

PRAC Assessment Grant Final Report Format

(Must be submitted within 30 days of completion of the project)

Include the following:

1. Name and rank/title of Project Director(s): Maria Brann, Professor; Elizabeth Goering, Professor; Kim White-Mills, Associate Professor
2. Department/Division and School: Communication Studies, School of Liberal Arts
3. Campus Address: 425 University Blvd., CA309
4. Phone: 317.278.3199
5. Fax: 317.278.1025
6. E-mail: mabrann@iupui.edu, bgoering@iupui.edu, kwhitemi@iupui.edu
7. Project Title: Designing a Sustainable Assessment Plan for the Communication Studies Gateway-to-Capstone ePortfolio Initiative
8. Project Dates: May 2021 – May 2022

Please respond to the following as thoroughly as possible:

- Provide a summary of overall project accomplishments as related to the intended outcomes of the project described in the proposal.

The intended outcome of this project was to create a sustainable assessment plan that could be used in the Gateway-to-Capstone initiative by developing (1) a direct measure to evaluate the quality of content in ePortfolio folders and (2) an indirect measure of a reliable and valid survey questionnaire to assess student perceptions of their knowledge of, and competence regarding, the department's learning outcomes and the university's principles of learning. We provide details of this process in the data collection methods and findings analysis section below. Overall, we were able to assess the quality of the content of the ePortfolios through the systematic examination of all ePortfolios completed by Communication Studies graduates between Fall 2019 when the initiative was started and Fall 2021 (n = 109). We also constructed, pilot-tested, and administered a survey questionnaire to students in the core courses (i.e., G100, G201, G310, and G480) to gather their self-reports of knowledge and competence in having achieved the department's 10 learning outcomes.

Additionally, we have led departmental faculty training in ePortfolio design and assessment as well as disseminated the project process and findings at two conferences:

Goering, B., White-Mills, K., & Brann, M. (2021, October). *From initiation to continuation: Creating maintainable gateway-to-capstone eportfolio initiatives*. Webinar presented at the annual Assessment Institute, Indianapolis, IN.

Brann, M., Goering, B., & White-Mills, K. (2022, April). *Making text-based assignments more eportfolio-friendly*. Workshop presented at the annual ePortfolio Symposium, Indianapolis, IN.

- Describe data collection methods and provide an analysis of the findings.

Evaluation of Quality of Content

To analyze the quality of the content of the ePortfolios and the degree to which they demonstrate attainment of the department-level Learning Outcomes in Communication (LOCs), we conducted a content analysis of the Showcases (SC) graduating seniors included in their final CN ePortfolios (n = 328 SCs). For each SC, we coded the skills/competencies demonstrated in the SC, tracking both the skills explicitly tagged by the students as well as the skills evident in the showcase that were not tagged by the students. We then linked the skills to the LOCs, which allowed us to assess the degree to which the ePortfolios demonstrate attainment of each LOC. Next, we coded the students' reflections about their learning included in the SCs. Specifically, we coded the amount of reflection included, how the reflection was included, and the level of growth and learning apparent in the reflection. Finally, we viewed the ePortfolios through the eyes of potential external viewers, assessing the effectiveness of the Showcases as vehicles for communicating what the student knows and can do to potential employers and others outside the academy.

Our findings provide useful information about what our majors are learning in our program. The SCs provide ample evidence of student learning related to LOC1 (describe the communication discipline and its central questions), LOC3 (engage in communication inquiry and research), and LOC4 (create messages appropriate to audience, purpose, and context), LOC6 (demonstrate the ability to accomplish communicative goals), LOC8 (utilize communication to embrace difference), LOC9 (influence public discourse), and LOC10 (collaborate). The SCs provided less evidence of learning related to LOC2 (employ communication theories), LOC5 (critically analyze messages), and LOC7 (apply ethical communication principles and practices). The findings also reveal that most students offered at least some reflection on learning in their SCs. The most effective forms of reflection were either a separate reflection section or reflection woven into the narrative of the overall SC. Although most SCs included some reflection, students seemed to struggle with discussing their growth and learning. Many SCs implied growth and learning by the tangible outputs included, but the process of learning was not explicated in the reflection.

In addition to providing insight into what students are learning, our analysis also provided us with useful information about the design and implementation of our ePortfolio initiative. When looking at the ePortfolios through the eyes of external viewers, the coders concluded: "What made a Showcase (SC) standout was the student's ability to incorporate reflection, evidence, and display an array of LOCs and skills. These SCs clearly demonstrated what they have learned throughout their time in college and how communication can be used to make sense of these experiences. Also, these SCs had a higher level of creativity than the other SCs, whether that be in how the SCs description was written or designed, interesting pieces of evidence, and they all displayed clear reflections. What made some SCs be on the bottom of the pile

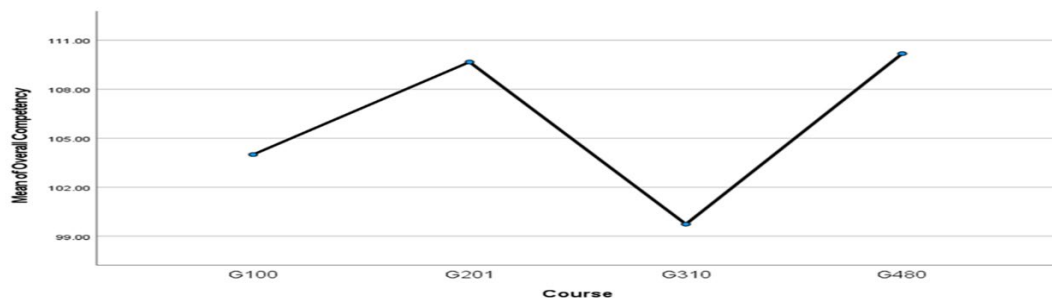
were unfinished SCs, clearly copy and pasted bullet point lists from a resume, no reflection, no description, and a lack of evidence.”

The findings of this qualitative analysis of completed ePortfolios suggest several ways in which our ePortfolio initiative can be improved. As part of our ongoing assessment of the initiative, we will develop ways to promote stronger reflection about learning and more audience-orientation in the labeling and presentation of artifacts evidencing the LOCs. We also will explore the lack of evidence of learning related to certain LOCs. We need to ensure that those competencies are effectively integrated into our curriculum, and we need to work with students to help them recognize and showcase their learning related to those LOCs.

Evaluation of Student Perceptions

We developed and pilot-tested a self-report survey questionnaire that measured students’ perceptions of their knowledge and competency regarding the department’s learning outcomes. The questionnaire was pilot-tested in the fall of 2021 and formally implemented in the spring of 2022. The initial version of the questionnaire was administered in a section of each of the core courses (i.e., G100, G201, G310, and G480). The 26-item assessment, with a total possible score of 130, was found to have extremely high internal consistency, $\alpha = .912$, good face validity, and was deemed usable as an indirect measure. Preliminary results indicate several significant findings. First, there was a significant difference in the reported knowledge and competence between the four core course levels, $F = 5.43$, $p < .006$. Second, the most significant differences were found between sophomores and juniors and also between students in G310 (research methods) and G480 (capstone). Finally, seniors reported greater overall knowledge and competency.

Assessment of differences across averages of the core courses: G100-Intro, G201-Theory, G310-Comm Research, G480-Capstone



The final version of the questionnaire was administered to students in the two sections of the capstone course (G480) in the spring of 2022. In comparing the mean scores of the pretest to the mean scores of the posttest, there was a statistically significant difference in the reports. That is, students reported greater knowledge and competence at the end of their college career, $t = -3.417$, $p < .01$. Future comparisons will be made between the self-reports of students in G100 who first-year students and students in G480 who are seniors.

As shown below, 43 of the students completed the pretest and only 26 students completed the posttest. Slightly higher scores were obtained between the start of the semester and the end of the semester, indicating that some seniors reported even greater knowledge and competence after completing the capstone course (in which they completed the ePortfolio).

Spring 2022 G480 Survey Results

	N	Range	Minimum	Maximum	Mean
Spring Pretest	43	41	87	128	104.63
Spring Posttest	26	47	83	130	117.19

We will conduct paired t-tests on the assessment questionnaire using the data from the same group of students, identified by their student identification numbers, when we receive more data. Currently, there are limited matching student identification numbers in the spring pre- and post-tests so we need additional data to confidently make claims. A challenge to overcome is ensuring that all students report their student identification number accurately and completely on each administration of the assessment.

- Describe any obstacles/challenges encountered.

Beyond the challenge of matching data because of student inaccuracy in reporting identification numbers, another challenge we recognized was getting students to complete the survey at all. Students may have experienced fatigue with the number of times we collected data to start this process. Finally, related to the survey, we need to make sure that all faculty have buy-in and not only promote the survey, but encourage participation of their students.

The biggest challenge we faced with directly measuring items in the ePortfolio was the sheer volume of data to assess. We were able to train and use the services of a graduate assistant during the project period, which helped, but it was an overwhelming task.

- What changes, if any, were made to address these obstacles/challenges?

To be able to track students more accurately, we will administer surveys through the course Canvas site and ask students to enter the last four digits of their student identification number for tracking purposes. Even if the student identification information is not provided, because the section information is automatically loaded, we can make comparisons across the sections and the course levels.

To address the challenge of students not completing the survey, we may need to consider incentivizing participation. For example, nominal extra credit points could be awarded for completion.

To lessen the possibility of participant fatigue, we must avoid collecting data too frequently. We have re-assessed the courses in which it makes the most sense to assess student learning. Ultimately, we have decided to focus on the introductory course at the beginning of one's academic career and the capstone course at the

conclusion of one's academic career and not include the core courses in the middle years.

We will continue to offer active faculty training and seek input from faculty to encourage their participation in the process.

Moving forward with the direct measure of ePortfolios, we will need to train other faculty and/or student assistants to help with assessment, and we will likely only assess a random sample of data instead of all available data to avoid the challenge of being overwhelmed with data.