

4

A Taxonomy of Programmatic Evaluation and Research Questions to Guide TPC Program Administrators

JOANNA SCHREIBER AND LISA MELONÇON

In the fall of 2015, one of the authors sent the following query to professional email lists:

We are in the process of developing a capstone course, and I am gathering information about best practices. We've recently done away with tracks in our major and find ourselves with multiple upper division "capstone" courses. Our undergraduate program includes technical and professional writing, writing studies, linguistics, and creative writing.

We'd like to develop a single capstone course. I would really appreciate any advice, syllabi, assignments, activities, course descriptions, materials, best practices, portfolio practices, etc., that the members of this community can provide. I'm particularly interested in hearing from interdisciplinary programs that include both creative and technical writing.

Thank you in advance for any help you can provide!

This query remains a touchstone for us because it highlights a common assumption that many faculty make. That is, we assume a model or data currently exists that would help technical and professional communication program administrators (TPC PAs) and faculty make informed, data-driven decisions for their programs. In the case of Joanna's query, the data did not

exist. This led to our effort to get capstone data to help both of our programs, and started our ongoing collaborations that have included a study about the capstone course (Melonçon and Schreiber 2018) and a collection that situates TPC knowledge domains in a framework for a sustainable identity for the field (Schreiber and Melonçon 2022).

What the capstone projects helped us to understand is that for so many programmatic questions, field-wide data or even local data were either not available or required an update. These concerns about data and programs are not new in the TPC. For example, the impetus for starting the Council for Programs in Technical and Scientific Communication in 1974 was to gather together TPC PAs to share information about common problems and challenges (Pearsall 1974). These long-standing conversations about common TPC curricular concerns are the basis of programmatic research, which CPTSC explicitly promotes, and programmatic and pedagogical research remains about 21 percent of published research (Melonçon et al. 2020, 96).

Programmatic research investigates “classroom teaching approaches at the course level; classroom teaching and student learning practice at the course level; and programmatic approaches related to courses, curricula or TPC program administration” (Melonçon et al. 2020, 93). TPC PAs need evidence-based, programmatic research that can be recognized by a variety of stakeholders at multiple levels, including department, institution, and accreditation agency. In addition, programmatic data serves both to support the growth and effective refinement of your program (evaluation) and to provide evidence for potential research questions to share with the field. Programmatic research, which is evaluative in nature, builds field-wide data that is applicable across institutions and can be applied locally.

This essay helps TPC PAs embrace an evaluation perspective and consider their programmatic evaluation and research needs that can serve their program locally and be built into their research agenda in four steps:

1. Emphasize programmatic evaluation.
2. Plan programmatic evaluation data.
3. Localize programmatic evaluation data.
4. Sustain programmatic evaluation data in your research agenda.

After establishing an exigency for evaluation rather than assessment, we offer a taxonomy of programmatic research questions to include types of questions, how those questions can be used locally within their programs and institutions, and examples from current literature and our own evaluation work.

We end this entry with implications for the field and opportunities for TPC PAs to participate in building programmatic research into their research agenda.

Too often TPC PAs and faculty find themselves the only person on a department committee with a TPC background, which means the need for evaluative data can be a useful tool to make arguments. We hope this essay will help new TPC PAs and faculty to situate tough conversations about program change with data and invite stakeholders to join you in examining the possibilities of that data. We also hope it will spark programmatic research questions and help TPC PAs and TPC faculty develop a research agenda that supports their scholarly interests as well as their pedagogical and curricular work. Having a taxonomy of programmatic research questions ready at hand enables TPC PAs to start with a programmatic perspective, which includes considering programmatic relationships: course to course, course to program, program to other academic programs, program to professional field, and just as importantly, all the processes and documentation that go with a program for the multiple stakeholders across and outside of campus (Schreiber and Melonçon 2019, 257–258). This sort of perspective ensures TPC PAs can continue to change and sustain programs, while addressing a myriad of questions from varying stakeholders within their own institution.

Step 1: Emphasize Programmatic Evaluation Rather than Assessment

Assessment is an incredibly important practice that provides data on the current state of a program or a course. Often, TPC PAs are mandated by an institutional initiative, usually tied to accreditation, to perform regular assessments. As a field, we have been asking more and more of assessment and have created increasingly complex assessment models (e.g., Brady and Schreiber 2013; Carter et al. 2003; Coppola et al. 2016; Henschel and Melonçon 2014; Medina and Walker 2018; St.Amant and Nahrwold 2007). Assessment can be used to help diagnose problems and prescribe change, but with a limited scope. TPC programs put themselves at risk if they expect assessment to do more than that. As we have previously argued, “assessment needs to be one piece of a larger and more deliberative process that includes *additional data points from different stakeholder perspectives*” (Schreiber and Melonçon 2019, 257; emphasis added). As the opening example illustrates, problems that are beyond the control or scope of assessment can snowball out of control without sufficient data for informed decision-making. Thus, when we call for programmatic evaluation, we ask TPC PAs to approach programmatic administrative work from a research-based and

data-driven perspective. In doing so, evaluation makes assessment part of a conversation instead of a means to an end.

Evaluation helps programs shift away from positioning assessment as the solution, instead of an important part of a solution. Assessment ought to encapsulate the values of a program, but it has limited capacity to identify problems or program needs, especially for emerging industry trends. Further, positioning assessment as the place that both identifies and solves problems also narrows solutions and sets up important initiatives for failure. Approaching programmatic work from an evaluation and research perspective also ensures that TPC PAs are prepared to make departmental and institutional arguments from their disciplinary or field expertise, which increases opportunities to garner resources or support. When TPC PAs and faculty are gathering the data necessary for those arguments, local data needs to be read alongside field-wide data. A field-wide programmatic perspective is one that looks at TPC programs and courses at the field level by combining data and experiences from multiple institutions and programs (Melonçon 2025). Field-wide data provides a macro view of curricula and programs that can be read alongside the rich history of micro views that typically focus on a single program or course. Assessment is a program-level practice that produces micro-level data and can be aligned with field-wide, programmatic data, which is macro-level data.

Evaluation also allows programs to attend to programmatic change in conceptual and practical ways, allowing TPC PAs to address current needs and develop data-driven strategic plans. For example, Yu (2012) makes an important call to incorporate intercultural competence in assessment. An evaluative approach repositions this call more broadly and helps TPC PAs to:

1. Identify places in the curriculum to place the concept.
2. Connect this concept to institutional goals and metrics.
3. Identify any additional training needed for faculty or new hiring.
4. Make explicit industry connections, including local connections.
5. Establish appropriate SLOs for assessment.

Evaluation provides the necessary basis for integrating intercultural competence into courses and the program, while assessment assumes TPC PAs and faculty will know how to do the work to then assess it. Too often the field's assessment scholarship fails to describe the implications for practice.

Beyond clarifying how conceptual assessment ideas work in practice, program and course evaluation also helps frame assessment as part of important

data-driven conversations. Many TPC PAs know the challenge of getting faculty to engage with assessment data and have important conversations about how to improve the program. Even when such conversations are possible, they can often become anecdotal, which can prevent making important changes. For example, Boettger (2010) offers a detailed explanation of the creation and implementation of rubrics. An evaluation perspective would allow the focus to go beyond the implication of meeting accreditation and assessment standards and toward a consideration of improving student learning and teaching practices. An evaluation perspective creates space for additional data and stakeholders beyond the department, allowing for better conversations around pedagogical improvements and curricular change.

Programmatic research and program evaluation are centered on making changes or gathering information at the class level or at the program or curriculum level (Melonçon et al. 2020, 99). Program evaluation means an ongoing reflective inquiry of programmatic data for the purpose of continuous improvement of programs and of courses, focused on improving pedagogical practices that enhance student learning. Existing scholarship, however, has not adequately addressed ways for TPC PAs to continuously evaluate their programs. To address that need, we previously developed a continuous-improvement model that would situate assessment among a landscape of programmatic concerns (see Schreiber and Melonçon 2019). Our model, Gather-Read-Analyze-Make (GRAM), is a process for negotiating curricular and programmatic concerns that situates both local and field-wide perspectives and data. Often found in industry, continuous-improvement models are used “to organize several iterative processes and practices in conversation with each other, promoting alignment without sacrificing important deliberation” (Schreiber and Melonçon 2019, 258). Based on the inquiries and uptake of that work, many still think that continuous improvement starts with assessment. GRAM was inspired by our capstone study (Melonçon and Schreiber 2018) revealing mistaken assumptions about the utility of assessment data, and the need for a model to put assessment in conversation with other types of data and practices. GRAM positions assessment in conversation with perspectives that include programmatic data, industry perspectives, institutional perspectives. When deployed at the department or program administrator level, GRAM brings in voices productively, transparently, and fairly. We were developing GRAM at the same time both of our institutions were undergoing a complex consolidation of institutions that required multiple curricula to be evaluated and ultimately combined. We came to appreciate GRAM’s application

as one way to think through difficult programmatic and institutional change as well as to think about including multiple voices and perspectives in those conversations.

In this essay, we use GRAM to help us illustrate the role of programmatic research as essential to program evaluation and improvement, serving both student learning and institutional perspectives. TPC programs need a variety of data to participate in conversations within their institutions, as well as in conversations at the field-wide level and with industry. These conversations can often be fraught, highlighting the political nature of programmatic work. For example, other programmatic practices rely on a clear program identity, including marketing, recruitment, and advising. Effectively defining the issues for stakeholders beyond the department (including prospective students, employers, advisors, administrators, and parents) is beyond the scope of assessment and too much to ask of the assessment process.

Returning to our opening example, Joanna's program was seeking to develop a single capstone course for the purpose of assessment. Faculty were allowed to argue that their upper-division course would fail to enroll if it was not designated as a capstone course. Over time, the issue was exacerbated and five capstone courses became eleven. Assessment was developed as a process independent of these courses and could not define the problem of too many capstone courses from an assessment perspective. This meant that assessment could show that the extra capstones made the program difficult to assess, forced the program to rely on generic SLOs, and made it difficult to assess student growth in areas because there were so many choices. As one can imagine, eleven capstones is indicative of a rather unwieldy program that lacks a cohesive identity and makes any curriculum map—which needs to be comprehensible to faculty, department and program administrators, institutional administrators, advisors, and students—difficult to understand. By the time the program began building data beyond assessment and having meaningful conversations about the data as it related to the program, it was too late. The solution that eventually came down from upper administration was to combine this writing program with a literature program.

Models such as GRAM offer TPC PAs a specific approach to gathering and positioning data and information, but they do not help TPC PAs brainstorm and develop the types of programmatic research questions and inquiries that often come up in the everyday work of program administration. Programmatic research questions are developed from an evaluative perspective. Assessment is the analysis of what has happened in a program, while evaluation is “an

iterative process that evaluates how outcomes, assignments, and courses impact student learning as the program functions in real time” (Melonçon et al. 2024, 153). Evaluation contextualizes and enables a more comprehensive local view that can then be expanded into a field-wide perspective. In the next section, we take a look at types of questions that generate evaluation data.

Step 2: Plan Programmatic Evaluation Data

Programmatic evaluation data often becomes particularly important in moments when you don’t necessarily have time to design and carry out a full research study. For example, when your department is debating major programmatic changes or when institutional forces are imposing changes that affect your program (e.g., raising course caps or requiring syllabus policy statements). Because of this, planning evaluation data is incredibly important. Planning involves collection and analysis of existing data as well as identifying missing data or data that needs to be updated. This section provides a taxonomy of questions to help you make these decisions.

This taxonomy should be used iteratively to help you identify evaluative programmatic data for program administration (step 2), localize that data for your program (step 3), and identify needed areas for additional research that you can incorporate into your research agenda (step 4). In a review of programmatic and pedagogical research in TPC, Melonçon and her collaborators (2020) called for a more formalized approach to research study design and research questions for pedagogical and programmatic research: “Pedagogical research and programmatic research overlap in iterative and reciprocal ways that lead to continuous reflection and improvement in how we teach and how we administer programs” (Melonçon et al. 2020, 93). To enable this type of iteration and contemplation for continuous improvement, we need more attention to the types of questions TPC PAs often need to ask in their everyday work to support students and faculty and to provide information to the institution.

To realize the type of pedagogical and programmatic research that focuses on continuous improvement, TPC PAs and faculty need to consider *types of research and evaluation questions*. Forming questions that often come out of the process of GRAM is key to systematically improving curricula, courses, and programs. GRAM situates power dynamics, data points, and sets up conversations that are necessary to enact curricular change within the complex organizational structures, which are exactly what is found in higher education.

It is difficult to separate the taxonomy of questions we offer below from the different steps of the process for GRAM (or some other continuous improvement model). We attempt to do so to help TPC PAs and faculty grapple with the different types of questions that can be used for programmatic and pedagogical improvement. Inspired by categories of research questions in the scholarship of teaching and learning (Hutchings 2000), we have created a taxonomy of programmatic evaluation and research questions:

- description
- practice
- impact
- inquiry

Each type of question is meant to be considered at the programmatic level, which we take to mean looking across a degree program or a service course program. In listing these questions and potential subquestions, we cite studies in the field that are asking similar questions to serve as examples and provide evaluation examples from both of our experiences. It is important to point out that many of the questions and studies we list require additional research and we see this as an opportunity for TPC PAs to do the work within their own institutions and then to craft (or renew interest in) a programmatic research trajectory. As has been documented in the field, best practices for TPC programmatic administration often extend from lore instead of data (Albers and Flanagan 2019; Kimball 2013; Melonçon et al. 2020). Thus, there is an opportunity for TPC PAs to strengthen both their programs as well as their research agendas with programmatic research.

DESCRIPTION EVALUATION AND RESEARCH QUESTIONS

Description questions look to gain information on current practices. Description evaluation and research questions ask what is already known or what the current state of programmatic features and practices is at the course, program, or field level. The goal of descriptive questions is to gain a baseline knowledge of programmatic features and practices at the course, program, or field level. Much of the pedagogical and programmatic scholarship in TPC involves description questions. The results of description questions often lead to practice, inquiry, or impact questions because knowing a baseline, or the “what” of an issue, then enables deeper examinations of it.

Examples of Description Questions

An example of description questions from the literature would be the research that came out of this essay's opening anecdote. In that piece, we provided data on the current state of the undergraduate capstone course in TPC degree programs, which answered a typical "what is" research question (Melonçon and Schreiber 2018). Another example comes from Francis (2018), who looked at assignments in the TPC service course. Building on previous scholarship from Cunningham and Stewart (2011), Francis researched what writing assignments were being taught in the TPC service course as they compared to what engineers write on the job. Her project addresses the "what is" question: What is an effective assignment for engineering students?

Another strand of work that provides strong examples of description questions is how the academic field is teaching user experience. Chong (2016) asked about the current state of usability pedagogy in the field by analyzing syllabi, key texts, and course descriptions. Building from Chong's work, Turner and Rose examined how UX processes are being incorporated into the classroom from a number of perspectives (Rose and Turner 2023; Turner and Rose 2022).

Though rarely framed as programmatic research, integrative literature reviews are also examples of the description category and can be incredibly useful to programmatic inquiry. Integrative literature reviews are systematic analyses of practices and concepts in the field over time or they examine how the academic field's perspectives align with an industry perspective. They can offer recommendations regarding pedagogical and practical assumptions from the field's perspective such as content strategy (Andersen and Batova 2015; Clark 2016), data visualizations (Gubala and Melonçon 2022), and project management (Lauren and Schreiber 2018). Findings from these studies—such as Lauren and Schreiber's finding that major terms like *leadership*, *management*, and *project management* have not been properly delineated in the field—provide programs with data for incorporating and rethinking the placement of evolving practices in curricula. They also prompt the field to question its own assumptions about these common topics.

Examples from our work include Joanna's examination of current technical editing trends from both industry and instructor perspectives. The project includes revisiting the definition of technical editing and asking what its role is in the current content landscape (Schreiber 2024) and asking what editors and editing teachers are doing to support accessible and inclusive content practices in the workplace and in the classroom (Benjamin and Schreiber 2021;

Schreiber 2025). In two in-progress projects, Lisa and her collaborators are asking description questions related to the service course. In one project, her team asks, “What are the current assignments being assigned at the field-wide level?” and in a separate project, her team is trying to gain insights into the current size and scope of the service course in the US by gathering generalizable data about locations of the service course and the number of students served.

How Might Data and Information Gathered from Description Research Be Used Administratively?

Description research can be used to help TPC PAs work with other faculty in the program or department. Example of common issues that description questions can assist with are changing an approach to a course; integrating new units into a course or across courses; making a change to a key module; or updating learning outcomes in a course or program. Description questions generate preliminary or foundational information. Without knowing a baseline or having a ready answer to “what is” questions, it is difficult to craft more specific and complex questions. Descriptive data also helps identify connections among key concepts and practices, so it is helpful when determining whether a new course is needed or an existing course needs to be updated.

Description research questions can also generate data to use in professional development for new faculty or for training faculty on new pedagogical approaches. The data can also be used to show others in the department or other institutional stakeholders what is happening in a course or program and it may relate to other courses or specific institutional initiatives (e.g., how an internship course in TPC is working alongside internships in other departments or programs). The results of description questions will often raise other types of programmatic questions.

PRACTICE EVALUATION AND RESEARCH QUESTIONS

As the name implies, practice questions are designed to help us understand TPC programmatic policies, pedagogies, processes, and procedures better. Practice evaluation and research questions isolate a programmatic feature for systematic analysis or testing. These questions hope to gain insights into what may be working or not and why programs may be doing things a certain way. Practice questions can be specific to courses or to entire programs (degree programs or service course programs). Processes of programs are also included

in this category. Questions that ask how the work of the program is done. To be the most effective as part of an evaluative process, practice questions should include at least two perspectives and multiple data points to draw conclusions.

Examples of Practice Questions

Practice questions are different from description questions in that the questions or inquiries start from some existing data and then seek to gather more and different information. Many practice questions may be generated out of description questions. For example, Gonzales and Baca (2017) described the data collected from students and industry to support their practice questions related to moving their hybrid bilingual professional writing certificate fully online. Their practice questions were about what was working pedagogically about the courses that were already online and what needed to change to serve stakeholders, including the possibility of additional training. In another example, Baniya and her collaborators (2022) isolated service-learning practices to find out if they incorporated social justice and intercultural communication theories.

At the service course program level, practice questions have guided two studies for Lisa and her collaborative teams. They have examined how well an information design assignment was working pedagogically (Sonnenberg et al. 2024) and how well students were demonstrating their learning of rhetorical outcomes (Melonçon et al. 2024). Together, these studies provide important data across a large service course program that can be used locally to improve teaching and learning, but they also point to the importance of practice questions for research in the field.

Doan's (2019) study of instructor feedback illustrates how instructor comments can run contrary to course goals and outcomes. Building on this work, Lisa and her collaborators are currently investigating: What do students think about a new form of feedback? In the preliminary stages of gathering information, we have added a simple question before students upload their assignment, which asks about their preference for feedback strategies. This simple quantitative measure over several terms will then direct the next series of questions and the consideration of how to gather appropriate data. By collecting the data in a way and on a scale that will help other programs examine their own feedback practices, we are taking an evaluative rather than assessment approach to an institutional practice.

How Might Data and Information Gathered from Practice Research Questions Be Used Administratively?

For most TPC PAs, asking practice questions will likely feel the most familiar because it aligns with teacher-based research that the field has long done. Thus, data from practice questions help to answer institutional queries about course or programmatic efficacy. For example, data from a practice question can answer a query from engineering on why the TPC service course uses a specific assignment or pedagogical approach. Further, these types of questions can provide context to other institutional queries such as those about general education. Finally, practice questions offer data and evidence that are necessary for TPC PAs and faculty to have at hand to work through questions and discussions with disciplinary faculty or between faculty in a department. The data generated from practice questions can point to why decisions were being made (e.g., an approach to a course required by all majors) or whether an approach to teaching key concepts for students across courses is actually working.

IMPACT EVALUATION AND RESEARCH QUESTIONS

Impact evaluation and research questions directly address external forces. Impact questions are important to programmatic health and sustainability because they “are designed to advocate for ourselves as a vital field, as essential administrators, as critical researchers, and as praxis-committed teachers” (Melonçon et al. 2020, 109). Programmatic impact questions show the impact of the TPC program on student learning and on the mission and strategic goals at the department, college, and institutional levels. Impact questions can also address external industry and social forces.

Examples of Impact Questions

To build upon the description question that propelled Clegg and his collaborators (2021) to look at program student learning outcomes, one could imagine impact questions (e.g., “How do students understand student learning outcomes?”) rather than an assessment-based question (“Did students achieve the outcome?”). Flipping the emphasis to the student experience and understanding of the outcome offers TPC PAs and faculty an additional way to show the impact of their programs.

Stanton’s impact research question is about what skills technical communication graduates should have for their first job and whether programs are adequately preparing students for the job market (Stanton 2017). Her data

includes an analysis of job ads, programmatic requirements across institutions, and interviews with recruiters. Another common university initiative relates to career paths for students and practical skills. Impact questions related to such initiatives might be about connecting with local industry, developing an advisory board, adding courses, or adding emerging practices to existing courses. These types of questions are about impact on student learning in the context of institutional goals and they also connect to inquiry questions, which are discussed next.

In another example, Lisa and her collaborators (Burry et al. 2024) used an impact question to guide their inquiry into how well the TPC service course program has operationalized issues of diversity, equity, and inclusion in a series of assignments. A programmatic impact question was used to guide the process of integrating the new assignments into the curriculum and, more importantly, in determining how to gather data that could demonstrate how this assignment—and thus the program—were contributing to student learning and the institutional goal of integrating DEI all the way to the assignment level in courses. The impact questions helped to structure a process where we could gather student data on alignment with learning outcomes as well as instructor data on how they structured this topic in their classrooms.

How Might Data and Information Gathered from Impact Research Questions Be Used Administratively?

In the last several years, higher education has emphasized “impact” as one of its measures. For example, tenure-track faculty have likely faced the need to show the “impact” of the scholarship they produce, usually using citation counts as one measure. Programmatic impact questions are designed to gather essential data and evidence so that TPC PAs and faculty can show and can argue for their program’s impact by whatever metric the institution has asked about.

One of the most essential ways TPC programs already show impact is student learning outcomes. While this is an assessment use, the data generated can also be used to demonstrate other valuable impact markers such as alignment with workplace readiness or civic engagement initiatives. In addition, other institutional initiatives such as high-impact practices (e.g., internships and capstone courses), interdisciplinary problem-solving, and experiential learning can all be argued through evaluation data. For the service course programs, impact questions mean having evaluative data for on-campus stakeholders such as engineering or business programs. Being able to show impact buttresses the value of the program for students and the institution.

INQUIRY EVALUATION AND RESEARCH QUESTIONS

Inquiry evaluation and research questions ask the “how” and the “why” of a problem and go beyond the current state to ask how something *should* work instead of how something *does* work. These questions seek to scope out and address problems. Inquiry questions can also open up the opportunity for TPC PAs and faculty to construct research questions that gather data and information on “what if” types of questions. This category of question follows a more traditional research question trajectory because these questions advance the theory and practice of administration and teaching generally. Inquiry questions do not examine or test an existing practice or process, but they may seek to reimagine existing practices and approaches, incorporate new or updated practices and approaches, or develop new theories and concepts for teaching and administration.

Examples of Inquiry Questions

Inquiry questions might stem from advances in technology, changing workplace practices, emerging communication practices and affordances, and social changes. For example, Bay’s (2022) examination of a change in her TPC service course starts with two inquiry questions: (1) how to incorporate diversity, equity, and inclusion (DEI) into the service course, and (2) how to prepare students to create equitable workplaces. In another example, Kong and Ding (2024) recommended ways for recent graduates to navigate emerging industry practices in social media profiling during the job search and recruitment process whereas Seawright and Stanton (2022) use an alumni survey to scope the problem of salary negotiation for recent graduates. A final example is Chong and Roundtree’s (2021) study of recruitment concerns in TPC program, which goes beyond describing issues with recruitment to focus on issues of programmatic messaging and programmatic identity.

In some ways, our development of GRAM started as an inquiry-based question. As briefly described in that article, we both needed a way to contextualize programmatic work during consolidation (two universities into one for Joanna, and three universities into one for Lisa) and the subsequent programmatic and curricular work that needed to be done. We would have both benefited from additional data and evidence during the process of consolidation, which is another reason we want to advocate for this taxonomic approach to research-based programmatic questions. This essay is also an example of an inquiry question.

How Might Data and Information Gathered from Inquiry Research Questions Be Used Administratively?

Inquiry questions are the category that is most internally focused, which is meant to be internal to the TPC program itself and internal to the field of TPC. Inquiry questions are about applying emerging workplace, technology, industry, and field trends internally. Inquiry questions connect to larger social and cultural concerns and help to ensure the program is thinking beyond the context of the institution and the field, which is highlighted in the in-process example above.

The taxonomy of research questions emphasizes an iterative, ongoing program-evaluation approach that generates data and evidence so that TPC PAs can improve their programs while also having data to argue for the value of their programs to a diverse set of stakeholders. The taxonomy of questions provided and examples from current research point to the need for enhanced systems and approaches to conduct this type of inquiry and research effectively.

Step 3: Localize Programmatic Evaluation Data

Outside of mandated institutional assessment plans, we encourage TPC PAs and faculty to create an evaluation plan where data is consistently collected and reviewed with an eye toward continuous improvement. Obtaining data is the first step of actualizing the continuous-improvement process of GRAM through *gather*. This step of the continuous-improvement model refers to “the process of gathering together existing data about the program” (Schreiber and Melonçon 2019, 262). Understanding where to obtain data institutionally is sometimes like trying to open an opaque box or searching for a needle in a haystack. In the following, we point to some common institutional locations in which to get localized data that could be beneficial to your work in program evaluation and research.

For full degree programs, data that we have found useful to gather each term are assignment descriptions, student deliverables to key assignments, and the corresponding faculty feedback. This type of data provides important insights into how well the curricula and instructional approaches are getting students to the learning outcomes. Examining key assignments across required courses is also helpful to see how well key concepts (tied to learning outcomes) are being addressed in each course. Considering ways to get systematic feedback from students about their perceptions of the courses and the program is also an important and often difficult step. One way to do this is through reflective

assignments that prompt students to consider how well they believe they have achieved the goals of the course and then reviewing those reflections across a class or a program. Lisa encourages faculty to do midterm “evaluations” where students are asked what is working (or not) in the course. These data can be combined over several years and offer invaluable insights into classroom practices and their impact on student learning.

Programmatic data gathered needs to be robust enough to shed light on how well the program is working for students (and faculty). This means that the data must be gathered regularly (yearly at the minimum) and then critically and reflectively examined and discussed. When programs are moving to considerations of major changes to curricula, then other data should come from alumni, local employers who have hired graduates, advisory boards (if the program has one), and institutional data on placement and satisfaction. For example, when redesigning a major at a previous institution, Joanna developed two surveys for alumni. One survey focused on the experiences of alumni with the current state of the program and targeted those who had graduated only in the previous five years. It was also important to gather information about industry trends and career trends over time, so a second alumni survey targeted all alumni of the program over multiple decades. The results of both surveys were presented to faculty and to an industry advisory board for the program.

In addition to the data the TPC PA may systematically gather about the program from students (current students and alumni) and faculty, institutional data adds layers to understanding trends in courses and across the program. All institutions have at least one office that gathers institutional data. These offices are often called the office of decision support, institutional research services, or institutional assessment. The types of data that may be useful are number of majors, minors, or students served annually in the service course; trends over time with enrollments patterns; student profiles (e.g., majors, etc.); percent increase in enrollments; course caps over time; percent of transfer students; patterns of student enrollment in major courses; under-enrolled courses; enrollment trends across campus and mode; trends in interdepartmental programs; and scheduling trends.

It is also vital to know the full profile of those who teach in a program, particularly if the program relies on contingent faculty (as most service courses do) or contingent faculty for key courses in a degree program (which is also a trend in the US). Knowing the backgrounds and experiences of faculty can help the TPC PA understand what is needed to support faculty and thereby support student learning.

If the service course is required as a general education requirement or required for certain majors, we need to get a sense of enrollment trends over time and to ensure administrators know where the students are coming from, that is, what majors and colleges. Building relationships with people in key colleges, such as engineering or business, is also a good idea. These relationships can provide an important piece of data at the appropriate time for evaluating changes to learning outcomes or assignments and for getting feedback that the course may be working well as is.

It is a worthwhile use of time for us to find a key person in these different locations as a resource that can assist when the TPC program may need different types of data or information. Other people who can be beneficial for program evaluation are associate deans in the college, who are usually a good starting place to ask about data or where to obtain it. Libraries can also be a source of different types of data specific to supporting research and teaching, and centers for teaching and learning can provide recent research information on teaching and learning strategies associated with scholarship of teaching and learning. Having contacts in these locations can help with gathering together resources or information that can directly impact a TPC program, such as by offering a workshop for faculty on new trends (e.g., AI in writing instruction and approaches to incorporating that in the classroom, or facilitating difficult conversations around bias and race).

Data cannot be gathered without context, however, which circles back to not only the taxonomy of questions that guide the data gathering but also the necessity to read the gathered data within the larger contexts of the institution. *Read* is “the process of reading landscapes to obtain additional information and to better understand the multiple perspectives that programs must consider for sustainability” (Schreiber and Melonçon 2019, 262). What we refer to as reading is understanding the different needs of the diverse stakeholders that TPC PAs and faculty often have to talk to. Framing data for institutional assessment is quite different than framing data for departmental colleagues, and both are quite different than arguing for increased faculty lines in tight budget environments. While on the first read this statement is obvious, the day-to-day work realities often mean we lose sight of our own goals and priorities for our courses and programs. In both of our experiences with consolidation, we had to be prepared to discuss the same aspect of our programs for different audiences. For example, when we talked to faculty about the continued need for a capstone course, we focused on what this high-impact practice does for student learning, but when we were talking to local industry representatives,

the capstone course was framed in terms of skills and knowledges and how those may transfer to workplace contexts.

We have highlighted the *gather* and *read* steps because they function across contexts. The process of gathering information and then understanding the different stakeholders is roughly the same across institutions. *Analyze* and *make* are highly contextual and based on the evaluative goals of the program. Using GRAM alongside the taxonomy of evaluation and research questions can help programs remain focused on using continuous improvement to enhance student learning.

Step 4: Sustain Programmatic Evaluation Data in Your Research Agenda

In this section, we offer a series of implications for the field, to encourage TPC PAs and faculty to develop their own programmatic evaluation plans with related evaluation and research questions.

OFFERING AN APPROACH TO GATHER NEEDED DATA AND EVIDENCE

A taxonomy of programmatic research questions prepares TPC PAs and faculty to have ready at hand the information they need to make decisions at the course and program level and to advocate for their programs institutionally at the department, college, and provost level. This kind of data—brought about by a conscious approach to program evaluation and continuous improvement—enhances the positionality and strength of programs. It provides context to assessment data and can better serve a range of programmatic work: recruitment, retention, advising, internships, industry partnerships, curricular design, training, and hiring. Making clear, data-driven arguments for all programmatic activity and being able to connect replicable, multi-institutional data with institutional metrics like student credit hours (SCH) becomes incredibly important as resources tighten and TPC PAs (and all faculty) are asked to make arguments for the value of their courses and programs. We urge TPC PAs and faculty to iteratively approach framing evaluation and research questions alongside the steps of continuous improvement models or evaluation approaches. We have offered GRAM as the model to work alongside the taxonomy of questions, but other approaches could work equally as well. The driving consideration, however, is that the approach has to be systematic and data-driven.

COUNTERING LORE

In much the same way that some thirty-plus years ago North (1987) lamented that too much lore was driving decisions in the field of composition studies, TPC is currently struggling with perceptions about what the field has actually published about programs and courses. Evaluation and research questions used in tandem with GRAM or other approaches can help TPC combat programmatic lore. Too often in hallway or conference conversations, people are under the impression that scholarship exists when in fact it does not.

As in other areas of the field, such practices perpetuate lore, which can negatively affect peer review and editing practices as well as programmatic practices. Instead, the field “should consider encouraging early-career researchers to challenge taken-for-granted assumptions and to create stronger and more sustainable research a greater priority” (Melonçon et al. 2020, 109). Both of us have experienced institutional consolidation, which involves the sudden and inelegant combining of programs and departments. Consolidation revealed the limitations of assessment because assessment data becomes worthless when the program no longer exists. But it also revealed that what we think we know about best practices in the fields needs more attention because what will count as data at other administrative levels beyond the department is often different than what faculty may have on hand. The taxonomy we propose here encourages more evaluative research that engages with field-wide concerns and field-wide needs for research that can be used locally to make improvements and that would be recognized by those outside of the field. TPC is constantly absorbing new knowledges and practices, making it difficult to define the field’s scope (Melonçon and Schreiber 2022). As a field, TPC PAs and faculty exacerbate that problem if we don’t continue to build reliable, field-wide data on common programmatic features and practices.

ENSURING SUSTAINABILITY

Johnson (2004) advocated for sustainability in program development because sustainability was an apt metaphor for program development as it “suggests growth/life, but it also invokes the inevitable problem of limits” (102). Johnson’s balance between growth and limits brings a cautious vitality to a programmatic perspective. Scholars have picked up the idea of sustainability (e.g., Johnson et al. 2018; Melonçon and St.Amant 2019; Schreiber and Melonçon 2022), and this scholarship shares an emphasis on considerations of the field’s present and future through the lens of sustainability. Returning to

Johnson's emphasis on sustainability and program development, we would ask: How can TPC's programmatic perspective (the administrative and advocacy work) and curricular identity (the work of course and program design and development) be sustained? We argue in this essay that a key part of the answer to this question is through data and research-based evidence. Thus, the taxonomy of questions offered contribute to the need for "reflection and maintenance," which are two steps toward the sustainable practices promoted by Johnson (2004). Not losing site of sustainability as a programmatic goal is key to the quality and value of TPC programs to students and to other stakeholders inside and outside of higher education.

Conclusion

One of the reasons that we both have been thinking about programmatic evaluation and research is one unique to us and our local situations, but then, not so unique to us at all. While we have known each other for quite some time, it wasn't until Joanna's query to professional email lists (noted at the beginning of this essay) that we began to work together. What we have discovered during our institutions' respective consolidations is that programmatic data and how it can serve dual purposes—for local evaluation and for contributing to the field's research knowledge—isn't well understood.

It is worth noting that we have also both served in a variety of roles. For example, when Joanna sent out this query as a member of a department strategic planning committee, she did not have an official administrative role. Along the way, she has served in a program coordinator role, which has evolved with department changes. Her current programmatic work focuses on policy design, which aligns with her current service roles. While we have TPC PAs in mind as the primary audience for this essay, we feel it is equally important that all faculty understand the importance of programmatic research and the limitations of assessment data in program evaluation. Even outside an official coordinator role, Joanna also finds it incredibly helpful during department debates to understand the limitations of assessment data and the need for robust programmatic data to speak to university metrics. She recently advocated for the use of community-based practices to build relationships with alumni rather than treat them as a group from which information is simply extracted intermittently.

Meanwhile, Lisa's career arc has progressed, as many folks' in TPC do, with serving on a program curricular committee and then taking on a large project

within that committee. In Lisa's case, she spearheaded curricular updates that coincided with transitioning curricula from quarters to semesters and simultaneously updating the name of a degree that required state approval. When she moved institutions, she immediately became an administrator of an undergraduate degree program and, surprisingly, also an (unrecognized by departmental policy) administrator of a large service course program. In this work, she leaned into using data to guide decisions, with an eye toward aligning the data with the values of the program and the department. This stance has been articulated in a programmatic inclusion audit (<https://tek-ritr.com/wp-content/uploads/2021/01/Program-Inclusion-Audit.pdf>) that is used as another tool to assist with program evaluation and research.

We end with our own stories, of sorts, to illustrate how we have both lived what we are arguing for in this essay. We provide a taxonomy of programmatic evaluation and research questions for TPC PAs and faculty. This taxonomy and the resultant data and information underscores the necessity of having data and evidence ready at hand to advocate for students and for TPC courses and programs. Through examples of the evaluation and research that aligns with the taxonomy and an explanation of how the data generated from each category of questions can be used, we hope that TPC PAs can expand their own views of evaluative programmatic research and the role that research can play in sustaining TPC programs. Because no matter the size of the program, the institutional location, the number of faculty, the expertise of faculty, or any number of other variables that define programs locally, we all need to understand how to gather data and turn that data into evidence to evaluate and to advocate for our programs. Creating research and evaluation questions is a difficult task, and one that cannot be done in isolation from larger institutional issues. This is one of the reasons we have discussed the taxonomy of questions in tandem with the continuous-improvement model of GRAM. It is difficult to create questions without performing some of the work that GRAM encourages, and it is difficult to perform GRAM (or other models) without clear questions.

We hope this essay helps TPC PAs and faculty better understand how to systematically approach the vital work of program evaluation and then use the results of that evaluation to start and advance a programmatic research agenda. Programmatic work can be challenging because of the need to manage institutional politics, sustain programmatic strengths, address programmatic areas of weakness, and improve student learning. But with strong data and evidence, courses and programs have a better chance of preparing students to

grow intellectually and learn valuable skills to use in the workplace and in their civic and everyday lives.

References

- Albers, Michael J., and Suzan Flanagan. 2019. "Editing in the Modern Classroom: An Overview." In *Editing in the Modern Classroom*, edited by S. Flanagan and M. J. Albers. Routledge.
- Andersen, Rebekka, and Tatiana Batova. 2015. "The Current State of Component Content Management: An Integrative Literature Review." *IEEE Transactions on Professional Communication* 58 (3): 247–270. <https://doi.org/10.1109/TPC.2016.2516619>.
- Baniya, Sweta, Jessica Edwards, Jennifer Sano-Franchini, and Josephine Walwema. 2022. "Revisiting SL in TPC Through Social Justice and Intercultural Frameworks: Findings from Survey Research." *IEEE Transactions on Professional Communication* 65 (3): 353–369. <https://doi.org/10.1109/TPC.2022.3177083>.
- Bay, Jennifer. 2022. "Fostering Diversity, Equity, and Inclusion in the Technical and Professional Communication Service Course." *IEEE Transactions on Professional Communication* 65 (1): 213–225. <https://doi.org/10.1109/TPC.2021.3137708>.
- Benjamin, Sedona, and Joanna Schreiber. 2021. "Updating Technical Editing Models for Accessibility and Advocacy." In *The 39th ACM International Conference on Design of Communication*, 26–30. Association of Computing Machinery.
- Boettger, Ryan K. 2010. "Rubric Use in Technical Communication: Exploring Process of Creating Valid and Reliable Assessment Tools." *IEEE Transactions on Professional Communication* 54 (1): 4–17. <https://doi.org/10.1109/TPC.2009.2038733>.
- Brady, M. Anne, and Joanna Schreiber. 2013. "Static to Dynamic: Professional Identity as Inventory, Invention, and Performance in Classrooms and Workplaces." *Technical Communication Quarterly* 22 (4): 343–362. <https://doi.org/10.1080/10572252.2013.794089>.
- Burry, Justiss, Carolyn Gubala, Jessica Griffith, Tanya Zarlengo, and Lisa Melonçon. 2024. "Creating Assignments That Put Programmatic Inclusion and Diversity Work into Practice." In *Inclusive STEM: Transforming Disciplinary Writing Instruction for a Socially Just Future*, edited by H. Falconer and L. McClary, 123–145. WAC Clearinghouse; University Press of Colorado. <https://doi.org/10.37514/ATD-B.2024.2364.2.08>.
- Carter, Michael, Chris M. Anson, and Carolyn R. Miller. 2003. "Assessing Technical Writing in Institutional Contexts: Using Outcomes-Based Assessment for Programmatic Thinking." *Technical Communication Quarterly* 12 (1): 101–114. https://doi.org/10.1207/s15427625tcq1201_7.
- Chong, Felicia. 2016. "The Pedagogy of Usability: An Analysis of Technical Communication Textbooks, Anthologies, and Course Syllabi and Descriptions." *Technical Communication Quarterly* 25 (1): 12–28. <https://doi.org/10.1080/10572252.2016.1113073>.

- Chong, Felicia, and Aimee K. Roundtree. 2021. "Student Recruitment in Technical and Professional Communication Programs." *Technical Communication Quarterly* 30 (1): 1–18. <https://doi.org/10.1080/10572252.2020.1774660>.
- Clark, Dave. 2016. "Content Strategy: An Integrative Literature Review." *IEEE Transactions on Professional Communication* 59 (1): 7–23. <https://doi.org/10.1109/tpc.2016.2537080>.
- Clegg, Geoffrey, Jessica Lauer, Johanna Phelps, and Lisa Melonçon. 2021. "Programmatic Outcomes in Undergraduate Technical and Professional Communication Programs." *Technical Communication Quarterly* 30 (1): 19–33. <https://doi.org/10.1080/10572252.2020.1774662>.
- Coppola, Nancy W., Norbert Elliot, Faye Newsham, and Andrew Klobucar. 2016. "Programmatic Research in Technical Communication: An Interpretive Framework for Writing Program Assessment." *Programmatic Perspectives* 8 (2): 5–45.
- Cunningham, Don, and Jill Stewart. 2011. "Perceptions and Practices: A Survey of Professional Engineers and Architects." In *Proceedings of IEEE International Professional Communication Conference*, 1–14. IEEE. <https://doi.org/10.1109/IPCC.2011.6087194>.
- Doan, Sara. 2019. "Contradictory Comments: Feedback in Professional Communication Service Courses." *IEEE Transactions on Professional Communication* 62 (2): 115–129. <https://doi.org/10.1109/TPC.2019.2900899>.
- Francis, Anne M. 2018. "A Survey of Assignment Requirements in Service Technical and Professional Communication Classes." *Programmatic Perspectives* 10 (1): 44–76.
- Gonzales, Laura, and Isabel Baca. 2017. "Developing Culturally and Linguistically Diverse Online Technical Communication Programs: Emerging Frameworks at University of Texas at El Paso." *Technical Communication Quarterly* 26 (3): 273–286. <https://doi.org/10.1080/10572252.2017.1339488>.
- Gubala, Carolyn, and Lisa Melonçon. 2022. "Data Visualizations: An Integrative Literature Review of Empirical Studies Across Disciplines." In *Proceedings of IEEE International Professional Communication Conference*, 112–119. IEEE. <https://doi.org/10.1109/ProComm53155.2022.00024>.
- Henschel, Sally, and Lisa Melonçon. 2014. "Of Horsemen and Layered Literacies: Assessment Instruments for Aligning Technical and Professional Communication Undergraduate Curricula with Professional Expectations." *Programmatic Perspectives* 6 (1): 3–26.
- Hutchings, Pat. 2000. "Approaching the Scholarship of Teaching and Learning." In *Opening Lines: Approaches to the Scholarship of Teaching and Learning*, edited by Pat Hutchings, 1–10. Carnegie Publications.
- Johnson, Meredith, W. Michelle Simmons, and Patricia Sullivan. 2018. *Lean Technical Communication: Toward Sustainable Program Innovation*. Routledge.
- Johnson, Robert. 2004. "(Deeply) Sustainable Programs, Sustainable Cultures, Sustainable Selves: Essaying Growth in Technical Communication." In *Power and Legitimacy in Technical Communication*, vol. 2 of *Strategies for Professional Status*, edited by T. Kynell-Hunt and G. J. Savage, 101–119. Baywood.

- Kimball, Miles. 2013. "Visual Design Principles: An Empirical Study of Design Lore." *Journal of Technical Writing and Communication* 43 (1): 3–41. <https://doi.org/10.2190/TW.43.1.b>.
- Kong, Yeking, and Huiling Ding. 2024. "Tools, Potential, and Pitfalls of Social Media Screening: Social Profiling in the Era of AI-Assisted Recruiting." *Journal of Business and Technical Communication* 38 (1): 33–65. <https://doi.org/10.1177/10506519231199478>.
- Lauren, Ben, and Joanna Schreiber. 2018. "An Integrative Literature Review of Project Management in Technical and Professional Communication." *Technical Communication* 65 (1): 85–106.
- Medina, Cruz, and Kenneth Walker. 2018. "Validating the Consequences of a Social Justice Pedagogy: Explicit Values in Course-Based Grading Contracts." In *Key Theoretical Frameworks: Teaching Technical Communication in the Twenty-First Century*, edited by A. Haas and M. Eble, 46–67. <https://doi.org/10.7330/9781607327585.c002>.
- Melonçon, Lisa. 2025. *Programmatic Revelations and Imaginations: A Curricular History of Technical and Professional Communication*. WAC Clearinghouse; University Press of Colorado.
- Melonçon, Lisa, Jessica Griffith, Carolyn Gubala, and Tanya Zarlengo. 2024. "Back to the Basics: Uncovering the Rhetoric Student Learning Outcome." *Business and Professional Communication Quarterly* 87 (1): 152–176. <https://doi.org/10.1177/23294906231213631>.
- Melonçon, Lisa, Jeremy Rosselot-Merritt, and Kirk St.Amant. 2020. "A Field-Wide Metasynthesis of Pedagogical Research in Technical and Professional Communication." *Journal of Technical Writing and Communication* 50 (1): 91–118. <https://doi.org/10.1177/0047281619853258>.
- Melonçon, Lisa, and Joanna Schreiber. 2018. "Advocating for Sustainability: A Report on and Critique of the Undergraduate Capstone Course." *Technical Communication Quarterly* 27 (4): 322–335. <https://doi.org/10.1080/10572252.2018.1515407>.
- Melonçon, Lisa, and Joanna Schreiber. 2022. "Introduction: Promoting a Sustainable Collective Identity for Technical and Professional Communication." In *Assembling Critical Components: A Framework for Sustaining Technical and Professional Communication*, edited by J. Schreiber and L. Melonçon, 3–16. WAC Clearinghouse; University Press of Colorado. <https://doi.org/10.37514/TPC-B.2022.1381.1.3>.
- Melonçon, Lisa, and Kirk St.Amant. 2019. "Empirical Research in Technical and Professional Communication: A Five-Year Examination of Research Methods and a Call for Research Sustainability." *Journal of Technical Writing and Communication* 49 (2): 128–155. <https://doi.org/10.1177/0047281618764611>.
- North, Steven. 1987. *The Making of Knowledge in Composition*. Boynton/Cook.
- Pearsall, Thomas E. 1974. "Introductory Summary." Conference of Directors of Technical Communication Programs (later to be CPTSC), University of Minnesota, St. Paul, MN.
- Rose, Emma J., and Heather N. Turner. 2023. "Trust the Process: A Scalable Model for UX Pedagogy." *Journal of Technical Writing and Communication* 55 (1): 3–30. <https://doi.org/10.1177/00472816231210234>.

- Schreiber, Joanna. 2024. "What's Technical About Technical Editing?" *IEEE Transactions on Professional Communication* 67 (4): 437–454. <https://doi.org/10.1109/TPC.2024.3463349>.
- Schreiber, Joanna. 2025. "Inclusive and Accessible Technical Editing in the Workplace and in the Classroom." *Journal of Business and Technical Communication* 39 (4): 403–431.
- Schreiber, Joanna, and Lisa Melonçon. 2019. "Creating a Continuous Improvement Model for Sustaining Programs in Technical and Professional Communication." *Journal of Technical Writing and Communication* 49 (3): 252–278. <https://doi.org/10.1177/00472816187599>.
- Schreiber, Joanna, and Lisa Melonçon, eds. 2022. *Assembling Critical Components: A Framework for Sustaining Technical and Professional Communication*. WAC Clearinghouse; University Press of Colorado.
- Seawright, Leslie, and Rhonda Stanton. 2023. "You Accepted What? The Impact of Location, Education, and Negotiation on Technical Communication Graduates' Salaries." *Journal of Technical Writing and Communication* 54 (3): 304–323. <https://doi.org/10.1177/00472816231188649>.
- Sonnenberg, Michelle, Carolyn Gubala, Justiss Burry, Jessica Griffith, Tanya Zarlengo, and Lisa Melonçon. 2024. "Implementing a Continuous Improvement Model for Assignment Evaluation at the Technical and Professional Communication Program Level." *Journal of Technical Writing and Communication* 54 (1): 24–45. <https://doi.org/10.1177/00472816221124605>.
- St.Amant, Kirk, and Cindy Nahrwold. 2007. "Acknowledging Complexity: Rethinking Program Review and Assessment in Technical Communication." *Technical Communication* 54 (4): 409–411.
- Stanton, Rhonda. 2017. "Do Technical/Professional Writing (TPC) Programs Offer What Students Need for Their Start in the Workplace? A Comparison of Requirements in Program Curricula and Job Ads in Industry." *Technical Communication*, no. 64, 226–236.
- Turner, Heather N., and Emma J. Rose. 2022. "What Do We Teach When We Say We Teach UX? A Study of the Practices of TPC Instructors." *Programmatic Perspectives* 13 (1): 61–102. <https://programmaticperspectives.cptsc.org/index.php/jpp/article/view/11>.
- Yu, Han. 2012. "Intercultural Competence in Technical Communication: A Working Definition and Review of Assessment Methods." *Technical Communication Quarterly* 21 (2): 168–186. <https://doi.org/10.1080/10572252.2012.643443>.