## Patricia F. Campbell

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#### ACADEMIC BACKGROUND

- Ph.D. Mathematics Education, The Florida State University
- M.S. Mathematics, Michigan State University
- B.S. Mathematics, College of St. Francis, Joliet, Illinois

#### **Honors and citations (selected):**

- 2011 Louise Hay Award for Contributions to Mathematics Education, Association for Women in Mathematics
- 2008 Presidential Citation for Research and Development, American Educational Research Association
- 2008 The Alumni Association Board President's Award, University of St. Francis, Joliet, IL
- 2006 Outstanding Service to Higher Education, Tuskegee University, College of Liberal Arts and Education, Tuskegee, AL
- 2002 Board of Regents' Faculty Award for Excellence in Public Service, University System of Maryland
- 2002 Award of Excellence, Baltimore City Public School System
- 2001 Urban Impact Award, Council of the Great City Schools
- 2000 Outstanding College Professor, Maryland Council of Teachers of Mathematics

#### **FUNDED RESEARCH PROJECTS (selected):**

- Researching the expansion of a K-5 mathematics specialist program into rural school systems (with R. W. Farley, A. Ellington, V. L. Inge, and J. Whitenack). National Science Foundation, 2009-2016, \$427,751subcontract to Virginia Commonwealth University (coprincipal investigator for \$4,713,685 award; principal investigator at the University of Maryland).
- Mid-Atlantic Center for Mathematics Teaching and Learning (with J. T. Fey, J. Hiebert, and M. K. Heid). National Science Foundation, 2005-2013, \$10,781,711 (2005-2007 coprincipal investigator; principal investigator at the University of Maryland; 2007-2013 project director, principal investigator).
- Mathematics specialists in K-5 schools: Research and policy pilot study (with R. W. Farley, P. E. McNeil, V. Inge, and W. C. Bosher). National Science Foundation, 2004-11, \$554,448 subcontract to Virginia Commonwealth University (co-principal investigator for \$4,444,898 award; principal investigator at the University of Maryland).
- Mid-Atlantic Center for Mathematics Teaching and Learning (with J. T. Fey, J. Hiebert, and M.

- K. Heid). National Science Foundation, 2000-05, \$9,575,724 (co-principal investigator; principal investigator at the University of Maryland).
- Mathematics: Application and reasoning skills (MARS) (with A. R. Bowden). National Science Foundation, 1996-2002, \$5,999,000 (project director, principal investigator).
- Project IMPACT: Increasing the mathematical power of all children and teachers (with T. E. Rowan). National Science Foundation, 1994-97, \$763,158 (project director, principal investigator).
- Improving the mathematical understanding of minority students (with T. E. Rowan). National Science Foundation, 1989-95, \$2,513,950; IBM, 1991-92, \$20,000 (project director, principal investigator).
- NCTM *Standards* research catalyst conference (with M. Hala). National Science Foundation, 1990-93, \$153,088 (project director, principal investigator).

### **PUBLICATIONS** (selected)

- (\* designates refereed manuscripts; + designates solicited manuscripts)
- \*Campbell, P. F., Nishio, M., Smith, T. M., Clark, L. M., Conant, D. L., Rust, A. H, DePiper, J. N., Frank, T. J., Griffin, M. J., & Choi, Y. (2014). The relationship between teachers' mathematical content and pedagogical knowledge, teachers' perceptions, and student achievement. *Journal for Research in Mathematics Education*, 45, 419-459.
- \*+Campbell, P. F., & Malkus, N. N. (2014). The mathematical knowledge and beliefs of elementary mathematics specialist-coaches. *ZDM: The International Journal on Mathematics Education*, 46, 213-225.
- \*Clark, L. M., DePiper, J. N., Frank, T. J., Nishio, M., Campbell, P. F., Smith, T. M., Griffin, M. J., Rust, A. H., Conant, D. L., & Choi, Y. (2014). Teacher characteristics associated with mathematics teachers' beliefs and awareness of their students' mathematical dispositions. *Journal for Research in Mathematics Education*, 45, 246-284.
- Campbell, P. F., Ellington, A. J., Haver, W. E., & Inge, V. L. (2013). *Handbook for elementary mathematics specialists*. Reston, VA: National Council of Teachers of Mathematics.
- +Campbell, P. F., & Ellington, A. J. (2013). Research findings. In P. F. Campbell, A. J. Ellington, W. E. Haver, & V. L. Inge (editors). *Handbook for elementary mathematics specialists*. Reston, VA: National Council of Teachers of Mathematics.
- \*Campbell, P. F., & Malkus, N. N. (2013). Elementary mathematics specialists influencing student achievement. *Teaching Children Mathematics*, 20(3), 198-205.
- \*Campbell, P.F. (2012). Coaching and elementary mathematics specialists: Findings from research. In J. M. Bay-Williams (editor), *Professional collaborations in mathematics teaching and learning: Seeking success for all* (pp. 147-159). Reston, VA: National Council of Teachers of Mathematics.
- +Campbell, P. F. (2011). Elementary mathematics specialists: A merger of policy, practice and research. In W. F. Tate, K. King, & C. R. Anderson (editors), *Disrupting tradition: Research and practice in mathematics education* (pp. 93-103). Reston, VA: National Council of Teachers of Mathematics.

- \*Campbell, P. F., & Malkus, N. N. (2011). The impact of elementary mathematics coaches on student achievement. *The Elementary School Journal*, 111, 430-454.
- \*Campbell, P. F. (2002). Connecting instructional practice to student thinking. In D. L. Chambers (editor), *Putting research into practice in the elementary grades* (pp. 24-28). Reston, VA: National Council of Teachers of Mathematics.
- \*Campbell, P. F., & Langrall, C. (2002). Making equity a reality in classrooms. In D. L. Chambers (editor), *Putting research into practice in the elementary grades* (pp. 294-298). Reston, VA: National Council of Teachers of Mathematics.

#### **EVALUATION REPORTS (selected)**

- Campbell, P. F. (2005). Research Catalyst Conference: Studying the role and impact of standards on K-12 mathematics education (External Evaluation Report). Reston, VA: National Council of Teachers of Mathematics.
- Campbell, P. F., Bulgakov, D., *Kramer, S.*, & Yakimowski, M. (2003). *An evaluation of the Mathematics Application and Reasoning Skills Initiative: A report prepared for the Board of School Commissioners*. Baltimore, MD: Baltimore City Public School System, The BCPSS Division of Research, Evaluation, Assessment and Accountability.

### **OTHER CREATIVE ENDEAVORS (selected)**

Campbell, P. F. (1997, revised 2000). *Baltimore City Public School System Elementary Mathematics Curriculum (Kindergarten; Grades 1-5).* Baltimore: Baltimore City Public School System.

#### PROFESSIONAL PRESENTATIONS (selected)

#### **International:**

- Campbell, P. F. (2013, June). Addressing teachers' mathematical and pedagogical content knowledge through professional development. National Centre for Excellence in Mathematics and Science Teaching and Learning, University of Limerick, Limerick, Ireland
- Campbell, P. F., Smith, T., & Smith, W. (2011, June). *Teacher education and development: United States of America*. FIRSTMATH International Research Coordinators Meeting, Washington, D.C.
- Campbell, P. F. (2005, June). *Increasing achievement through systemic change*. South African delegation, U. S. Agency for International Development, College Park, MD. (invited presentation)

## **Keynote sessions:**

- Campbell, P. F. (2014, May). *Prior knowledge matters: Cross-grade linkages in the Common Core.* Keynote address at the Eastern Shore Mini-Conference, Maryland Council of Teachers of Mathematics, Wye Mills, MD.
- Campbell, P. F. (2013, November). *Making a difference every day: The work and impact of mathematics specialists*. Math Specialist Institute, George Mason University, Fairfax, VA.

Erchick, D., & Campbell, P.F. (20011, July). Research on elementary mathematics specialists: Findings and implications. Elementary Mathematics Specialist State Certification Conference, Association of Mathematics Teacher Educators, Louisville, KY.

### **Invited papers or sessions (national):**

- Campbell, P. F., & Griffin, M. J. (2015, May). *Challenges associated with measuring the impact of specialists on student achievement*. Elementary Mathematics Specialists Research Conference, Association of Mathematics Teacher Educators and The Brookhill Foundation, Waukesha, WI.
- Campbell, P. F. (2015, February). *Coaching: Impact on student achievement.* Annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL.
- Campbell, P. F., Smith, T., Clark, L., & Nishio, M. *Knowledge and perceptions of teachers and their students' achievement*. (2011, September). National Science Foundation, Arlington, VA.
- Campbell, P. F. (2011, January). Addressing challenges in the Common Core: Mathematics specialists in elementary and middle schools. Joint Mathematics Meetings, New Orleans, LA.
- Campbell, P. F., & Whitenack, J. W. (2010, January). *The development, activity and impact of elementary mathematics specialists*. Annual meeting of the Association of Mathematics Teacher Educators, Irvine, CA.
- Campbell, P. F. (2009, April). *Making a difference in urban schools*. Annual meeting of the Research Presession of the Special Interest Group for Research in Mathematics Education and the Research Advisory Committee of the National Council of Teachers of Mathematics, Washington, D.C.

### Competitively selected papers or sessions (national):

- Campbell, P.F., & Griffin, M. J. (2015, April). The impact of elementary mathematics coaches on student mathematics achievement in rural schools. Annual meeting of the American Educational Research Association, Chicago, IL.
- Campbell, P. F., Inge, V., & Delozier, D. (2014, April). *Mathematics specialists: Finding your rhythm and supporting the band*. Annual meeting of the National Council of Teachers of Mathematics, New Orleans, LA.
- Campbell, P. F., & Inge, V. (2013, April). *The pioneers speak: Lessons from successful elementary mathematics specialists*. Annual meeting of the National Council of Teachers of Mathematics, Denver, CO.
- Campbell, P. F. (2012, April). Fostering teacher knowledge that connects to student achievement. Annual meeting of the National Council of Teachers of Mathematics, Philadelphia, PA.
- Campbell, P. F. (2012, April). Advancing the goal and meeting the challenges: Research findings that inform coaching's potential for effective, on-site professional development. Annual meeting of the National Council of Supervisors of Mathematics, Philadelphia, PA.
- Campbell, P. F., Smith, T. M., Nishio, M., Jones, T., Griffin, M., Neumayer DePiper, J., & Rust,

A. (2012, February). *Designing professional development to address identified gaps in middle-grade teachers' knowledge of mathematics and pedagogy*. Annual meeting of the Association of Mathematics Teacher Educators, Fort Worth, TX.

# PROFESSIONAL PUBLIC SERVICE (selected)

### **Consultancies:**

## Federal agencies:

2014	National Science Foundation, Arlington, VA (proposal reviewer)
2010	Technical Working Group for the Institute of Education Sciences' (Department of Education) and the National Science Foundation's commission of "A study of mathematics professional development," by Mathematica Policy Research, Inc. Washington, D.C. (member)
2008	National Science Foundation, Arlington, VA (review panel member)
2006	National Science Foundation, Arlington, VA (outside expert regarding evaluation of federal STEM education programs, in response to the Academic Competitiveness Council)

# **Public/private education agencies:**

2007	City-wide Task Force on Academic Intervention, Baltimore City Public School System, Baltimore, MD. (member)
2006	Elementary Mathematics Textbook Selection Committee, Baltimore City Public School System, Baltimore, MD. (chair)
2006	Mathematics Curriculum Infrastructure Committee (Grades 6-12), Baltimore City Public School System, Baltimore, MD. (co-chair)

## **Scholarly/professional activities:**

## **National advisory boards:**

2014-2019	National Advisory Board for the National Science Foundation-supported project "Study teacher expertise and assignment in mathematics," University of Missouri
2014-2019	National Advisory Board for the National Science Foundation-supported project "Developing Common Core classrooms through rubric-based coaching," Harvard University
2007-2011	National Advisory Board for the NSF-supported project "Teachers' use of standards-based instructional materials," New York University

### **National committees and boards:**

2015-2018	Hay Award Selection Committee, Association for Women in Mathematics
2011-2013	Chair, Mentoring Committee, Association of Mathematics Teacher Educators
2010-2011	Senior Scholar Award Selection Committee, Special Interest Group for Research in Mathematics Education, American Educational Research Association
2008-2009	Program Chair, Annual meeting of the American Educational Research

	Association Special Interest Group for Research in Mathematics Education	
2008-2009	Chair, Special Interest Group for Research in Mathematics Education, American Educational Research Association (elected position)	
2007-2009	Review of Research Award Committee, American Educational Research Association	
1996-1999	Board of Directors, National Council of Teachers of Mathematics (elected position)	
Editorial boards and panels:		

2008-2010	Editorial Board, The Journal of Urban Mathematics Education
2004-2007	Editorial Panel, The learning of mathematics (69th yearbook), National Council
	of Teachers of Mathematics