

THE IMPORTANCE OF CREATIVE PROBLEM SOLVING: REFLECTIONS ON MY MASTER'S THESIS JOURNEY

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Article History: Submitted 22 Aug 2025 | Accepted 26 Sep 2025 | Online first 08 Jun 2026 | Published 13 Jul 2026

ABSTRACT. This Note from the Field is a reflection on the author's journey through her Master's thesis. Drawing on the concepts of pragmatism, creative thinking, and identity formation, this article details the non-linear nature of her research work and the unexpected learning opportunities and insights that arose along the way.

L'IMPORTANCE DE LA RÉOLUTION CRÉATIVE DE PROBLÈMES : RÉFLEXIONS SUR MON PARCOURS DE MÉMOIRE DE MAÎTRISE

RÉSUMÉ. Cette note de terrain présente une réflexion sur le cheminement de l'auteure dans le cadre de son mémoire de maîtrise. S'appuyant sur les concepts de pragmatisme, de pensée créative et de construction identitaire, cet article met en lumière la nature non linéaire de sa démarche de recherche ainsi que les occasions d'apprentissage et les réflexions inattendues qui ont émergé tout au long du processus.

Creativity is an oft-neglected component of graduate education. Yet, creativity, along with originality and innovation, is central to graduate work (Baptista et al., 2015). Graduate students, in addition to being socialized into the existing structures of academia, must also be creative by “challenging these structures for attaining new knowledge” (Frick & Brodin, 2020, p. 211). Indeed, graduate work “is strongly associated with creativity, commonly as a way in which students engage in the research process” (Baptista et al., 2015, p. 58). Further, the complexity of the task determines the degree of creativity. Recent research on graduate students' creativity suggests that “scientific research work demands provide opportunities for graduate students to grow as individuals and also provide

an environment in which creativity can flourish” (Yao & Yu, 2023, p. 4). Thus, creativity is closely intertwined with students’ academic identity formation (Frick & Brodin, 2020).

In her interviews with graduate students, Brodin (2016) explored the tensions between critical and creative thinking in graduate programs and discovered that independent decision-making straddled both modes of thinking. Related to Brodin’s notion of pragmatic action, eminent philosopher and educator John Dewey viewed pragmatism as a “method to think and act in a visionary and creative as well as future-oriented manner” (Elkjaer, 2018, p. 125). Paramount to this notion is the idea of learning through inquiry. According to Dewey, inquiry is a process beginning with detecting something amiss, formulating a problem, constructing a hypothesis, engaging in imaginative reasoning of possible implications, and then implementing and assessing the solution (Hildebrand, 2023). Inquiry is situation-specific; that is, “the situation determines which concepts and theories are useful for an analysis of a given problem” (Elkjaer, 2018, p. 126). Pragmatism, creative thinking, and identity formation – these were fundamental to my journey as a graduate student.

PERSONAL CONTEXT

I am currently a second-year PhD student in Educational Studies. In September 2021, I began my Master of Education degree. A perpetual student, I had previously completed an Honours Bachelor of Arts degree in Psychology and a Diploma in Behavioural Science. As a neurodivergent educator who had worked in the special education sector in various capacities, I entered the program with a wealth of professional and personal experience. I was also familiar with the research process, having worked as a Research Assistant on several projects during my undergraduate degree. Yet, I had not completed a large, complex independent research project like a thesis and entered the program uncertain as to my success. In this *Note from the Field*, I reflect on my experiences navigating the twists and turns that arose in relation to the data collection component of my Master’s thesis. My hope is that other graduate students can find solace and inspiration in my journey.

THE PLAN

My initial plan for my Master’s thesis was simple. I would send out an advertisement through a local Learning Disability Association (LDA) to recruit 30 students in Grades 3-5 with learning challenges who struggled

with writing. For Stage 1, parents would complete a brief intake survey, and students would respond to a nine-question survey on writing self-efficacy. For Stage 2, I would select six students to participate in an interview. Both sessions were to take place via the online videoconferencing platform MS Teams. Yet, despite the project's simplicity, I did have some concerns. While I had experience with quantitative research, this would be my first time conducting qualitative research or working on a mixed-methods project, and I was unsure how the project would turn out. However, my main concern was attracting a sufficient number of willing participants in the first place.

THE LONG AND WINDING ROAD

The previous year, I had attempted to run a small pilot study at a private school and was unable to recruit any participants. While I was initially disheartened that I would not have the opportunity to conduct a trial run of my project, with the guidance of my supervisor, I pivoted to a different angle. I pilot-tested the materials themselves by passing them over to a handful of elementary teachers and requesting their feedback. This process ultimately proved beneficial, as it increased my confidence in the suitability of the materials and also helped me make some final tweaks to perfect them. Through this pilot study, I learned that flexibility, humility, and creative thinking are crucial skills in any research project, and I carried these lessons forward as I progressed in my program.

Six months later, at my first thesis committee meeting to discuss my thesis proposal, things shifted yet again. My committee members encouraged me to collect writing samples from the students as part of Stage 1 in addition to the survey. While I was excited to collect the additional data, this decision posed a new challenge – how best to collect writing data from students. In consultation with my supervisor, I selected rubrics and put together a simple observational checklist to record students' writing behaviours. Collecting writing data also opened up new avenues for data analysis – I could record the length of time they spent writing, calculate average word length, and so on. I was grateful for the guidance of my committee; the new direction was compelling, and I could not wait to see what results I would obtain.

However, after connecting with the LDA and commencing recruitment, uptake was slow. A few families responded, but the numbers were far lower than I had hoped. I reached out to additional LDAs to aid in recruitment and asked the original LDA to re-run their ads. A few more participants trickled in, but the numbers were still low. So, I decided to expand

eligibility up to Grade 6 and add parent interviews to maximize the amount of data I could collect from the participants. I invited everyone — families who participated in Stage 1, families who declined to participate, and even those who never responded — to participate in Stage 2. And, of course, I sent many follow-up emails. I was expecting that only a few would consent to be interviewed, but I was moderately optimistic about this new direction. Yet, I was pleasantly surprised when many families eagerly signed up to participate in the interviews. Not only that, but I had a steady influx of new participants — the additional advertising and follow-up emails had paid off. Perseverance was key; recruitment, as I learned, can be a slow process, and while it was tempting to give up in those first few weeks and deem the project a failure, I am glad I stuck with it and kept going.

Recruitment was not the only part of my study that caused me difficulty. While I had initially planned on having my student participants control my screen during the writing task, complications arose that made this process untenable. Instead, I shared a Google Doc with them and then shared my screen so their writing could be captured by the MS Teams recording. I realized I would also have to change how I would analyze the writing data — for instance, I could no longer assess students on conventions, as some were using spelling and grammar checkers. This proved to be a relatively easy fix; I could focus on the content of the writing and modify my observational checklist to better match my study context, rather than using a genetic tool. Unfortunately, as soon as this challenge was solved, another popped up. For some students, the screen recording failed entirely, leaving me with no record of their writing behaviours. Refusing to be deterred, I knew there had to be a solution. After thinking hard, I realized I could use Google Docs' built-in version history. While not perfect, it proved to be an incredibly useful way to gain insight into the changes students made while writing. In both cases, pragmatic thinking was key; rather than focusing on the loss of data, I reworked what I did have to gain a complete picture of students' writing.

THE JOURNEY'S END

Five months after starting recruitment, I finally wrapped up data collection. Twenty-one students had completed Stage 1 (not far off from my original goal of 30), and 21 parents and 20 students had participated in interviews. While it was time-consuming to collect and analyze all the data, it was an unparalleled learning experience. In line with Dewey's understanding of learning through experience (Elkjaer, 2018) and the importance of task complexity in fostering creativity (Yao & Yu, 2023), the

roadblocks and detours undoubtedly enriched my journey. This project gave me the confidence to tackle additional complex projects in the future and solidified my desire to continue studying writing. Indeed, the lessons I learned through my Master's thesis have carried over into my doctoral work and shaped my understanding of the research process. As Frick and Brodin (2020) note, "Creativity is transformational" (p. 217). Through sharing my story, it is my hope that other graduate students will be encouraged to embrace the twists and turns of their own research journeys and see them for the creative learning opportunities they are.

REFERENCES

- Baptista, A., Frick, L., Holley, K., Remmik, M., Tesch, J., & Åkerlind, G. (2015). The doctorate as an original contribution to knowledge: Considering relationships between originality, creativity, and innovation. *Frontline Learning Research*, 3(3), 55-67. <https://doi.org/10.14786/flr.v3i3.147>
- Brodin, E. M. (2016). Critical and creative thinking nexus: Learning experiences of doctoral students. *Studies in Higher Education*, 41(6), 971-989. <https://doi.org/10.1080/03075079.2014.943656>
- Elkjaer, B. (2018). Pragmatism: Learning as creative imagination. In I. Knud (Ed.), *Contemporary theories of learning* (2nd ed., pp. 66-82). Routledge. <https://doi.org/10.4324/9781315147277-5>
- Frick, B. L., & Brodin, E. M. (2020). A return to Wonderland: Exploring the links between academic identity development and creativity during doctoral education. *Innovations in Education and Teaching International*, 57(2), 209-219. <https://doi.org/10.1080/14703297.2019.1617183>
- Hildebrand, D. L. (2023). John Dewey. In S. Aiken & R. B. Talisse (Eds.), *The Routledge companion to pragmatism* (1st ed., pp. 26-34). Routledge. <https://doi.org/10.4324/9781315149592-6>
- Yao, H., & Yu, Q. (2023). Graduate student challenge-hindrance scientific research stress and creativity: Mediating effect of creative self-efficacy. *Journal of Psychology in Africa*, 33(5), 448-454. <https://doi.org/10.1080/14330237.2023.2246277>

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