Personal Statement and Research Analysis Task

**Your statement provides the Ed.D. Graduate Admissions Committee with information regarding your professional strengths, goals, and communication skills.**

**1. Describe your professional goals and why the Ed.D. in Secondary and Middle Grades Education degree helps you accomplish those goals. Name at least one specific instructional or classroom issue you would like to examine and improve through completing the degree program (maximum 250 words)**

A KSU Ed.D. will help me achieve my mission of equipping underprivileged youth to overcome key academic challenges. It will hone my ability to help students master the key concepts that often prevent them from graduating or gaining acceptance to their preferred colleges. Eventually, I plan to train volunteers in self-efficacy, motivation, and technology to coach struggling students in high-failure math courses and SAT math. My Ed.S. capstone explores ways to foster “college-bound identities” (Ober et al., 2020, p. 120) to help more underprivileged students apply to elite universities. With proper guidance, I believe many more could succeed. Through my Ed.D. thesis, I aim to perfect a program to increase these rates. Having already worked with Dr. Glassmeyer on this topic, I would enjoy continuing the work. Dr. Edwards’ interest in teaching for social justice also aligns well with my topic.

I have several research interests beyond the focus of my capstone. All center around my passion to empower underprivileged students in math. As many KSU math professors are committed to social justice, I am confident I could find a topic aligned with a professor’s research interests. For example, Dr. Lawler’s focus on equity and detracking complements my passion of expanding access to AP math, which has led to record enrolment at my school, while my interest in leveraging technology to increase minority students’ math EOC pass rates aligns with Dr. Glassmeyer’s expertise in technology-based math teaching and Dr. Gardner’s work on equity in STEM education.

**2. The Ed.D. in Secondary and Middle Grades Education degree is designed to be fully online for full-time teachers who balance completing degree with other responsibilities (family, coaching, etc.). This balance takes consideration to ensure the rigorous standards in courses are met. How do you envision balancing the degree program workload with the other demands in your life? (maximum 250 words)**

My success in the Ed.S. program demonstrates my ability to navigate the rigors of SMGE courses. I have maintained a 4.0 in my Ed.S., and professors have often requested to use my papers as exemplars. The key to meeting the challenges that confronted me during my Ed.S. was “flow,” an autotelic absorption in the task at hand (Nakamura et al., 2019). A standout moment from MAED 7719 exemplifies this: I created an activity that taught the essence of rational functions using graphing technology. The excitement of leveraging this technology to make complex concepts accessible to my students energized my work and thought process, and the lesson plan seemed to write itself. This passion-driven efficiency has underpinned my experiences in all my classes, since each has felt intrinsically important to my mission as a math teacher.

Another key to my success been careful timing of life events. I wanted to study for this degree years ago, but prioritized the needs of my children over my personal ambitions. Now that my daughters are in college, I can dedicate ample time to both my teaching position and my graduate studies. Disciplined planning is the final ingredient. I always create long-term plans with intermediate milestones that help me balance the demands of teaching and family responsibilities. This combination of factors has helped foster my success. I fully understand – and welcome – the rigors of the program and am eager to continue my journey.

**3. Read the following article. Then answer the following questions:**

**Kirschner, P. A., & De Bruyckere, P. (2017). The myths of the digital native and the multitasker. *Teaching and Teacher Education*, *67*, 135-142.**

**-Link to the article:** [**https://gwern.net/doc/psychology/2017-kirschner.pdf**](https://gwern.net/doc/psychology/2017-kirschner.pdf)

**-I also attached the article.**

**a. Explain the problem or issues to which the author is responding. (maximum 250 words)**

I would have liked to have submitted my capstone paper on increasing applications to elite universities among underprivileged students, but am still enrolled in the Capstone Seminar and have not yet completed it. Therefore, I am submitting the article response.

Kirschner and Bruyckere (2017) confront two pervasive theories in pedagogy. First, that today’s generation, immersed in technology all their lives, are “digital natives” with new learning preferences and an inherent facility with digital tools. Second, the related theory of multitasking holds that people can process two or more cognitive tasks simultaneously, like a computer. Both theories are myths. Many so-called “digital natives” possess only rudimentary skills in technology, especially as it is applied to learning. The term “digital native” did not emerge from research but out of a rationalization of the media-inundated behaviors observed among children. Similarly, multitasking is simply task-switching, and results in poorer outcomes than tackling activities serially. Both myths are based on a belief in nonexistent metacognitive skills that require us to tailor education to fit the supposed unique proclivities of the current generation.

Since this article’s publication in 2017, the need to get technology right has only become more urgent. The pandemic accelerated the adoption of technology, making it more ubiquitous and accepted, by forcing remote learning even on unwilling participants (Engelbrecht & Borba, 2023). Given the increasingly widespread and urgent push for technology, a flawed approach would do even more damage than Kirschner and Bruyckere originally anticipated.

**b. Summarize the primary positions, points, or conclusions of the article (maximum 250 words)**

Beware the prophets of unprecedented change! Kirschner and Bruyckere (2017) acknowledge the importance of redesigning education to employ technology more effectively. However, they warn that tailoring educational design to the presumed metacognitive skills of a supposedly unique generation hinders learning. The focus on the myth of digital natives and multitasking obscures students’ need for explicit digital literacy instruction and guidance on using technology for learning. Multitasking, especially with laptops, may also damage cognitive resources and weaken students’ ability to focus. To effectively redesign education for this generation, we must examine the unique characteristics and interplay between learners, teachers, and technology, rather than assuming generational differences based on presumed cognitive capacities.

While these warnings have validity, we cannot let the authors’ conservative stance prevent us from recognizing a real revolution when it does occur. This generation may not be radically different in terms of cognitive capacities, but AI may bring the most significant shift in education since the invention of writing. Some scholars predict that AI will “hyper-personalize” education by detecting student characteristics and tailoring education to meet their needs more effectively than we ever imagined. Intelligent tutoring systems could mine databases of student interactions to identify “stereotype” profiles that are refined with every interaction (Engelbrecht & Borba, 2023), offering just the right support to promote “productive struggle” without leading to dead ends (National Council of Teachers of Mathematics, n.d.). While caution regarding new cognitive capacities is justified, we must remain open to the possibility of revolutions in other areas.

**c. Reflect upon the ramifications of the article in terms of your pedagogy, curriculum, policy, or some other focus within your specific context (maximum 250 words)**

Proponents of the digital native/multitasking mentality fall prey to the “hands-on without being minds on” mistake common to all “activity-focused” instruction (Wiggins & McTighe, 2005, p. 16). Such activities lead nowhere intellectually, because they are not purposefully directed at an important concept; they identify learning with the activity (Wiggins & McTighe, 2005). This mindset assumes students already possess the necessary cognitive skills, prompting proponents to find methods that engage them. While lessons may be engaging, they often fail to convey concepts of lasting value. Instead, teachers should prioritize the “enduring understandings” essential to their students’ mathematical survival and determine what activity best equips them to gain the desired knowledge (Wiggins & McTighe, 2005). Given the power of technology to kindle conceptual understanding through experimentation on infinitely malleable mathematical representations, I anticipate using it more in my lessons. However, I choose the vehicle only after determining its destination.

The authors’ key points also apply to my math class in a lower SES high school. I must ensure any new techniques are research-backed, to avoid myths like “digital natives” (Kirschner & Bruyckere, 2017) and prevent wasting limited class time. Many of my students lack digital literacy, so I must teach them to use technology productiveand recognize how it can undermine their efforts. Since technology encourages multitasking, I must teach my students the importance of focus in every career and help them develop this skill. I must also know when to set technology aside, to avoid distraction (Kirschner & Bruyckere, 2017, p. 136).

References

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