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APPLYING COMPETENCIES ACROSS DISCIPLINES TO ENHANCE COMPUTATIONAL THINKING AND PROFESSIONAL PERFORMANCE

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ABSTRACT

Aim/Purpose	This study examines strategies to support the need to enhance computational thinking and professional performance across disciplines through the integration of writing across the curriculum (WAC) in graduate and doctoral programs
Background	This study explores how combining rhetorical theory and computational thinking can improve students' communication skills, critical thinking, and problem-solving abilities, preparing them for real world application and the complexities of modern global challenges
Methodology	Qualitative research was used to gather the lived experiences of higher education instructors
Contribution	This research contributes to a deeper understanding of how WAC can be effectively integrated into graduate and doctoral programs, enhancing scholarly communication and professional performance.
Findings	Discipline-specific writing skills, critical thinking, information literacy, and proficiency in writing assist with student success in various industry sectors.

The full paper has been published as the following and is being presented at this conference:

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Applying Competencies Across Disciplines

Recommendations for Practitioners	Integrate WAC strategies across disciplines in graduate and doctoral programs. Focus on developing discipline-specific writing skills tailored to real world application.
Recommendations for Researchers	Conduct further studies on the specific application of WAC within graduate and doctoral programs in additional fields. Explore innovative methods for assessing and evaluating writing skills across disciplines.
Impact on Society	By improving the quality of scholarly communication and professional performance, this approach can lead to more effective transdisciplinary collaborations, better-prepared graduates, and ultimately contribute to addressing complex global challenges
Future Research	Longitudinal studies tracking the impact of WAC integration on career outcomes. Comparative analyses of WAC implementation across different cultural and educational contexts. Exploring the role of emerging technologies in enhancing WAC strategies and computational thinking skills.
Keywords	transdisciplinary collaboration, writing across curriculum, computational thinking, higher education writing, rhetorical theory

AUTHORS



Dr. Imani Akin earned an MS in Special Education, an EdD in Educational Leadership, and an MBA in Data Analytics. She is deeply committed to fostering collaboration that effectively addresses the academic and social-emotional needs of all learners. As an educational leader, Dr. Akin has designed and led impactful professional development sessions, empowering educators to enhance their capacity for implementing response to intervention strategies in both K-12 and higher education environments. Dr. Akin is a faculty member of the doctoral research department and serves as a dissertation chair. Recognized for her passion for research, Dr. Akin was awarded a grant to lead a research team focused on exploring the needs of doctoral graduates as they seek to launch and expand their scholarly activity. This research was later published and evolved into a model for identifying and engaging in research to build new knowledge. Dr. Akin continues this work and still serves as a Research Fellow to support research activities. A strong advocate for the power of collegiate dialogue, Dr. Akin consistently seeks out opportunities to collaborate, present, and publish research, furthering the ongoing growth and innovation within the educational community.



Dr. Matasha MurrellJones earned a Doctorate in Organizational Leadership and an MBA in International Business. She also earned graduate certificates in Data Analytics and Project Management. She is an accomplished and results-oriented Director of Learning with a proven track record in designing and implementing successful educational programs. Dr. MurrellJones is focused on the creation of innovative learning strategies to promote inclusion and educational support in higher education. Matasha's leadership extends to her role as Lead Faculty, where she oversees program strategy, faculty management, and academic excellence. Her dedication to advancing knowledge is evident in her global publications and presentations, where she explores topics such as strategic partnering for dissertation development, cultural diversity in multinational teams, supporting scholarship for graduates, and bridging the gap

between theory and application in academic writing. Dr. MurrellJones has attained a research fellowship where she studied best practices for mentors when partnering with doctoral candidates for the successful completion of the doctoral project. Dr. MurrellJones continues to seek opportunities to learn, engage in research and presentations to support the student learning experience.



Ramona Burress, PharmD, is a healthcare leader with extensive experience in patient engagement and health equity. As the former Head of Patient Engagement and Insights at Takeda Pharmaceuticals, she played a pivotal role in driving global health equity initiatives. Ramona has also held leadership positions at Janssen Pharmaceuticals of Johnson & Johnson, where she focused on increasing diversity in clinical trials. A licensed clinical pharmacist with expertise in infectious diseases and oncology, Ramona serves on the boards of Susan G. Komen Chicago and the University of Chicago's Women's Board. A supporter of educational enrichment, Ramona was elected and served two terms on the local school council and continues to serve as the Chair of Friends of Kenwood Academy High School.

Dedicated to improving community health, Ramona serves as the board chair of ONYX360 and the MarSid Fund, health organizations. Ramona is deeply committed to advancing healthcare access and outcomes, with a focus on underserved populations.