

PROMOTION RECOMMENDATION
The University of Michigan-Dearborn
School of Education

Approved by the Regents
May 15, 2008

Christopher J. F. Burke, assistant professor of science education, School of Education, is recommended for promotion to associate professor of science education, with tenure, School of Education.

Academic Degrees:

Ph.D. 2001	University of Illinois, Curriculum and Instruction
M.S. 1994	University of Illinois, Curriculum and Instruction
B.S. 1991	University of Illinois, Journalism

Professional Record:

2001 - present	Assistant Professor of Science Education, University of Michigan-Dearborn
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Summary of Evaluation:

Teaching: Professor Burke's teaching is rated as significantly capable. Since his appointment in 2001, he has taught a number of required courses in the School of Education's teacher certification programs, working with both elementary and secondary level pre-service teachers. Professor Burke teaches undergraduate and graduate courses. His specific area of teaching expertise is in science education. He enriches his courses with perspectives gained from his major research interests – a constellation of issues dealing particularly with teaching and learning challenges within urban, low income, and disadvantaged communities and student populations. Professor Burke has played a major role in the development of several science education classes especially as part of his work with the Inquiry Institute. Using required School of Education course evaluation forms (1 = poor to 5 = outstanding) Professor Burke's student ratings average 3.8 and more than 70% of his students rate him as 4 or 5.

Research: Professor Burke's research and scholarship is rated as excellent. He has distinguished himself by focusing on science education in urban and diverse communities and more specifically, informing a national science curricula that seeks to address the achievement gap, the need for a diverse community of mathematicians and scientists, and urban school renewal and reform. This is an area that many experts in science education agree needs scholarly leadership and new theoretical paradigms. By shifting the scholarly focus away from achievement reports and toward ways that teachers can make qualitative changes, Professor Burke has successfully put in place the foundations for this new agenda.

Since joining the faculty Professor Burke has seven publications in respected journals at both the state and national levels. His scholarship not only examines policy and procedures in science education, but also translates theory into practical application in the schools and community. His view of science as a universal discipline with important, practical implications is the dominant theme of his scholarship. He elaborates on ways to cast science as relevant to all aspects of life. Professor Burke demonstrates the adaptability of science instruction to compliment a wide variety of teaching environments and philosophies. Finally, he explores ways in which college and school teachers might communicate to enhance their interactions and improve science

instruction. In addition, Professor Burke has presented thirteen research/teaching papers at national conferences including the American Educational Research Association and the National Association for Research in Science Teaching, two of the most prestigious organizations in the field.

It is important to note that the nature of Professor Burke's scholarly work involves a substantial time commitment. He works directly with teachers and schools as he cultivates relationships with school personnel in order to study curricular transformations. Such relationships take time and are based on trust and mutual respect. Thus, Professor Burke's strong record of publications and presentations, as well as his significant time commitment to teaching epitomize the qualities of a successful teacher/scholar.

It is also important to note the collaborative and interdisciplinary nature of Professor Burke's scholarship. In his role in the UM-Dearborn Science Inquiry Institute as well as his participation in the CASL Writing Pilot project, and his collaboration with faculty in the Women's and Gender Studies Program, Professor Burke remains consistent with the collaborative inquiry stance he has taken in his research endeavors.

Recent and significant Publications:

- Burke, C. J. F.; Adler, M.; Linker, M., "Listening to the frontline: The power of teachers' experiences for shaping localized and meaningful curriculum for urban schools." *Multicultural Perspectives in Education* (Accepted, March 2007).
- Burke, C. J. F., "Neighborhood science stories: Bridging science standards and urban student's lives." *Teaching Education*. Vol. 18, no. 4, 2007, pp. 357-367.
- Burke, C. J. F.; Burke, W., "Problematizing the role of expert within small scale school-university partnerships." *The Teacher Educator*. Vol. 43, No. 3, 2007, pp. 264-288.
- Burke, C. J. F., "Seeing the community as an ecosystem." Trends and Issues: *The Journal of the Florida Council for the Social Studies*. 2005, pp. 5-8.
- Burke, C. J. F.; Burke, W., "Student-ready schools for every student: from elementary to high school." *Childhood Education*. Vol. 81, no 5, 2005, pp. 281-286.
- Burke, C. J. F.; Luera, G; Moyer, R., "Preparing pre-service elementary school teachers to teach science: An evaluation of the development and implementation of a reform program at the University of Michigan-Dearborn." *Michigan Journal of Teacher Education*. Vol. 1, No. 2, 2004, pp. 42-47.
- Burke, C. J. F., "Challenging the high tech tapestry by adding diverse threads from the lives of children, in science teaching and learning" in D. Tippins, T. Koballa, & B. Payne (Eds.) *Learning from Cases: Unraveling the Complexities of Elementary Science Teaching*. Allyn & Bacon. Boston, 2001.

Service: Professor Burke's service is rated as excellent. He has served as a member of the Curriculum Committee, the Educational Technology Search Committee, Portfolio Committee, Capital Funds Steering Committee, MA Review Committee, Alumni Survey Committee, and Science Education Periodic Review Committee. In addition to this work, he is an integral member of the School of Education's Inquiry Institute and participates in all aspects of their work. He was also the first science education faculty to participate as a MITTEN faculty support member. With colleagues from the Inquiry Institute he has been involved in the development and reform of numerous courses, Professor Burke is a member of the CASL Writing Pilot Project, and was a member of the General Education Assessment Committee, the Child Development Center Advisory Board, the Woman's Commission, the SLRC Building

Committee, and is a Women's Studies Faculty member. At the national level, Professor Burke, was elected (twice) to serve as the secretary and treasurer of the Science SIG on Teaching and Learning for the American Educational Research Association. He has also served as a proposal reviewer for AERA.

External Reviewers:

Reviewer A: "Professor Burke's work is an excellent example of engaged scholarship...and helps address and solve problems and issues for people who live in the most-needy communities around our higher education institutions. Professor Burke's scholarship is based on partnerships, deals with difficult questions that change as the partnerships evolve, draws on various frameworks and knowledge (teacher education, science education, critical theory, curriculum inquiry, feminist pedagogy, to name a few) and challenges at various degrees the 'status-quo' – all signatures of engaged scholarship."

Reviewer B: "...Professor Burke has made significant contributions through publications and presentations at professional meetings and these professional contributions are focused and bring national attention to his work."

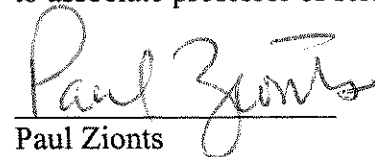
Reviewer C: "Professor Burke's research adds a very important piece to the literature regarding science education and poor communities. ...Professor Burke is clearly committed to exploring, pushing, uncovering possibilities in schools, which, I believe, is vitally important and will make an important addition to the research in this (sub) field. I do not think I can stress enough the importance of this."

Reviewer D: "It is difficult to think of a more important area of study than Professor Burke's scholarly focus. ...Professor Burke has published his work in a variety of journals aimed at multiple audiences including the science education community, teacher educators, and practitioners. His work is helping to bridge theory and practice in transforming science curricula. Moreover, his scholarly work is making important contributions to the field."

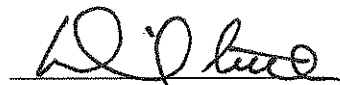
Reviewer E: "... (in his research) Professor Burke has addressed issues central to teacher education, explicated the context of diverse learners, redefined technology and content applied to students' experience, and explored the struggles between contemporary student measures and engaging science teaching."

Summary of Recommendation:

Professor Christopher Burke is a highly valued member of the School of Education and is a vital contributor to the efforts of the science education program. He is an outstanding scholar, teacher, curriculum developer, and colleague. We are very pleased to recommend, with strong support of the School of Education Executive Committee, Christopher J. F. Burke for promotion to associate professor of science education, with tenure, School of Education.



Paul Zions
Dean
School of Education



Daniel Little
Chancellor
University of Michigan-Dearborn

May 2008