

# Critical Postscript on the Future of the Service Course in Technical and Professional Communication

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The guest editors asked if I could respond to the work presented in this special issue in a way that was critical but useful. To make the critical points useful meant finding a way to point technical and professional communication toward different ways to think about programmatic scholarship and programmatic work. In other words, following the premise of the technical communicator as problem solver, I attempt to take the critique of the essays and the service courses as a direct call to action to improve our research and pedagogical practices related to how we think about and talk about programs in the field.

This special issue encourages technical and professional communication to pause and to critically reflect on this course, which is much needed because the service course is in many ways our beginning. Thus, it ought to be the touchstone from which we improve as a field—particularly in our programmatic research and development. In this way, these articles, and this postscript, are the first steps in an over-all dialectic to understand the service course. In thinking about the technical and professional communication service course, I have for years echoed Michael Knievel (2007) when he said it is “a crucial

curricular site, significant to the long-term health, credibility, and viability of the field” (p. 89). While it has not been the field’s identity (like the first-year writing course has remained the identity of composition), the service course has nonetheless always remained an important facet of our programmatic identity, because of the ubiquity of the course at locations with technical and professional communication programs, as well as at locations without full-fledged degree programs. With the number of students it serves, the course becomes a marker of the expertise of the field by illustrating in practical and material ways the importance of technical and professional communication’s knowledge in producing complex information for a wide variety of audiences. In fact, as Kirk St. Amant’s entry points out, it is a course that both complicates and buttresses the identity of technical and professional communication as a field. It is a key location for highlighting, in a microcosm, what the field *is*, what the field *does*, and in theory, what the field *values*.

Unlike composition, technical and professional communication has, from almost the very beginning of its existence in higher education, had the dual role of building and sustaining academic degree programs, while also maintaining a service function. This dual role has allowed technical and professional communication to professionalize its domains of knowledge through its disciplinarily or field expertise (i.e., degree programs) and connect that knowledge to the large number of service courses that in many ways help to sustain our programs. Because unlike Patricia Sullivan and James Porter’s (1993) contention that technical and professional communication has a service identity (pp. 405–406), my research into programs<sup>1</sup> has shown that, if it was ever the case, it is no longer the standard paradigm.

With that said, the dual nature of technical and professional communication’s academic identity is one to carry proudly. While it seems that many may disparage using the term “service” (as did Sullivan and Porter, 1993, or Connors, 1982), I find great value in the term in much

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<sup>1</sup> See endnote, page 225.

the same way that James Dubinsky (1998) did. Dubinsky argued for making visible the discourses around the service course and “rediscovering the positive meaning of service in the social contexts of literacy” (p. 40). This move opens a space to have meaningful conversations about the work we do and the value we bring to our institutions and to our programs. For example, in Brian McNely and Randall Monty’s (2017) workshop on the service course, they asked participants to consider reciprocal relationships of curricula and identity, exploring ways “in which courses that have traditionally been seen as providing service to the university may be rethought, reconfigured, and repositioned” (n.p.). Following in some ways the model presented by St.Amant, technical and professional communication program administrators (PAs) and faculty can choose what service it is we actually offer in the form of courses for other departments and what those courses should look like in terms of content.

For the last 10 years I have examined, in detail, programs in technical and professional communication. What I hope my research has done is to show the importance of shifting from localized examples and narratives (cf., Bridgeford, et al., 2014; Tillery & Nagelhout, 2015) to a field-wide view based on data. While local examples are useful and continue a practice that has a long history in the field, we do ourselves a disservice if we fail to consider the local alongside the global. Part of my argument for broadening the way we do programmatic research is that as the field has grown 172% over the last ten years (Meloncon, 2012), so it has become necessary to uncover trends and insights into pedagogical and programmatic practices through methodological meta-analysis that helps us ask better questions about the work that we do.

In other words, technical and professional communication needs to perform an archaeological dig, of sorts, to understand the field’s “knowledge infrastructures.” This term, borrowed from Christine L. Borgman (2015), resonates because it defines the numerous parts that make up the knowledge making, or research, enterprise. Knowledge infrastructures include people, practices, technologies, institutions, and relationships. Thinking of the service course as one part of a

programmatic knowledge infrastructure provides technical and professional communication an important way to study the structure of particular historical narratives, and in this case, we are trying to understand the service course and the role it plays within our programs' institutions.

I focus my critical view of knowledge infrastructures on three areas:

- considering pedagogical approaches
- improving research
- understanding the impact of labor within the field

While initially viewed through the lens of the service course, these three areas bring into sharp focus important issues for the field that extend well beyond a single course. As part of our knowledge infrastructure, these three areas are critical to the future of the field.

### **Considering Pedagogical Approaches**

The pieces in this special issue raise important questions about pedagogy, which I use here to mean the theoretical and practical approach to teaching practices: that is, what we do in the service-course classroom.

Something not at all discussed at length is the fact that there are different kinds of survey courses. The most common types are technical writing, business writing, and the even more ambiguous, professional writing. The most common "specialized" service course is a version of writing for the health sciences. Such distinctions are crucial to recognize because they encourage thinking through our pedagogical practices and how we address the service course, a bigger question—and one in which the field has turned something of a blind eye—is truly what is the difference between the service courses? Should there be differences, and if so, what should they be? For the majority of schools the answer is "No, there is no difference." Because, as Lora Arduser points out in this issue, there are few, if any content differences between the differently named service courses at her location, and based on my own research this is true at the majority of institutions.

However, as Ann Marie Francis' entry in this issue shows, engineers encounter certain types of documents on the job; this means there is an ongoing need to expose students to the types of writing they will be doing in their specialized fields after graduation. This

point also connects to Jennifer Bay, Richard Johnson-Sheehan, and Devon Cook, (in this issue) who make the bold proclamation: “Technical communication programs must evolve to meet these new challenges.... Meanwhile, we cannot afford to continue teaching traditional forms of technical communication to our students. We need to teach them to think like entrepreneurs, in line with how they are now being taught in their engineering programs and other technical courses.” An interesting point not addressed by Bay et al. is that in the world of engineering work (as someone who still works in this professional realm), “traditional forms” are still being used so there is an ethical stance in creating programmatic space that isn’t an either/or. However, Arduser, Francis, and Bay et al. underscore the need to think through the different kinds of service courses and what those differences mean pedagogically.

As Nancy Blyler (1993) argued, separating the teaching of workplace writing into different courses such as business, technical, for [fill in major or specialized writing here] is not the curricular solution because students need exposure to different kinds of writing within the same course. Blyler made the distinction between the course content by focusing on the memo, which she classified as an informative text, and the report, which she called persuasive. As the field began to theorize and think through in deliberate and sophisticated ways how curricular choices are made, the distinctions between the two courses were often done based on binaries or rationales that we, as instructors and administrators, should find somewhat specious in 2018. However, what this historical work tells us now are some of the rationales for the creation of different service courses. Beyond institutional pressures to meet the needs of different students and departments (and those same departments not fully understanding the work technical and professional communication does), the field was trying to create epistemic and theoretical approaches to the different service courses.

Even though “entrenched interests” (Blyler, 1993, p. 237) often help to keep these courses separate, faculty and technical and professional communication PAs need to push back against these moves with cogent and forceful arguments about the disciplinary knowledge we bring to the course. Recent work by Jennifer Veltsos and Ashley Patriarca (2017) found stakeholders in other departments express similar attitudes and desires of the content they want covered in the technical writing service course and the business writing service

course. For example, their disciplinary faculty partners, regardless of departmental home, wanted the service course to cover:

- Composing messages: Grammar & sentence structure, editing your own and others' documents
- Visual communication: Creating tables and graphs, document design and layout, visual aids
- Interpersonal skills: Participating in meetings, providing constructive feedback, writing collaboratively
- Numerical literacy: Analyzing and communicating statistical or financial information

The learning outcomes of the service course tell us that they align with the disciplinary faculty partners of Veltsos and Patriarca (2017), as well as the topical approach of most textbooks. The numerical literacy and specificity of visual communication is not as strong in the service course learning outcomes, but an emphasis on document design (connected to generic form) and visual aids can be found in the majority of service courses (Meloncon, 2018, raw data). In addition, service-course learning outcomes also emphasize some proficiency with technology or what can be referred to as a technological literacy, as well as research. These learning outcomes are often achieved through common assignments such as reports, proposals, letters, presentations, and resumes (Meloncon, 2018, raw data). But when one goes to put disciplinary approaches, outcomes, and assignments together into the design of the service course, the question becomes how to frame or approach teaching the course.

### **Current Genre-Based Approach**

At the present time, the most prevalent approach to teaching the service course is one that is genre-based and where the course is structured around moving students through typical genres they would write in the workplace. One of the reasons the field has settled into a genre-pedagogical approach is that the most used genres in organizations are flexible, dynamic, and malleable to different industries and end results. This flexibility explains why it becomes vital to teach the rhetorical contexts and social dynamics in which writing takes place rather than specific adherence to a generic form. While outcomes for the service course highlight the rhetorical nature of writing (i.e., paying attention to purpose and audience), in practice, many courses may seemingly be devoid of context and settle into teaching generic forms.

Teaching forms is much easier than teaching the rhetorical practices of the forms, and considering the diversity of the individuals who teach in our programs, it is not surprising that generic forms is the primary pedagogical mode. As an experienced teacher, I was surprised to read Heidi Lawrence et al.'s (2017) recent piece on proposals—an entry that claims the field needs to teach the rhetorical exigencies behind the proposal rather than the proposal form. But as I considered this piece further, it seems the reviewers likely acknowledged the importance of this idea, and for many instructors in our programs, this approach is a novel concept.

Incorporating an emphasis on rhetorical exigencies and messiness of the workplace is a difficult proposition for an experienced instructor, but such a method is even more so for an inexperienced one or one who does not have a technical and professional communication background. Thus, many programs and instructors tend to lean on textbooks to help. However, Joanna Wolfe's (2009) analysis of textbooks and engineering curricula and practice is important for the discussion at hand. Any review of the current textbooks being used within the field will highlight that they are structured around teaching genres: proposals, reports, letters, emails, memos to name but a few. Wolfe concludes that students would "benefit from more exposure to the genres and types of rhetorical decisions that are most common in their disciplines" and there is a "lack of attention to the forms of argument and evidence that our science and engineering students most need to master to be successful rhetoricians and writers in their fields" (p. 353). Wolfe's analysis demonstrates that while genres are important they are only useful if that genre knowledge is matched to more advanced rhetorical training. This particular point cannot be emphasized enough, because if textbooks are failing to include material that can help new and inexperienced teachers provide the depth and sophistication of teaching genres as embedded within complex and messy rhetorical situations, then teaching genres will devolve into teaching nothing but the conventions of the forms.

This seeming contradiction raises the question of whether genres are really the best way to teach the service course, or if they are simply an easy way to organize a course? Have we become complacent in teaching the service course?

### **Alternatives to Genre-Based Approach**

Some have considered importing the “writing about writing” model from composition (Read & Michaud, 2015). The main tenet of writing about writing (WaW) is to teach the field’s disciplinary knowledge (Downs & Wardle, 2007). In other words, one of the impulses of WaW is to, in part, train students in the same traditions of the field of composition. As such, WaW focuses on translating writing into an academic framework. It, for example, diverts attention away from learning the rhetorical exigencies of workplace settings to those of an academic orientation. Such a focus on academic writing, however, is not the aim of the service course.

The service course is not designed to try and reproduce a version of the instructors or academia. Instead the goals of the service course are about real-audience needs, problem solving, and learning to communicate information that has real cultural, legal and ethical obligations. Diminishing those goals to focus exclusively on the writing in the field—particularly if that writing is not practically focused—is a major disservice to students. Writing about writing is actually no better a move for technical and professional communication than writing about literature is for first-year writing.

Technical and professional communication is dedicated to ensuring that students match the field’s expertise and knowledge to their own content knowledge. For technical and professional communication, its aim, particularly in the service course, is to take the student’s content knowledge and move that outside of academic frameworks and into disciplinary and workplace practices. Thus, WaW and the technical and professional communication service course have completely different aims and goals and to attempt to import WaW into technical and professional communication is actually counterproductive to the work of technical and professional communication.

To expand pedagogical practices in the service course, technical and professional communication would be much better served to sever ties with composition and look toward more innovative and better-researched practices that are being experimented with in engineering or even in business communication. WaW fails to adequately engage the body of knowledge in technical and professional communication value. Repurposing a practice from composition misses, ironically, the whole purpose of technical and professional communication; that is, the need to understand the audience and purpose of the communica-

tive act. Technical and professional communication wants students to learn how to translate and communicate their own knowledge on their own terms. In technical and professional communication, we work to solve real-user needs and ethical and legal obligations. Thus, students need the resources to be able to write in a variety of situations for a variety of purposes that WAW is ill-positioned to meet.

In short, this potential movement is not the answer to pedagogical concerns in the service course. Thus, we have circled back to facing the question: How can we re-invigorate situating genres within a rhetorical context and make this pedagogical move with full awareness of the diversity of instructors who teach in our programs?

### **Reinvigorating Genre through Problem-Based Scenarios**

Julie Dyke Ford (2004) best summarizes the problems with the genre-based approach in her study of transfer from the service course to an industrial engineering course. Ford shows that students often rely on the “model based tactics, formats and templates and the text’s appearance” (p. 310) rather than the “awareness of audience or sense of purpose.” She concludes with what I am more strongly arguing for here: to teach what genres are, rather than what they look like.

I am proposing taking several existing practices and putting them together into a *problem-based scenario pedagogy*. This pedagogical approach combines case studies for education purposes (both research and teaching) with problem-based learning approaches to ensure that genres contain their rhetorical exigencies and messiness.

As early as 1997, Hillary Hart explained that environmental communication cases “make communication the content not just the skill-building goal of the course” (p.79). This idea of cases is not new in technical and professional communication, but it is an approach that has not been fully explored in our research nor integrated into our pedagogical practice. Probably, the most well-known use of cases as a pedagogical method is that of Harvard Business School (<https://www.hbs.edu/mba/academic-experience/Pages/the-hbs-case-method.aspx>), who developed their case method as a way to place the student in the role of decision maker within a case that has no simple solution.

Within technical and professional communication, we have longed used our own versions of the case method and have made in the past explicit calls to incorporate them into our pedagogy. Teresa Kynell and

Wendy Stone (1999) wrote a textbook based on “scenarios” as a way to focus on critical thinking and the diverse writing tasks necessary in technical and professional communication. The Annenberg Center at the University of Southern California has developed their own case method specific to strategic communication (<http://cssc.uscannenberg.org/about-cssc/>), and there have been several special issues around this method (Rogers & Ryman, 1998; Williams & Strother, 2004). A major journal in our field, *IEEE Transactions on Professional Communication*, continues to publish “teaching cases.” What the field has not done as well is to place this approach to pedagogy and expanded it into a fully-developed pedagogical approach that would include professional development opportunities on how to create effective case studies and more importantly, how to teach them. The closest we have is Jonathan Maricle’s (2016) work, which I am building on here.

An important part of both creating a teaching case and teaching one is to understand the importance of the problem embedded within the case. This, too, is an area that is underdeveloped theoretically and conceptually in technical and professional communication literature. Thus, here is an appropriate instance where we should borrow from other fields. Problem-based learning (PBL) is something that many instructors in technical and professional communication do intuitively if not directly. Developed in medical education (Kaufman et al., 1989; Neufeld et al., 1989) as a way to get students to think through messy problems with no clear-cut solution, PBL has been incorporated into educational initiatives across disciplines because it encourages students to immerse themselves within the problem and work through potential solutions for it. From a pedagogical and learning standpoint, it should be obvious as to why empowering students to develop a solution would be a welcome addition to any course. Technical and professional communication has incorporated PBL in a limited fashion (Paretti, 2006; Tatzl et al., 2012) in trying to develop models for improving pedagogical practice and learning outcomes.

By explicitly merging PBL with the case method and focusing on the pedagogical process—from reaction to modification to matching assignments, outcomes, and classroom activities to them to methods for using them in the classroom to professional development—a new pedagogical approach can be created. Moving away from the term

“case,” which is encumbered with histories outside our field and is often confused with a research method, I chose the *problem-based scenarios* in part because scenarios picks up and extends work within technical and professional communication (Kynell & Stone, 1999) and also in part because they provide more flexibility than one would find in typical teaching cases. By flexibility I mean that problem-based scenarios can vary in length and sophistication, which can meet the need of the wide range of instructors in technical and professional communication and students. Problem-based scenarios still incorporate genres as a primary mode of teaching, but it embeds those genres within a descriptive scenario so that the genres do not lose their rhetorical context and exigencies.

Using problem-based scenarios encourages the genre approach to be more rhetorical situated and sound rather than so focused on forms. As a rationale for creating cases, which can be more context dependent, Doug Brent (2011) reminded the field that “Highly context-dependent skills such as rhetorical performance are best learned—perhaps can only be learned—when learners are immersed in the real context in which such skills must be performed on a daily basis” (p. 400). Returning to Ford’s (2004) study, she potentially offers the field a way to start to (re)conceptualize how we teach and ultimately train instructors. While Ford found that the students understood the generic form but not the rhetorical exigencies behind how to use the form, she also found something that needs greater attention in the field. She found that engineering students were able to perform the important synthesis work of transferring what they learned from one context to another when they had experienced a co-curricular activity such as a co-op or internship. Ford concluded “In order for students to fully grasp rhetorical strategies that call for conceptual thinking and problem solving, they need to have experience writing texts in a context besides the classroom” (p. 310). This idea of real-ness is of prime importance in the service course, but as we know, that is much easier said than done.

Problem-based scenarios become a *techné*, which is always contextualized, and in creating the scenarios it ensures all activities are connected to something specific that is evident through the description of the scenario and deliverables. Ryan Moeller and Ken McAllister (2002)

see *techné* as a way for students to position themselves not as employees but as artisans, and that makes room for “learning and playing with basic concepts, experimenting with them, and using one’s imagination to form increasingly complex understandings of what is being practiced” (p.186). While learning outcomes are sometimes abstract ideas for students, specific tasks or problems faced within a scenario allow students to potentially better grasp the outcome of the case and their work. In other words, using scenarios—as a *techné*—helps to address some of the problems currently faced in a prescriptive genre approach.

Problem-based scenarios as *techné* are infused with explicit and implicit rhetorical exigencies that students will have to grapple with, and hopefully this approach mirrors more so some of the issues that students found in their co-curricular activities that made transferring knowledge about writing easier. Embedding students in fully developed cases allows them to start to truly see and experience writing that is directed at external audiences in a way that better mirrors the messy communication situations they will find on the job.

Rebecca Morrison (2017) argued for the use of genre in business communication as a way to encourage students to develop their critical thinking skills. Morrison’s approach complements the problem-based scenarios because she focuses on the outcome, or *telos*, of what the genre needs to accomplish. Thinking in rhetorical terms of the end result simply underscores the necessity to teach the rhetorical foundations of what genres can potentially accomplish rather than the form of them. Technical and professional communication does not need to abandon genres because they are such an important aspect of workplace communication.

This approach could incorporate Bay et al’s “entrepreneurial thinking” as well as keeping an emphasis on the important genres that students would need (Francis, in this issue). It would also provide a way to help explain to different stakeholders what a single service course could offer multiple departments (Arduser, and St.Amant, in this issue). It is flexible enough to incorporate service-learning components (Carnegie, in this issue) in a way that is scalable to the many types of faculty we have in our programs (Read & Michaud, in this issue). Moreover, pedagogically the field has to turn its attention back to teaching rhetorical practices and exigencies—on the actions that produce things, not the resulting objects they produce. We need to teach *proposing*

not proposals; *instructing* not instructions; *reporting* not reports. Teaching de-contextualized forms is not helpful in preparing students for future careers that will use and incorporate generic forms in a multitude of ways.

The service course is definitely an in-between, liminal location between a student's last involved interaction with writing in complex situations and their next step as new writers in the workplace. No classroom pedagogical approach will provide a completely realistic experience of the workplace—and it should not—because classrooms need to be safe places for students to experiment and to practice and to (potentially) fail. We have to resist the urge and the pressure to create simulated workplace environments and instead offer students assignments, exercises and experiences that allow them to practice the skills that will make them adept and flexible rhetorically savvy writers.

### **Improving Research**

The entries in this issue also underscore the need for a different orientation to pedagogical and programmatic research. The entries also highlight three specific areas that the field could attend to and immediately see improved results:

- Research study design
- Participant recruitment
- Different approaches to research

These three ideas are discussed in the next three sections.

### **Research Study Design**

Greater attention needs to be paid to *research study design*, which is a systematic and reflexive approach to designing studies in ways that emphasize the connection and integration between the research question and the chosen methodologies, methods, and practices used to examine a topic.

Research study design is a comprehensive plan that provides the rationale and justification for methodology, methods, and practices with an intense and transparent focus on ethics. The study design should serve as the roadmap for the research project and remain flexible enough to change when situations arise during the research project. While some aspects of research study design may be done

intuitively and/or implicitly, there is a need for deeper thinking and more transparency through description of the research study design to ensure that the practice of research will ultimately result in data that answers the original question.

Greater attention to designing a research study, which shifts the thinking for our over-reliance of picking methods first, will allow technical and professional communication to create research that can be validated or refuted—and it is this ability to test and validate or refute that allows for true dialects to evolve, for real knowledge to be created, and for discussions in the field to move forward in meaningful and effective ways. While some qualitative or rhetoric-based scholars will want to push back against the more scientific terms of replicable or generalizable, the fact remains that pedagogical research in technical and professional communication needs to be critically examined and improved so that we can build the field's knowledge.

To build the field's knowledge also means that we need to ask better research questions, a key facet of research study design. Every entry in this issue starts from a point that one might argue is somewhat disconnected from the field's scholarship and the actual work of the field. For example, Bay et al. conclude with the demand that "programs must evolve to meet these new challenges. ...

Meanwhile, we cannot afford to continue teaching traditional forms of technical communication to our students," without consideration at all that the "traditional forms" of technical communication are still being used daily in a multitude of fields. The disconnect between the "findings" and the world of work highlights that the original question being investigated may not have been the best question. In other words, the better and more important question should have been, "How can programs and faculty shift existing curricula to better suit the needs of working engineers or how close does existing curricula match the expectations of working engineers?" Either of these questions would have produced a more focused study that offered more usable results.

Similarly, Arduser's study represents a potentially impactful approach but one which fell short of its potential because it focused its interviews so narrowly on a problem that would have been more effectively framed in a different way. In other words, rather than interviewing the different stakeholders to determine what the program could do for them, the question could have been flipped to ask how the current courses could support their needs. While not a

large shift, it is an important semantic change with the focus not on service in the negative sense, but rather with the focus in the positive way of how the expertise offered within technical and professional communication can improve other programs. This is an important orientation for both research questions and research study design.

Improved questions with more diverse and mixed methods approaches help to ensure we are getting answers to the questions we need answered. For example, Sarah Read and Michael Michaud, in this issue, provide an interesting view of who is teaching in the service course, but as noted, the limitations of their instrument make it difficult to generalize their results or to even use them beyond a data point to build on. Indeed, surveys in general may not be the best method for the actual questions technical and professional communication needs answered. That is, while Read and Michaud's study helps us to understand who is teaching these courses, what the field truly needs to understand is how these individuals do their work, the impacts our institutional structures have on their work lives, and how such factors impact student learning.

Further, we need to select the best method for answering (i.e., collecting the data needed to answer) the questions we do ask. It is ironic that in technical and professional communication, where the majority of empirically-based research is based on surveys, we have done little specific work to understand the theoretical dimensions of survey research (Meloncon & St.Amant, in press). In the few books devoted to research *within* the field, the information on surveys is limited to generic discussions of the how to conduct research using surveys (Hughes & Hayhoe, 2008, pp. 95–106; MacNealy, 1999, pp. 148–172; Murphy, 2002, pp. 93–110) rather than fully understanding the “when” and “why” one would use a survey (which has traditionally been when you want to gather large samples of data to produce generalizable results). As Michael Hughes and George Hayhoe (2008) note, however, “unless correctly designed, implemented, and analyzed, a survey can result in a botched opportunity at best or a misrepresentation of a population at worst” (p. 95). In both cases of the surveys in this issue, different methods—outside of the survey—would have generated richer data that was better contextualized and would offer more information to the field. In short, surveys are being overused—and often used in place of interviews, focus groups, or other forms of qualitative data gathering that would most likely answer the question(s) better.

## Participant Recruitment

To follow a better research study design, researchers need to take the important step of *determining who is the best sample for their question*. An important aspect of research study design, and one that illustrates one of the current problems in the field's research, is *participant recruitment*. When I use participant recruitment, I am referring to finding the right people to help you answer your research questions.

Here are some things that we need to know as the foundation of the field's knowledge infrastructure about the service course. First, there are actually three distinct kinds of service courses based on institutional settings:

- those where there is also a technical and professional communication program;
- those where there is no technical and professional communication program;
- those found at two-year colleges.

Constraints of the focus of this piece limit a detailed overview of what some of the differences are. In general, the aims of the service courses are typically different, and more importantly, how they are administered and the administrative "philosophies" are also typically different. In addition, there are also different types of institutions that also bring with them differences in the service course. For example, large R1 programs like mine have an issue of scale because of the number of courses offered, but it is possible that all institutions still have the same issues of providing professional development. Our organization, CPTSC, does have a master list of programs in the field, as well as a calculated representative sample of institutions that offer the service course but do not have a degree program. Thus, when embedded within the field and being part of those conversations, one would know where to start to gather better and more usable data. No matter the question, care needs to be made when designing a study to ensure that participant recruitment (institution type and where there is a technical and professional communication program) matches the overall goal of the research study.

Rather than immersing themselves in the field and understanding the landscape of the field, most researchers are quick to take the path of least resistance, which is seen in the two survey-based entries in this issue (and also to a lesser extent in Arduser's entry). In the case of the

surveys in this issue, as well as any number of studies published in the recent past, that path of least resistance is to use listservs (which are easy to access) to recruit participants. Unfortunately, the listservs in technical and professional communication are not representative of the field's instructors, nor are they representative of the types of programs in technical and professional communication.

The self-enrollment process that results from recruiting subjects via listservs in the field means those enrolled do not represent the largest majority of institutions that house technical and professional communication degree programs. For example, the majority of programs are located at Master's Large Institutions (see <http://carnegie-classifications.iu.edu/> for information on Carnegie classifications) while the majority of those enrolled on the two listservs in the field (ATTW and CPTSC) are primarily at research institutions. Thus, if a researcher is soliciting participants for anything teaching related, the resulting sample is inherently skewed in ways such that the data is no way generalizable and its usefulness is severely compromised. The resulting convenience sample is simply that—convenient, and it is convenient in a way that does not provide insights that are indicative of the realities of the field or that can be applied by or acted upon by most other programs in the field. As Daniel J. Murphy (2002) so aptly puts it: "To have confidence in your inference, it is important to ensure as much as possible that you have used a representative sample for findings to be reliable and valid with respect to the 'true' nature of the population" (p. 98). Without a representative sample and one that can be replicated in the future also means we are unable to build on existing research and determine trends of changes. In sum, no new knowledge—that which can be known, tested, validated or refuted, and acted upon—has been created. So what then is the point of the endeavor?

This leads us then to considerations of different types of research such as multi-institutional research and different types of pedagogical research. Both of which are discussed in the next section.

### **Research Involving Different Approaches**

The field must move beyond the single-classroom or single-program study. Many of St. Amant's questions in his contextualized course design approach can be flipped into important research questions that need to be investigated across institutions. For example, Veltsos and

Patriarca's (2017) project occurs across two similar institutions, and their work intersects in important ways with another multi-institutional project (Shreiber, Carrion, & Meloncon, 2017). Both of these studies are moving toward a programmatic model that considers new ways of sustaining programs and calls for greater reliance of field-wide data to make more informed programmatic decisions (Shreiber & Meloncon, in press). These types of multi-institutional studies need to be thoughtful about their constructions. Multi-institutional research should either focus on collaborations between similar institutions for the purpose of building a rich repository of data that can then be studied as a corpus or they need to focus on similar kinds of courses or conditions to answer field-wide questions that we are unable to answer at this time.

For instance, Teena Carnegie's entry in this issue, although based upon a strong longitudinal design, still does not offer a completely persuasive research-based case for service learning in the service course outside of programs that are similar to the program at Eastern Washington University. The care and attention of incremental and ongoing changes is an important aspect of the type of research-based programmatic work the field needs to be doing. However, the work presented in Carnegie's entry still leaves many questions and gaps unanswered. What is surprising to me is that when there are a number of institutions incorporating iFixit projects into the service course, no one researcher or institution has taken the much-needed step to compare and contrast localized data to provide a field-wide view that could potentially improve instruction and work toward more sustainable pedagogical practices across the nation.

Another area where we need to improve our research practice is to consider different types of approaches to pedagogical research that moves us beyond teacher-research to more "objective" approaches such as control studies that do not involve students in the teacher's own class. This model, which has been adopted from scholarship of teaching and learning (SoTL) and is prevalent within composition scholarship, does not adequately capture the complexities of the subject of technical and professional communication. This kind of work represents what I call, "look what I did in my class" research, and can provide few insights locally and even less externally. There are many common programmatic and pedagogical problems and concerns that could benefit from a more field-wide view. Recent research has

moved toward trying to provide this view with varying degrees of success (cf., Chong, 2016; Schreiber & Meloncon, in press). But without this sort of field-wide view, one gets the problematic conclusions found in Bay et al. and Carnegie, or one gets research that that could have been more (Arduser). Reflecting on our own practices is necessary if we are to gather pedagogical and programmatic data that can help the field grow, improve, and sustain programs.

### **Understanding the impact of labor practices**

Finally, the field also knows we have our own labor problem because the service course is still taught overwhelmingly by contingent faculty who are contractual, full-time, non-tenure track (the largest segment), term-to-term adjuncts, or graduate students (Meloncon, Mechenbier, & Wilson, in press). It was disappointing not to see an attention to, or even more than a sentence mention, of labor conditions. No future discussion of the service course can occur without an intensive and specific attention to labor and labor conditions because any discussion we have about pedagogical practices has to consider the fact the majority of those contingent faculty also do not have a background in technical and professional communication and even fewer have ever had a course in teaching technical and professional communication (Meloncon, Mechenbier, & Wilson, in press). So, for example, if we consider Bay et al.'s call to invoke a different theoretical orientation or approach—what they call “entrepreneurial thinking”—how does one implement this in a program? The fact remains that, in a large number of programs, we have not even managed to successfully integrate a critical attention to rhetorical concepts (see pedagogy section) evenly and uniformly.

While this is something of a rhetorical question, it needs to be parsed out a bit so that we have a better understanding of the complexities of labor within our programs. There is no way I could implement Bay et al.'s suggestion or Carnegie's approach to service learning within the service courses at my institution. Even though I typically never invoke my  $n=1$ , my institutional setting is important as a microcosm—even if on a larger scale—to the labor problems (and pedagogical problems) within the field. My institution serves around 4800 students a year in three different versions of the service course. It is 95% taught by contingent faculty, and the vast majority of the instructors have no background in technical and professional communication (academic or professional).

Attempting to scale Bay et al. or Carnegie's approach at my institution would be an unmitigated disaster simply because we do not have the resources or the institutional support structures to provide the type of professional development necessary for instructors should they want to incorporate either of these approaches. Even though on the surface, this sounds like a direct criticism of the instructors and my institution, it is not. It is simply, sadly, the current state of affairs in higher education—and these problems have been around much longer than any austerity measures that happened after the economic collapse of 2008. Any consideration of changes to the service course must start with the questions: how will this impact contingent faculty in the program? and Does the institution have the support and infrastructure to provide adequate compensated professional development for contingent faculty to learn and practice curricular or pedagogical changes? If a technical and professional communication program administrator and tenure-line faculty cannot adequately answer these questions then changes and shift to curricula need to be reconsidered.

Any suggestion of any change in teaching the service course must start with an understanding of the material work conditions of those faculty who teach it. Unfortunately, this factor is not adequately addressed in this special issue in large part because of the limitations of the study designs. Without understanding the material work conditions, which are the "day-to-day working conditions of faculty, such as teaching loads and institutional support" (Meloncon, England & Ilyasova, 2016, p. 209), of faculty who teach these courses, we stand little chance of ever improving them. And all the grand plans of integrating new theoretical models, such as that offered by Bay et al., will potentially work until they have to be scaled across a multitude of sections with committed faculty who unfortunately have little background in technical and professional communication. Material work conditions also come into play as seen in Arduser's entry where the addition of another "specialized" service course simply means hiring another contingent faculty member without due consideration of the perpetuation of the labor problem and simultaneous problem of undermining the field's own expertise as researchers and teachers.

The point of including a distinct section on labor conditions is that absolutely every conversation about the service course from future research on the course, to training teachers to what pedagogical approach to use, must first and foremost consider explicitly issues of material working conditions and labor.

### **Building a Programmatic Perspective**

When I started my own programmatic research trajectory, I did it with an eye toward both a macro- and a micro-understanding of programs. By macro, I directly follow Ken Rainey (1995) when he lamented that most curricular research is self-centered around a local context, but that in most situations the questions raised were always about whether programs should be doing this or offering that (p. 54). My goal when I started was to move outside of local contexts so that technical and professional communication program administrators could answer broader field-wide questions, while still attending to the local—the micro—situation. The service course is a rich site for the field because it can give us insights at both the micro- and the macro-level. We have to become meta-reflective to examine our own processes, and the service course provides us the perfect site to do many aspects of that reflection.

Many years ago, M. Jimmie Killingsworth (1990) lamented, “Information on service teaching seems to have drained out of our journals” (p. 38), and unfortunately, that is still true. Even though scholarly attention to the service course may have drained from our journals and collections, technical and professional communication program administrators and faculty have always been consistently and acutely aware of the service course. I believe we fail to do research on the service course or more rigorous studies of curricula because we are simply too busy doing the job of administering and working in programs. Also, as I have noted here and in numerous presentations, good, thorough curricular research is hard because it takes an inordinate amount of time from designing the study to gathering the data to writing it all up. It is painfully slow and requires meticulous attention to detail to make the results worthwhile. Recognizing the immense and intensive time investment (that in most cases cannot be met because of systemic problems in the ways—both real and perceived—faculty are evaluated), I still stand by my assertion that we have to do better research. This will be the only way to determine what is a better method for teaching the service course, and it will be the only way to determine solutions, both large and small, to the field’s ongoing labor problem.

I am hopeful that this special issue will serve as an impetus to bring the service course into broader discussions of what the field values and what it does, and becomes the focal point for future research endeavors. Because in reading these essays carefully, I do appreciate the rich avenue of potential questions that they open for the field. Some examples of the types of problems or questions that researchers should pursue are

- **Alignment of our classroom practices to workplace practices taking into consideration the fact we, as academics, have knowledge about skills that is equivalent to those of practitioners.** Questions of transfer are most needed, particularly about the service course. Research studies that investigate how well, or not, students (not our own students) perform on the job in close proximity after they take the service course can shed light on pedagogical approaches.
- **More in-depth work on the alignment of assignments to workplace practices as well as a consideration of outcomes.** We have so little work from a field-wide perspective that programs are at a disadvantage without this type of data-driven work.
- **Studies that focus on the difference between courses** (following Patriarca & Veltsos, 2017; Schrieber, Carrion, & Meloncon, 2017). Attention needs to be paid to specific questions around stakeholder views as they compare to our expert perspectives. In addition, comparing across institutions with keen attention to similarity in gathering data will provide insights that can be applied across the field.
- **Studies that look more in-depth at assignments across the field in the current different kinds of courses.** Beyond gathering this data, we need qualitative work with technical and professional communication PAs and faculty to understand how assignment decisions were made to gain insights into the overall approach to designing and teaching the service course and other “core courses” within the curriculum.
- **Control-group studies that try out different pedagogical approaches and then attempt to scale those approaches across multiple sections (and then different institutions).** Innovative teaching approaches to the course itself (studying in detail what happens when we shift our generic approach and ways to train faculty in other methods).

- **Studies on feedback.** Two new, innovative studies (Doan, in progress, and Singleton, 2016) seek to understand better with actual empirical evidence the feedback practices of instructors in the field and whether or not the existing practice of individualized feedback can be altered without impacting student learning. There are other questions as well such as understanding feedback practices in the workplace, working toward alternative methods, and delving into the efficacy of peer review as a strategy to name but a few.
- **Research on the outcomes of the service course, other courses in technical and professional communication, and for programs themselves.** While understanding and taking seriously the criticism of outcomes (e.g., Gallagher, 2012), the field cannot escape their importance in institutional initiatives (such as assessment) and the role they should play in curricula. However, we have little understanding of outcomes at the field level. The information presented above is from a pilot study focused on the service course, and there is an initiative within CPTSC at the programmatic level, but much more work needs to be done.
- **Additional research on contingency and its impact on our programs.** The forthcoming project on contingent faculty in the field answers many questions with a great degree of context and generalizability, but it also opens up a whole series of questions such as should there be minimum educational and experience (teaching and industry) requirements for instructors? How is the best way to provide ongoing and useful professional development opportunities for all faculty, most particularly contingent faculty? How can we begin to address and more importantly minimize our reliance on contingent labor? Is there an impact (as found in other fields) on student learning in courses and programs with a high use of contingent faculty?

I do not want to rehash the power and legitimacy arguments made in the past (for example, see St.Amant & Meloncon, 2016; Spilka, 2010; Sullivan et al., 2003), but I do want to end with the idea that if we are not willing to do the research to have the data that we need to argue for our disciplinary knowledge and distinction, then we deserve what we get. Even when we are mandated to do more with less, we still have the opportunities to insert our own beliefs and knowledge into the work we do. We often forget that we have more power than we think

we do. We have an expertise, and we should start every consideration, particularly of the service course, with that understanding and then move out from there.

As technical and professional communication PAs and faculty, we are the makers of our programs and courses and to that task we do bring our own knowledge, but we need to match that knowledge to the various communities we serve. An indisputable fact is that the future of technical and professional communication programs is directly and intimately connected with the future of the service course. It is past time for the service course to become a designated focus of our research and attention.

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<sup>1</sup> Many of the ideas presented here are based on a longitudinal research study, *Putting Technical and Professional Communication in its Place: A Curricular History*. That study is in the final phases, and pieces of it have been published or are currently in review. There is not enough room to fully discuss the methodological orientation and study design, but I am happy to any questions any one may have. (One can find a partial overview that provides additional information at [tek-ritr.com](http://tek-ritr.com) or can contact me at [Meloncon@tek-ritr.com](mailto:Meloncon@tek-ritr.com) to ask more about this study.)

The information about labor is part of a separate (yet related) national study that is in process and is under something akin to an advance contract at the journal, *Academic Labor*, for publication later this year, but several pieces on labor that is specific to the service course have already been published (Meloncon & England, 2011; Meloncon, 2014; Meloncon, England, & Ilyasova, 2016; Meloncon, 2017). My data on faculty and programs directly refutes several of the points offered by Read and Michaud, and Francis, differences which are likely based on differences in the research study design, and afford the field an opportunity to have richer and more data-driven conversations.

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