-University Assessment Group using the Tri University Written Communication Rubric.

NAU Essential Questions: To what extent have NAU undergraduate students achieved the Liberal Studies outcomes for written communication? How can the Liberal Studies program best serve our students in the development of written communication skills?

Construction of a sample

Artifacts were collected from students in early career from our Mountain Campus, where we offer the greatest number of in-person English 105 classes. Late career artifacts were collected from our Mountain Campus, as well as from our Online and Statewide sites. The artifact collection was expanded for late career due to the challenge of acquiring enough student work for the required sample size. The incoming artifact was an essay written early in ENG 105 prior to significant university-level writing instruction. The outgoing artifact was a significant piece of writing produced during their Senior Capstone course. Oversampling was used to obtain a representative random sample of incoming students and a stratified, representative random sample of outgoing students. From each of the oversamples, a sample of 350 incoming and 350 outgoing students' artifacts was assessed.

Recruitment and training of raters, and ratings

Seven faculty raters were recruited to rate the student artifacts during the spring 2022 term. Raters were calibrated using the Written Communication rubric. Student artifacts were assigned a random number from 1 to 700 and all identifying information was removed from each document to ensure student anonymity. A random selection of 35 incoming artifacts from ENG 105 and 35 artifacts from Senior Capstone courses across disciplines was shared with the other two universities for independent scoring. This was done to ensure validity of the rubric and inter-rater reliability.

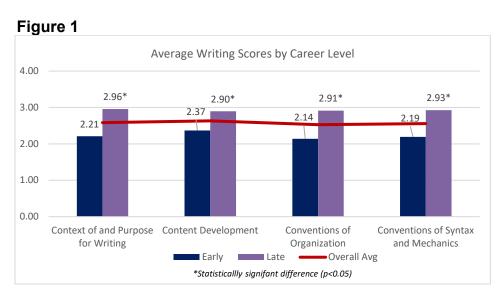
II. Data Collection and Results

Once all artifacts were rated, scores were averaged on each of the rubric criteria. Table 1 and Figure 1 show the comparison between Early and Late career students.

Statistical testing revealed significant differences (p<0.05) between early and late career students for all four rubric criteria (Context of and Purpose for Writing, Content Development, Conventions of Organization, Conventions of Syntax and Mechanics), with late career students scoring significantly higher than early career students.

Table 1

Rubric Criteria	Career Level		Criteria
Rubric Criteria	Early	Late	Average
Context of and Purpose for Writing	2.21	2.96	2.58
Content Development	2.37	2.90	2.63
Conventions of Organization	2.14	2.91	2.53
Conventions of Syntax and Mechanics	2.19	2.93	2.56
Group Average	2.23	2.92	2.58



III. Interpretation of data

A focus group was formed to assist in interpreting the quantitative findings. This group, comprised of faculty and program directors, was convened based on their involvement with writing courses at the university, involvement with the Tri-University project thus far, and/or their notable expertise in writing as a discipline.

Expectations of early and late career ratings according to the rubric.

Participants in the focus groups hypothesized that early career students would have some control of organizational structure, syntax and mechanics, yet they may need more support in developing the purpose of their writing. Late career students were expected to have a stronger foundation in content development. Early career student scores were generally where the group expected. The focus group noted that late career scores were lower than expected and discussed potential contributing factors, including challenges with alignment of the rubric to student work, and the impact of Covid 19 on teaching and learning.

NAU's undergraduate experience has a positive impact on student writing abilities.

Higher scores overall in late career imply that students are receiving a college-level writing experience where they engage with instruction, practice, receive feedback, and incorporate it. Students received practice in English foundation courses such as 105 or

205, and again through a junior level writing course. There was a general agreement amongst focus group participants that 100 level writing courses and junior-level writing courses were contributing to students writing development. There was also agreement that the group could not address the impact of diverse student pathways such as course selection and major degree paths that also influence student writing competencies.

IV. Strengths and limitations

Given the nature of early and late career artifact selection, we were not able measure growth over time of the same population of students. However, using incoming and outgoing writing samples gives us the capacity to assess the capability of our first-year population compared to the skills of outgoing seniors. Furthermore, using the same rubric for both populations of students provides us with a common standard by which to measure growth. Furthermore, the availability of capstone artifacts was limited. Many courses required students to submit capstone projects as a group and/or in oral presentations, which could not be assessed using the Written Communication Rubric. For this reason, sample selection was expanded beyond our Mountain Campus. This introduced variation in instruction and learning that cannot be accounted for in the data.

V. Recommendations

The focus group was limited in scope. While there was an attempt to interpret the data to develop recommendations, a larger, more diverse focus group is needed to obtain reliable feedback. Given these circumstances, strong efforts were made to use the data to understand how well our students are meeting the learning outcomes for written communication and to identify opportunities to enhance our general education program to best meet student needs.

The following is a list of comprehensive recommendations applicable to strengthen any general education program, independent of the data:

- Increase faculty participation in professional development opportunities such as the certificate in Effective Writing Instruction through the Interdisciplinary Writing Program.
- Incorporate writing requirements at all course levels 100 400 within a discipline so that writing skill development is more scaffolded across the curriculum.
- Expand campus-wide communication about writing requirements for Liberal Studies and faculty resources for teaching writing.

VI. Learning Opportunities

According to feedback from our raters, applying the rubric, particularly to late career assignments, was difficult due to the wide range of majors in late career. In the future, more attention will be given to working with faculty to select assignments that have clear alignment with the rubric on all assessments. Given the limitation of the focus group, future assessment plans will engage with more robust representation that includes student voices.

Written Communication Assessment at the University of Arizona

Overview

The first assessment of Written Communication at the University of Arizona (UArizona) reflected the mission outlined by the ABOR Tri-University Committee on Assessment, and it followed an evidence-based model. The **assessment objective** was to understand students' achievement of learning outcomes for written communication as identified in the ABOR Tri-University Written Communication Assessment rubric. The UArizona assessment included 728 samples of student writing:

- 364 from students entering UArizona (early-career);
- 364 from juniors and seniors at UArizona (late-career).

Who Participated in Scoring Student Writing?

- In total, 50 instructors from multiple colleges and departments participated at different stages of the assessment.
- 22 instructors, consisting of 13 UArizona faculty and nine Graduate Assistant Teachers (GATs), were trained as evaluators.
 - o Half of the evaluators were instructors in the Writing Program at UArizona
 - o Half represented departments across the disciplines.

What Student Writing Samples Were Assessed?

- 364 early-career samples from the UArizona Foundations Writing placement system.
 - These samples were written by early-career students who were newly enrolled, matriculated with 25 or fewer units completed, spanning a wide range of colleges and programs.
 - The samples were reflective writing tasks written by first-year students as part of the Foundations Writing placement.
- 364 late-career student writing samples from a variety of disciplines in fall 2021.
 - Instructors in five different colleges and fourteen programs provided student writing samples from upper-division courses, representing latecareer students who were in their junior or senior year and had completed 75 or more units.

What Did We Learn?

Guidelines for Interpretation of the Data

- For all 728 samples of writing, a score of 2 or greater indicated meeting or exceeding expectations (≥ 2).
- Early-career and late-career samples should not be directly compared; rather, these different sample groups represent snapshots of student writing at different stages of learning.
- Generally speaking, the WC1 rubric category "Context of & Purpose for Writing" becomes increasingly complex over the course of a student's career.
 - Whereas early-career students in this assessment were asked to reflect on their writing experiences to explain their placement request, late-career students are often expected to compose documents according to specific,

- established guidelines within a field or profession. In writing studies, these professional types of writing are called "genres."
- All evaluators completed online training in advance of scoring student artifacts. Then, evaluators scored artifacts across two weeks asynchronously through the digital assessment platform Watermark (May 16 - May 28, 2022). During this time, faculty participated in calibration training at three different synchronous sessions (May 16, May 18, and May 20). Our team carefully trained and calibrated evaluators, which resulted in strong inter-rater agreement and rater engagement.

Early-Career Samples

- As seen in Fig. 1, the majority of students are getting the highest or second highest mark at their grade level (3 or 4), with the averages of each rubric category exceeding "Meets Expectations" (≥ 2).
- Early-career artifacts show achievement in writing exceeding what is expected for students entering the university from secondary school settings (≥ 2).
- A majority of the artifacts demonstrated an awareness of the writing situation and purposeful attention to structure, language, and use of information.
- Early-career artifacts showed less proficiency developing a nuanced understanding from various sources of information.

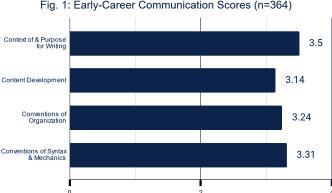
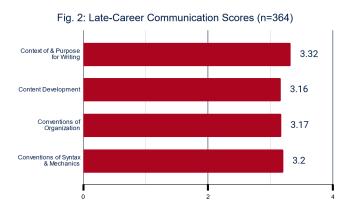


Fig. 1: Early-Career Communication Scores (n=364)

Late-Career Samples

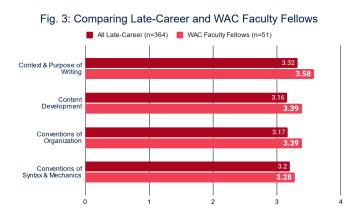
- As seen in Fig. 2 below, late-career artifacts demonstrate comparable student achievement in writing late in their undergraduate careers: these assignments are far more complex than the reflective writing done by early career students. The late career writing includes a range of genres, or types, of writing.
- As students are exposed to a variety of disciplinary genres throughout their college careers (Lindenman, 2015; Reiff & Bawarshi, 2011), the implications from our data illustrate that students are effectively communicating in writing in upperdivision contexts.
- The score for WC1, Context and Purpose, illustrates faculty efforts in helping to support students' rhetorical dexterity across genres and students' ability to grapple with complex writing tasks.

- These are the essential first steps in mastering genre awareness (Tardy, 2009) and can support students' ability to comprehend other aspects of writing, such as conventions of organization.
- Late career students are consistently writing above the passing mark, emerging from novice writers to advanced practitioners of writing. These numbers were consistent across gender, race, ethnicity, socioeconomic status, and other stratified data which did not yield significant differences.



Samples from Classes Taught by Writing Across the Curriculum (WAC) Faculty Fellows

- A small subset of late-career artifacts were collected from students enrolled in courses taught by instructors who participated in the 2021 Writing Across the Curriculum (WAC) Faculty Fellows training.
- The WAC training provided resources to instructors about the following: organizing writing assignments more effectively; scaffolding writing assignments; designing meaningful writing assignments; and embedding peer tutors to provide support to students in the class.
- As seen in Fig. 3 below, a subset of late-career artifacts collected from students enrolled in courses taught by instructors who participated in the 2021 Writing Across the Curriculum (WAC) Faculty Fellows training showed significantly stronger results (p = .02) in this assessment on two rubric dimensions (context and purpose of writing, conventions of organization).



Implications and Recommendations

• Connected Curriculum

- More can be accomplished by training faculty and students to make explicit connections across Foundations Writing, General Education (GE) writing, and writing in the major.
- We recommend that undergraduate students complete two GE courses with a Writing Attribute, which provides the foundation for establishing sequenced writing courses in Foundations Writing, GE, and the majors, with the goal of connecting across these domains and building explicitly upon one another (Melzer, 2014; Wardle & Roozen, 2016).

WAC Training

- Faculty across the curriculum deserve more training in how to teach writing in their courses.
- Results from a 2020 survey of 348 UArizona instructors showed that
 instructors are less prepared to define genre, purpose, and audience as
 elements of effective writing when teaching writing. However, instructors'
 survey responses showed that expectations for writing differ based on the
 discipline with some common patterns in Professional and Applied
 Sciences, Social Sciences, Humanities & Fine Arts, and Natural Sciences.
- The GE Writing Attribute policies offer a first step for doing so. However, there is little explicit support in other contexts, especially writing emphasis courses in the major.
- More resources are necessary to sustain ongoing faculty training, including initiatives like the WAC Faculty Fellows in which faculty receive stipends for extended training and professional development.