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## The Union of Theory and Skill: Using Micro-Credential Coursework as Class Supplement

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**Abstract:** Within the realm of higher education, the question of how to respond to the notable surge in demand for micro-credentials has sparked intense debate. This contentious response to micro-credentials, which in many ways revolves around the tension between teaching theory versus skills, brings to the forefront a long-standing dilemma faced by Technical and Professional Writing (TPW) instructors. How can we effectively strike a balance between teaching critical reasoning based on TPW theory and teaching the practical skills necessary to develop a robust employment portfolio? In this paper, I aim to explore how the skills-based competencies associated with micro-credential coursework can be effectively utilized as a course supplement to enrich the learning experience in the TPW classroom.

**Keywords:** Scholarship of Teaching and Learning, TPC Pedagogy

Within the realm of higher education, the question of how to respond to the notable surge in demand for micro-credentials has sparked intense debate. Critics of micro-credentials contend that these smaller units of certification are steering higher education away from its fundamental purpose: providing a well-rounded education that fosters critical thinking. Wheelahan and Moodie support this argument by characterizing micro-credentials as “gig credentials for a gig economy.” Through the lens of human capital theory, they illustrate how micro-credentials reflect the deeper incursion of the employability and competency-based education discourse within higher education (Wheelahan & Moodie, 2022, pp 1281). They further assert that as employability assumes central importance, the academic sphere forsakes its broader and more inclusive vision of education, which aims to prepare individuals for lives that they have “reason to value,” a concept that draws inspiration from the ideas of Nussbaum and Sen (Nussbaum, 2000; Sen, 1999).

In contrast, numerous advocates of micro-credentials view smaller, skill-focused educational units as a rational response to shifting patterns of knowledge acquisition and transformations in the industrial landscape. These scholars highlight the emergence of skill gaps resulting from Industry 4.0, also known as the fourth industrial revolution. Driven by factors such as increasing globalization, aging populations, climate change, and advancements in Artificial Intelligence (AI), this new industrial revolution inherently calls for “upskilling, reskilling, and developing the capacity to thrive in a new digital world” (Brown et al., 2021, pp234). Instead of perceiving micro-credentials as an ill-advised reaction to an educational “craze” carrying the potential for significant “moral hazard” (Ralston, 2021), proponents of these modular-based educational units argue that they offer universities the flexibility to adapt swiftly to new knowledge without undermining the emphasis of critical reasoning in traditional degree programs (Desmarchelier & Cary, 2022).

The contentious response to micro-credentials within the broader landscape of higher education, which in many ways revolves around the tension between teaching theory versus skills, brings to the forefront a long-standing dilemma faced by Technical and Professional Writing (TPW) instructors. How can we effectively strike a balance between teaching critical reasoning based on TPW theory and teaching the practical skills necessary to develop a robust employment portfolio? This question has become even more relevant within our field as we have reconsidered the goals, methods, and outcomes of teaching TPW through the social justice turn and the design turn, all of which have underscored the significance of fostering students’ critical thinking regarding their communication deliverables. However, the combination of mounting teaching responsibilities and limited resources for professional development has created a growing challenge for instructors to stay abreast of both scholarly advancements and the evolving landscape of TPW tools, making this balance even more challenging.

In this paper, I aim to explore how the skills-based competencies associated with micro-credential coursework can be effectively utilized as a course supplement to enrich the learning experience in the TPW classroom. By incorporating micro-credential coursework from external organizations as a supplement—akin to a textbook or guest lecture—TPW instructors can leverage the skills-focused nature of the embedded micro-credential coursework to help them balance the workload of teaching both theory and skills. This allows them to allocate their resources more judiciously towards teaching the intricate theoretical aspects of effective skills implementation.

I will discuss my experience incorporating two badges through LinkedIn Learning as a supplemental component in my program’s Professional Practice in Technical Communication class, a kind of capstone for the technical communication minor. Drawing upon student feedback, I then provide recommendations on how to effectively utilize micro-credentials like the ones in LinkedIn’s LinkedIn Learning platform to enhance student learning by allowing TPW instructors to focus on being subject matter experts (SMEs) while the facilitators in the micro-credential coursework serve as skills/ tool experts. All student feedback included in this text was collected through the university wide Student Feedback Survey (SFS) and was approved for use in this text by the university’s Institutional Review Board (IRB)

office. This successful experience has impressed upon me the need to further investigate embedding micro-credential coursework in traditional TPC classroom settings and plans for further research beyond this pilot will be discussed.

## **What is a micro-credential?**

The contentious debate surrounding micro-credentials in higher education is exacerbated by the absence of a standardized definition for the term. Despite growing interest in micro-credentials, the term itself remains elusive, encompassing a wide range of interpretations. It is used to describe anything from badges granted for minimal engagement with short video content to certificates earned upon successful completion of comprehensive multi-course sequences at regionally accredited universities.

Where definitions have emerged, they tend to be broad. For example, as part of their comprehensive micro-credential program, SUNY provides the following definition: "Microcredentials are short, focused credentials designed to provide in-demand skills, know-how, and experience" (Microcredentials - SUNY, n.d.). Even with this definition, there remains a level of vagueness, as factors such as workload, modality, and accreditation are not explicitly addressed. Likewise, the National Institute for Digital Learning at Dublin City University defines micro-credentials as "smaller units of study, which are usually shorter than traditional forms of accredited learning and courses leading to conventional qualifications such as degrees" (Brown et al., 2021, pp. 228). Similar to the SUNY definition, this description lacks specific detail, which can give rise to disagreements and confusion regarding the rigor of a micro-credential and the type of work required for students to earn such a credential.

Despite the absence of a universally agreed-upon definition, certain patterns are emerging that juxtapose and pit micro-credentials against traditional degrees. Among the definitions examined for this article, almost all share the following attributes in their definition of micro-credentials:

- Small
- Focused
- Skills-based

These descriptors seem to juxtapose traditional four-year degrees, which pride themselves on broad curricula dedicated to critical reasoning and transferable heuristics, with these smaller, more skills focused micro-credentials. This dichotomy creates a seeming incompatibility between the two, a kind of curricular mutual exclusivity. And this mismatch between the two, in many cases, triggers an even more volatile dialogue, one that interrogates the very nature, purpose, and role of obtaining a post-secondary education.

## **TPW at the Tense Intersection of the Employment Market and Higher Education**

While TPW as a field has often kept the workplace in focus as we develop our curricula, there are concerns among other stakeholders in higher education regarding any curriculum that appears to tailor its content to the demands of employers. This uneasiness helps explain much of the resistance encountered within higher education towards micro-credentials, which are much more skills-/tools-focused. This emphasis on competencies, especially technological ones, holds appeal for prospective learners in a world where the prevailing assumption is that traditional educational models have not adequately equipped individuals with the specific knowledge and skills demanded by the labor market (Wheelahan & Moodie, 2022, pp. 1285). Opponents of micro-credentials, such as Wheelahan and Moodie, perceive the alignment with the labor market as contradictory to the core purpose of higher education. However, a strong connection between higher education and employability seems to still provide the mind of students.

Anecdotally, I remember sitting outside my middle school guidance counselor's office, gazing at the "going to college pays" poster displayed on the wall. The poster featured a bar chart illustrating the average salaries of individuals who dropped out of high school, completed high school, and obtained a baccalaureate degree. From a young age, the education system in the United States instills in students the association between education and employability. Consequently, it is not surprising that an increasing number of students are pursuing micro-credentials, which establish a more explicit connection between their coursework and future employment opportunities.

As TPW instructors, we have a unique position at the crossroads of the college campus and the professional world, allowing us to cultivate classrooms where theory, tools, and deliverables converge. While some of our colleagues may express discomfort about what Kathryn Rentz refers to as "our shamefully close relations with business, science, and technology" (Rentz, 2001, pp.188), we take pride in our ability to teach students how to develop communication deliverables that are both critically informed and skillfully created, allowing our students to excel in the workforce and, in turn, bring about transformative changes within their respective industries.

However, the realities of modern higher education often pose challenges in creating such an ideal classroom, despite the fact that the content and focus of our field naturally align with it. Keeping up with the constant influx of new tools and skills required in the rapidly evolving 21st-century workplace can feel like a Sisyphean endeavor. Just as we become proficient in using a particular tool or program, a new one emerges, rendering our previous knowledge, in some ways, obsolete. By incorporating course work from micro-credentials, such as those offered on the LinkedIn Learning platform, we can alleviate some of the pressure to constantly stay updated on changes in TPW tools. This approach allows us to shift our focus from striving to become experts in every tool to leveraging our subject matter expertise and teaching capabilities.

## **Course Design and Student Reaction**

Professional Practice in Technical Communication was initially designed as a capstone course for the technical communication minor at the University of Texas Arlington. This course provides comprehensive coverage of the professional practices of technical and professional writers and designers, drawing insights from the rich histories, theories, and methodologies within the field. Each instructor brings their unique publication and research background to tailor the course, enabling the theme to evolve from semester to semester, while maintaining a central emphasis on professional practice and portfolio development.

In my iteration of the course, I specifically focused on the intersection of instructional design and TPW. This topic was chosen based on my extensive research and publication experience in the field, as well as my background as a corporate classroom facilitator and trainer. Drawing from my observations in the industry, I recognized the significant role technical communicators play in the instructional design process, thanks to their expertise in effectively conveying complex information. Throughout the course, I aimed to guide my students in understanding how the broader theoretical frameworks we explored in the minor—such as design justice, user-centered writing, and design thinking—can be applied and integrated into the practice of instructional design. By emphasizing the application of these frameworks, I sought to help students develop a critical perspective on instructional design and recognize the importance of incorporating user-centered approaches and inclusive practices in their work.

When thinking through the age-old question of how to balance employment-based skills and engagement with theoretical TPW frameworks, I decided to implement a strategy of embedding micro-credential coursework into my class. Instead of relying on textbooks or other supplementary materials, I capitalized on my institution's license for LinkedIn Learning and utilized the LinkedIn Learning Canvas embed tool to integrate two micro-credential course sequences and additional tool related materials directly into my LMS course shell. The two micro-credential sequences focused on teamwork, agile design, and foundational principles of instructional design, while the additional materials focused on TechSmith tools, such as Camtasia and Snagit.

As part of their coursework, students were assigned to watch approximately five hours of LinkedIn Learning videos per week outside of class. These videos served as the springboard for our in-class and online discussions. During these discussions, students were encouraged to reference specific material from the video sets as we explored how complex theoretical frameworks I introduced in class—namely design thinking and design justice—intersected with the skills-based content of the videos. In addition to the discussions, students were required to complete skills quizzes embedded within LinkedIn Learning. Successful completion of these quizzes enabled them to earn the micro-credentials associated with the video coursework.

As we moved through the semester, we took the union of theory and skills that began in our discussions and then actively applied that understanding to the development of our deliverables: a set of instructional videos built as part of a service-learning project. The result were theoretically grounded deliverables that demonstrated a deft understanding of both the practical skills of instructional design and the theoretical frameworks that move our deliverables toward equity.

Student feedback regarding the integration of LinkedIn Learning course sequences in the class emphasized the added value of the skills-focused material and the importance of contextualizing those skills within a larger theoretical framework. According to the responses gathered from the university's Student Feedback Survey (SFS), when asked if they acquired new skills in the course that would be useful outside of class, students in my course rated it an average of 4.8 out of 5, while the university's average was 4.2 for the same question. Although the nature of the data is ordinal, limiting broad assumptions about the course's effectiveness, it does provide insight into the accompanying comments.

One student commented, "the [LinkedIn Learning] videos provided lots of great information that I can use now as a student and most definitely when I enter the working field." Another student expressed that the LinkedIn Learning certifications would "be helpful for me in my career." The data, coupled with these comments, indicate that the students recognized the value of including LinkedIn Learning courses leading to micro-credentials. This finding alone warrants further exploration into the integration of skills-based micro-credential work and traditional credit-bearing courses. However, it was a comment from another student that solidified my belief in the need for additional investigation into this course design.

When asked on the course evaluation about the attributes of the class that "helped you learn the material," the student noted, "The discussion boards helped a lot. If I were to just watch videos but not discuss them, I would not remember anything. It encouraged me to think about how I process information." This comment further reinforced my conviction that while skills-based micro-credential coursework is valuable, it must be complemented by a deeper exploration of theoretical frameworks for the skills to hold significance. In other words, skills in a vacuum are quickly forgotten, but skills coupled with communities engaged in deep, theoretically based reflection and implementation amplify pedagogical impact.

## **Notes about Further Research and Suggestions for Implementation**

Based on my experience in this pilot, I have initiated a research collaboration with Missouri State University to conduct a more comprehensive and formal analysis of the potential advantages of integrating micro-credential coursework within credit-bearing TPW courses in traditional academic settings. While we await approval from the Institutional Review Board (IRB) at our respective institutions, our team is also seeking grant funding to expand the scope of our data collection, aiming for more systematic and generalizable findings.

In the interim, although the results of this pilot cannot be considered fully generalizable, they have provided valuable insights into the process of utilizing micro-credential coursework as a supplementary component in a traditional TPC class. If you are interested in implementing a similar approach in your own course, I offer the following three recommendations:

- 1. Discover Available Resources:** In this pilot study, I made use of my university's institution wide license for LinkedIn Learning (formerly Lynda.com). While not all educational institutions may have such a license, it is worth noting that many faculty members I have talked with were unaware that their school did indeed have a license. I recommend reaching out to your local information technology team to determine if you and your students have access to LinkedIn Learning or similar platforms. If your institution does not have a license, you may consider exploring the free 30-day trial period offered by LinkedIn Learning as an alternative option to explore its potential benefits.
- 2. Start with Your Theoretical Framework:** I have found that designing an integration of this kind is most effective when I begin crafting the course and student learning outcomes (SLOs) with the theoretical frameworks I intend to teach in mind. Only once that foundation is clear do I then begin thinking about the integration of micro-credential coursework for the skills/ tools teaching. By aligning the micro-credential coursework with the theoretical framework in this way, the integration becomes more purposeful and cohesive. In my pilot study, for example, I recognized from the beginning the importance of teaching design thinking and design justice to help my students develop the ability to create equitable instructional design materials. Based on this understanding, I then explored the micro-credentials and training available within LinkedIn Learning that aligned with my instructional objectives and would best support my students in achieving them. By starting with the theory and then moving to the skills/tools, I was able to have the skills and tools be in service of the theory rather than the other way around.
- 3. Integrate Theory and Skills:** As highlighted in the discussion of student feedback, teaching skills without a solid theoretical foundation results in limited retention. Similarly, teaching theory without skills implementation lacks context and practicality. It is crucial, then, to unite theory and skills through student engagement. In the case of embedding micro-credential coursework, it is important to not isolate the skills-focused videos from the broader theoretical context of the course. Instead, we must consciously connect the skills and tools covered in the videos to the deeper theoretical concerns addressed in the course, allowing for a meaningful and comprehensive learning experience. By deliberately intertwining theory and skills, students can understand the practical application of the concepts and develop a deeper understanding of the subject matter.

Despite the ongoing pressures to achieve more with fewer resources in higher education, integrating micro-credential coursework as a supplement in our classrooms can serve as a means to mitigate some of these challenges. While it is true that critics of micro-credentials have validly highlighted the limitations of

an education model solely focused on skills or tools, this article demonstrates how we can harness the advantages of this focused approach to enhance our teaching practices. By incorporating micro-credential coursework within our existing courses, we can provide students with valuable supplementary learning experiences that complement the broader educational objectives of our classes.



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