

Statement of Professional Goals:

Reflecting on My Journey from Questions to a Quest

As I approach the first major milestone in my doctoral program, Portfolio I, I am reminded of the reason that brought me to this program and the fundamental question posed in my original personal statement: *What should instructional design look like for neurodivergent learners?* ([Burris, 2023](#)).

Shaped by personal frustrations as a learner with ADHD and anecdotal observations as an instructional designer, I approached this question with the enthusiasm of someone who had identified a critical gap but lacked the methodological rigor to address it systematically. As I reflect on the origins this journey, remember my experiences as a neurodivergent learner, and consider my thoughts as an instructional designer, I recognize that what started first as a question born of the desire to create inclusive approaches has now turned into a quest to reduce the number of impediments in digital learning environments in order to support neurodivergent learners and their own quest to fully participate and succeed. Due to the coursework I completed during my first year, I am seeing my aspirations shift from intuitive advocacy to an evidence-based, research and design-focused agenda that seeks to bridge theory and practice.

Academic Goals: Building Expertise Through Strategic Coursework

Epistemological Evolution: From Constructivism to Hermeneutic Integration

My first course in the program laid the foundation for me to understand my epistemological stance and helped me evolve my perspective, my thoughts, and my language. Challenged to evaluate, expand, and evolve, *EDUC 800: Ways of Knowing* introduced me to hermeneutic inquiry and challenged my theoretical reliance on constructivism ([Burris, 2024c](#)). By highlighting the roles of context, power, and interpretive bias, hermeneutics shifted my research to a truly learner-centered approach that centers neurodivergent voices. As I stated in the closing section of my final paper, "...what I will carry forward is this: while constructivism emphasizes the learner's role in constructing knowledge and

meaning through their interactions with the text and the learning context, hermeneutics focuses on how the text, context, and power structures shape the learner's interactions" ([Burris, 2024c, p. 16](#)).

Research Methods Foundation: From Uncertainty to Confidence

My coursework in *EDRS 810: Problems and Methods* and *EDRS 812: Qualitative Methods* was pivotal in shaping the beginnings of my research identity as a qualitative researcher.

At first, I found research design overwhelming. However, while working on my qualitative research proposal in EDRS 810, I learned how to combine phenomenological inquiry with design-based research ([Burris, 2024a](#)). I also realized I could broaden my perspective by including relational theory, which helps balance the social and emotional sides of learning with the content and skills focus of traditional instructional design. These lessons have allowed me to develop a hybrid approach that now forms the basis of my three-manuscript dissertation and supports both analysis and intervention.

EDRS 812: Qualitative Methods was just as impactful. For my first empirical study, I interviewed neurodivergent college students about their experiences in digital learning environments, building on my earlier proposal from EDRS 810 ([Burris, 2024a](#)). The case study showed that neurodivergent learners use AI support differently: autistic students prefer personalized content, while students with ADHD look for help managing tasks ([Burris, 2024c](#)). These insights later helped shape the frameworks I developed in another class.

Currently, I am taking *EDRS 811: Quantitative Methods*. Although it is the last in the mandatory research methodology courses, I plan to employ a mixed-methods approach in my research and view this course as vital to my strategic plan.

AI Integration: From Skepticism to Strategic Implementation

I decided to take a class outside my usual field and enrolled in the College of Engineering and Computing. My background in education was different from most of my classmates, but I appreciated the chance to learn from a new perspective. *AIT 790: AI in Education* changed my view of AI from

skepticism to seeing its strategic potential (Burris, [2025f](#), [2025g](#)). My literature review showed that many AI tools miss the specific needs of neurodivergent learners but also highlighted AI's promise for improving cognitive accessibility. Exploring the Private Learning Intelligence (PLI) framework provided me with ideas for protecting data while supporting personalized learning, such as offering modular content and implementing real-time task management. Learning about federated learning approaches helped me address ethical concerns about privacy and bias in a framework I developed for another class. This technical knowledge now informs my approach to ethical AI use in education.

Primary Specialization: Learning Technologies Design Research

My specialization in Learning Technologies Design Research (LTDR) gives me the foundation I need for my research. In my first year, I created two frameworks to support this work. The first is my Neuro-Informed Instructional Design (N2ID) Framework, which combines evidence-based cognitive strategies with personalized instructional design ([Burris, 2025e](#)). The second is my Neuro-Embracing Educational Design (NEED) Framework ([Burris, 2025d](#)), which uses Romiszowski's Skills Schema and generative AI to build personalized learning paths based on qualitative research and participant feedback.

Supporting Area: Neuro-Informed Instructional Design

Right now, I am taking courses to support my secondary focus in Cognitively Accessible Instructional Design. To strengthen the psychological aspect of my research ([Burris, 2025a](#)), I am enrolled in *EDEP 820: Teaching, Learning, and Cognition, which will enable me* to better understand how people think and learn. This interdisciplinary approach demonstrates that designing for neurodivergent learners involves rethinking how we support learning through neurologically informed design, rather than merely making accommodations for challenges.

Research Goals: A Three-Pronged Investigation

My Strategy: A Three-Manuscript Dissertation

The goal of my strategic plan is to identify and address the cognitive gaps that exist at the intersection of instructional designers, course instructors, and neurodivergent learners. As illustrated in my conceptual framework ([Burris, 2025b](#)), I see gaps where continuous negotiations occur and tension is created between instructional designers $\leftrightarrow$ neurodivergent learners, neurodivergent learners $\leftrightarrow$ course instructors, and course instructors $\leftrightarrow$ instructional designers. It is in these moments of tension that I can envision the potential of Artificial Intelligence (AI) to address these gaps through the creation of personalized learning pathways, executive function support, cognitive load support, enhanced flexibility, collaborative design, tailored content, and dynamic engagement.

Built on this approach, my research is crystallizing into three interconnected manuscripts that will form my dissertation:

Manuscript 1: Current Practice Assessment

While my current course, *EDIT 891: Design Research Independent Study – AI Approaches to Learning Gaps*, serves as the basis for this study, it also builds upon my EDRS 812 findings ([Burris, 2025c](#)) that revealed significant gaps in both awareness and implementation of cognitively accessible design principles. As a result, this study will conduct an exploratory needs analysis using qualitative research methods to document four key areas regarding how instructional designers consider and support neurodivergent learners:

1. The knowledge, best practices, and regulatory guidelines they follow
2. Their process for design decisions
3. The limitations or constraints they encounter
4. The vision for the future inclusion of AI to address design gaps

The results from this phase will help guide the creation and testing of future AI tools and frameworks that support neurodiverse-inclusive design in the next stages of my research.

Manuscript 2: Faculty Knowledge and Implementation

This study will examine higher education instructors' understanding of cognitive accessibility and their accommodation practices. Through this study, I aim to explore the complexities and gaps between disability mandates and classroom implementation in digital learning environments.

Manuscript 3: Learner-Centered Needs Assessment

My last study will look at what neurodivergent learners need in digital environments and how AI can help meet those needs. I will focus on how to keep improving learner-centered teaching, design, student agency, awareness, technology, and resources.

Career Trajectory: Virginia-Based Academic Positions

I hope to become a faculty member at a university in Virginia, such as George Mason University, Virginia Tech, or the University of Virginia. My goal is to advance research on instructional design for neurodivergent learners and help train the next generation of instructional designers.

Strategic Professional Development Through Mentorship: My Graduate Research Assistant Position

Dr. Weiss has shown me that being a successful academic is about more than just research skills. It also means developing professionally in many areas. Her advice on balancing focused research with broader service has helped me shape a career path that supports both my interests and the needs of the institution.

This well-rounded preparation means that when I enter the job market, I will have experience in three key areas: publishing impactful work, making meaningful service contributions, and leading research. The scoping review project highlights my ability to do systematic research and work well with senior faculty, which are both important for success in academia.

Integration of Coursework Learning

Moving from my original goal to this strategic plan shows how much I have learned through my coursework. These insights give me a strong foundation as I prepare for my comprehensive exams, helping me bring together everything I have learned so far.

This plan sets me up to be a leader in the field of cognitively accessible, neuro-informed instructional design. It also allows me to contribute to research and help prepare educators to support diverse learners. My main question, *what should instructional design look like for neurodivergent learners*, remains at the heart of my work. However, now it is supported by theory, research, and a clear vision. I envision a future where neurodivergent learners can thrive in environments that capitalize on their strengths, with personalized pathways and a supportive, innovative community.

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