

Required General Education Program Evaluation: Bridging the gap between educators and administrators

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ABSTRACT

This paper reported on the development of an online data-gathering system for the programmatic assessment of General Education Programs (GEP) at a US public polytechnic university. The article began with a brief introduction to the study area and population. It then presents the findings of a literature review that underpinned the study, including research on faculty buy-in for programmatic evaluation. The primary findings highlighted a significant disconnect between those managing the data-reporting process for accreditation agencies and those charged with teaching and assessing students who are required to provide the data. Next, the study methods and procedures utilized for developing the online data-gathering system were described. A group of educators was engaged in a collaborative co-design process to develop the necessary data-gathering instrument and to test various tools during feedback sessions. For this pilot test, the GEP outcome being examined was 'Oral Communication,' which utilized a four-point Likert-style scale for indicators. The results of the pilot test are presented, along with user observations and comments. The article concludes with a series of findings and implications for how these methods can be applied to other GEPs and, more broadly, to any program evaluation needs.

Keywords: General Education Programs (GEP), Online Data-Gathering System, Faculty Buy-In, Accreditation Compliance, Collaborative Co-Design (CCD), Learning Management System (LMS), Oral Communication Outcome, General Education Program Evaluation, Educational Best Practices

1. INTRODUCTION

In the United States, institutions of higher education are required to maintain accreditation from a variety of national bodies, depending on the majors and programs offered by the institution. Many offer a General Education Program (GEP) to provide a common foundational education. The American Association of Colleges and Universities asserts that, "General education enables students to cultivate the competencies and dispositions associated with humanistic inquiry, including the communication skills, analytical skills, and intellectual agility required to

navigate a variety of perspectives" [1]. To evaluate a GEP effectively, each institution must develop and implement its own set of processes and procedures to gather data and understand the dynamics across a range of courses and majors that comprise their unique GEP. It is within this context that the study of the Collaborative Co-Design (CCD) of a GEP is examined [2]. NJIT is required to attain accreditation by the Middle States Commission on Higher Education (MSCHE). As part of our last review, the agency needed NJIT to create a formal system to assess its GEP. This project aims to create outcome criteria to guide future outcome assessments for the NJIT GEP, a crucial step toward attaining MSCHE accreditation.

The institution established a committee of nine academic and professional staff members representing all college departments, the Dean's Office, the Library, and the Office of Institutional Effectiveness (OIE), including one of the authors. In conjunction with the OIE, the committee tasked the author with designing and developing several outcome statements and associated data-gathering instruments that are holistic measures of student proficiency tied to summative assessments within GEP courses. That work operationalized components of the evaluation, like finding working systems and instruments that can be adopted within the institution's existing environment. Generating an understanding of our processes and procedures, along with working artifacts and related resources, will provide everyone with clear milestones, starting points, and guidance toward effective best practices for GEP or any program assessment.

To develop a working GEP evaluation that meets the requirements for MSCHE accreditation, the author collaborated with the Department of Humanities and Social Sciences to develop working instruments and a data-gathering system utilizing CCD. This collaboration led to the initial pilot test of a formalized outcome statement, a set of indicators, and a process to import these into the Canvas LMS provided for all courses at the institution. The most recent iteration of this pilot testing was conducted on March 20, 2023. This article discusses the results of that development process, examining outcomes and providing suggestions and best practices that emerged. The article begins with a brief introduction to the topics that serve as a foundation for the work going forward. A literature review presents the research that underpins the study of faculty buy-in for programmatic evaluation and some key areas of concern for aligning the work of administrative compliance with educator practice [3], [4]. The primary finding highlights a significant

disconnect between those managing the data reporting to accreditation agencies and those charged with teaching and assessing the students required to provide the data. The results of the pilot test are then presented. The article concludes with a series of findings and implications for how to apply these methods to other GEPs and, more broadly, to any program evaluation needs.

2. LITERATURE REVIEW

In order to inform the CCD and generate participation, buy-in, voice, and agency the authors conducted a literature review with the guiding question, "How do you bridge the disconnect between administrative compliance and faculty practice in general education programs?" The following major items were identified as foundational literature to the effective development process.

Establish Clear Communication Channels: Develop structured, regular communication channels between administrators and faculty to discuss general education program objectives, outcomes, and evaluation metrics [5]. This can include joint committees, regular meetings, and shared digital platforms for updates and feedback. Clear, transparent communication ensures both groups are aligned on goals, expectations, and the rationale behind compliance requirements.

Engage in Collaborative Planning and Decision-Making: Involve faculty in the early stages of planning and decision-making processes related to general education programs [6]. This collaborative approach can help in creating a shared understanding and ownership of the program's vision, objectives, and compliance requirements. Including faculty in these discussions also allows for the integration of their insights and pedagogical expertise into program design and evaluation.

Foster Professional Development Opportunities: Offer workshops, seminars, and training sessions focused on the latest best practices in general education teaching, assessment, and accreditation standards [7]. These opportunities can help faculty understand the importance of compliance from an accreditation perspective and equip them with the skills needed to align their teaching practices with program goals.

Utilize Interdisciplinary Teams for Program Evaluation: Create interdisciplinary teams that include faculty from various departments, administrators, and possibly students to evaluate general education programs [8]. These teams can use diverse perspectives to conduct a more holistic and effective evaluation, identifying areas for improvement that align with both faculty practice and administrative compliance [9, p. 88].

Incorporate Faculty Feedback into Compliance Processes: Implement mechanisms for regular faculty feedback on the impact of compliance requirements on teaching and learning [10]. Use this feedback to adjust policies, procedures, and practices in ways that support effective teaching while meeting compliance standards. This demonstrates respect for faculty expertise and promotes a culture of continuous improvement.

Highlight the Alignment Between Compliance and Educational Excellence: Clearly articulate how compliance requirements support the overarching goals of educational excellence, student success, and institutional accountability [11]. By framing compliance in terms of its benefits to students and the institution, administrators can foster a more positive view of these requirements among faculty.

Leverage Technology for Efficiency and Transparency: Use digital tools and platforms to streamline compliance processes, share information on program evaluation outcomes, and facilitate

easier documentation and reporting [12]. Technology can reduce the administrative burden on faculty and increase transparency in how compliance efforts contribute to program quality and accreditation.

Recognize and Reward Faculty Engagement: Acknowledge and reward faculty contributions to program evaluation and compliance efforts [13]. Recognition can take many forms, including professional development opportunities, grants for innovative teaching, and awards for exceptional contributions to program quality and student learning outcomes.

To bridge the disconnect between administrative compliance and faculty practice in general education programs, it is important to take a transformative approach that goes beyond a one-size-fits-all mentality [14]. Faculty need targeted professional development to improve their ability to conduct meaningful assessments of student learning outcomes (SLOs) (Amigo, 2015). Additionally, there is a need to establish a culture of assessment and inquiry, fostering faculty participation in the SLO cycle [16]. By reconfiguring institutional relations and establishing new relations that better serve academics' interests and needs, the counterproductive effects of administrative practices can be addressed [17], [18].

Considering these ideas, the authors worked to utilize CCP to bring faculty into the process of revising and optimizing the GEP outcome statement, the instrument used to gather data, and the online Learning Management Systems (LMS) data gathering tools. Rather than wait until all decisions were made by administrators, committees, or technical support experts, a set of feedback sessions was performed to present the current Oral Communications GEP instrument to a collection of interested Oral Presentation instructors as part of a study design approved by Institutional Review Board (IRB) protocol number 2304032591, exemption [19].

3. METHODS AND FINDINGS

The IRB protocol for the study, titled "HSS Oral Communication Document Analysis," outlines a comprehensive approach to evaluating oral communication rubrics within the Department of Humanities and Social Sciences (HSS) at NJIT. This protocol is designed to align with ethical research standards, ensuring the confidentiality and integrity of participant contributions. The study aims to identify commonalities in oral communication rubrics used in HSS courses, comparing these to nationally recognized best practices [20]. This comparison informs the development of outcome criteria for the NJIT General Education Requirement (GER) Programs, supporting the institution's efforts toward Middle States accreditation.

The methodological approach involves a 6-semester exploratory study, employing qualitative document analysis techniques as discussed in foundational texts by Corbin & Strauss [21], Frey [22], and Babbie [23]. The study will collect and analyze oral communication rubrics alongside departmental resources and exemplars through a structured process. This includes an initial email outreach to HSS faculty, collection of rubrics via email or a shared Google Drive, and subsequent coding and categorization of these documents to identify rating areas and instrument variety. The project will also incorporate an annual focus group to discuss findings and refine the oral communication assessment process, leveraging the expert knowledge of HSS faculty.

The Author IRB protocol [19] details in describe the recruitment procedures, including the dissemination of information through departmental meetings and email communications, and outline the informed consent process, ensuring participants understand

their rights and the study's scope. The document also addresses privacy, confidentiality considerations, and data usage post-collection, underscoring the ethical considerations central to the research design. For more information please visit the Data Management and Sharing Plan for "Common Rubric development methodology" [24].

Applying the literature review to the CCD for GEP identified several areas to address in order to increase successful development and implementation of the system. Three different portions of an effective online system was identified: Online data gathering tool, MSCHE Aligned outcome statement, and a graduated Indicator scale that was short but clear tied to larger guidance documents for training and elaboration of concepts. The online system was put through feasibility and functionality testing. The outcome statement and indicators were tested for applicability, validity, reliability and usability with the users. The institutional limits placed on available technology for faculty to accomplish this paired with the need for student data to track GEP scores longitudinally left limited options for testing. The majority of users were comfortable using the gradebook to enter data, however, using this tool offline or outside of the course proved cumbersome and was quickly left behind in favor of an integrated assignment. The use of this is currently being tested and preliminary tests show it is functionally effective. The next step will be to determine its usefulness in live data gathering.

For the development of the outcome statements, an iterative approach was undertaken. In order to engage the educators in the process and inform them, the CCD approach was utilized to ensure a committee of faculty from other departments and administrators unfamiliar with the course content would not be making unilateral decisions. The author conducted parallel development processes utilizing the ADDIE model for instructional design [25], [26] and Kirkpatrick for educational program assessment [27]. The two aspects of the development process needed to address an easy-to-use data gathering system that did not require additional work and had a low lift for learning. At the same time, the outcome statement and indicator needed to meet the needs of the MSCHE standards, align with the institutional policy and guidance documents, while making sense to those who would be completing the holistic scoring for the data entry.

The functional testing was handled in conjunction with the office of online learning and technology support to ensure the back-end systems would work while the user experience was effective. This development was fast-tracked by the need to use the existing LMS and its capabilities. The two paths tested were using the grade book or utilizing an assignment tool in Canvas. For the gradebook option, grades could be entered directly online or in a downloaded spreadsheet. Faculty reported that the process was too complicated and counterintuitive when compared with the use of existing assignment tools. The other option was to build an assignment tool in the Canvas commons that everyone could locate and import into the sections being evaluated. This was seen as much easier and is the current process being pilot tested. The other needed component for the online system is the outcome statement and associated indicators. These were developed through an iterative process that involved the CSLA committee, the department chair, and course coordinator, along with relevant faculty. After five iterations starting with the nationally normed AAC&U VALUE rubrics for Oral Communication [20] the feedback sessions and committee resulted in the institutions official outcome statement with indicators (see Table 1).

Table 1

Oral Communication Evaluation Instrument

General Education Programs (GEP) Outcome: Oral Communication

Instructions: Student work is measured on a scale of 1-4, where one is "Emerging" and 4 is "proficient" for oral communication proficiency. As a content expert, NJIT relies on your judgment to translate the students' attainment on summative assessments in your course to the most appropriate score. It is understood and expected that students in lower-level courses may not achieve higher ratings on the rubric.

GEP Outcome: Students will be able to communicate a central message orally in a responsive and appropriate way to particular topics and audiences and effectively achieve their stated purpose.

Indicators for Oral Communication. The submitted work demonstrates that the student:

- Proficient (4)-Effectively orally communicates a central message in a way that is responsive and appropriate to particular topics and audiences and effectively achieves their stated purpose.
- Competent (3)-Somewhat effectively orally communicates a central message in a way that is responsive and appropriate to particular topics and audiences and effectively achieves their stated purpose.
- Attaining (2)-Ineffectively orally communicates a central message in a way that is responsive and appropriate to particular topics and audiences and effectively achieves their stated purpose.
- Emerging (1)-Does not orally communicate a central message in a way that is responsive and appropriate to particular topics and audiences and effectively achieves their stated purpose.
- NA-Did not participate in the assessment.

4. RESULTS

First, it was necessary to determine the priorities and challenges faced by the institutional administration and faculty in the general education curriculum. Though faculty committees were initially charged with collaborating with OIE and other administrative staff, the work was assigned to the CSLA committee and eventually undertaken by the departmental representatives, who were most closely aligned with the area of outcome assessment. For this article, the HSS evaluation and assessment director acted as a liaison to listen to faculty concerns while meeting deadlines and milestones to move the project forward. This was made effective by sharing with faculty accreditation requirements and a plan to involve them in the system development process. Though the process is long-term, many items had a tight timetable, so actions were required to be taken as the work moved forward.

The second major component of the project focused on the prerequisite knowledge of data systems and Learning Management System (LMS) tools needed before commencing obligatory data collection. It was observed that there existed a broad spectrum of familiarity and ease of use among faculty members with the current tools and procedures available. The decision was made to leverage the existing LMS tools, as this approach was expected to present the least resistance, thereby minimizing the learning curve and reducing the workload for faculty responsible for data entry. The technology support team

and the administrators in charge of the program would manage all other technical tasks. The details of these discussions and the development of procedures are beyond the scope of this article. Finally, one of the biggest obstacles to educator preparation and administrator understanding related to the disconnect between the conceptions of assessment and evaluations that would become part of the process. One of the most significant disconnects in the study area relates to the perceptions and understandings of administrators overseeing programs from the instructors handling the daily educational practices. It was repeatedly found that there is a critical distinction between assessment and evaluation within higher education. It is vital to have a clear set of definitions and an understanding of a framework for their effective alignment and coordination across courses, programs, and entire majors. Assessment, defined as the process of determining students' positions, progress, and levels of mastery, is analyzed in both formative and summative contexts.

On the other hand, evaluation is examined as a measure of the efficacy, applicability, and satisfaction with educational tools and methodologies. The conflation of these two distinct processes often complicates the validity and reliability of data instruments. Clarifying these concepts is necessary at the outset to ensure that everyone is on the same page.

5. CONCLUSION

After working through the process for one outcome statement integrated into the LMS, the steps are much clearer. By following these, a balance was struck in the CCD process. In this way, the faculty did not feel overwhelmed with uncompensated work while still participating in the process of design and implementation. The steps are:

- 1) Administrators and educator committees gather best practices and relevant standards.
- 2) Compliance needs are identified and aligned with current institution practices.
- 3) Initial outcome statements are developed and brought to the relevant faculty experts
- 4) Outcome statements are revised and articulated to match those for all GEP outcomes with input from faculty department representatives.
- 5) Indicators are developed and tested to connect the GEP evaluations to the assessments conducted in relevant courses by faculty.
- 6) The outcome statements and indicators are refined to ensure a coherent connection from the assignment through the course to program and university applications.

This set of steps provides many places where the gap between administrators and faculty can be bridged. Soliciting input, ensuring common language, and ensuring participatory planning can enhance outcomes while ensuring engagement. Though only a small-scale test thus far, the process presented in this article has already been applied to other GEP outcome statements to move them successfully forward, including Written Communication, Information Literacy, and Critical Analysis and Reasoning. Other departments related to the GEP not connected to the humanities and social sciences have also employed this process to develop quantitative analysis, scientific literacy, and values and ethics outcome statements. All work has shown progress towards meeting the implementation deadline for each outcome statement. Most promising of all, Middle States has accepted the institution's interim progress report detailing this process and

progress towards completing all ten outcome statements for the MSCHE accreditation standard.

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Disclosure statement

No conflict of interest pertains to the research presented above.

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