

Susan A. Peters

University of Louisville
College of Education and Human Development
Room 291
Louisville, KY 40292
s.peters@louisville.edu
(502) 852-0579 (Office)
(814) 360-5288 (Cell)

EDUCATION

August 2009	THE PENNSYLVANIA STATE UNIVERSITY <i>Ph.D., Curriculum & Instruction, Emphasis area: Mathematics Education</i> Dissertation: Developing an Understanding of Variation: AP [®] Statistics Teachers' Perceptions and Recollections of Critical Moments	University Park, PA
August 2007	THE PENNSYLVANIA STATE UNIVERSITY <i>M.A.S., Master of Applied Statistics</i>	University Park, PA
August 1991	WEST CHESTER UNIVERSITY OF PENNSYLVANIA <i>M.A., Mathematics</i>	West Chester, PA
May 1987	KUTZTOWN UNIVERSITY OF PENNSYLVANIA <i>B.S., Secondary Education: Mathematics</i>	Kutztown, PA

PROFESSIONAL LICENSE AND CERTIFICATE

2002-Present	PENNSYLVANIA ADMINISTRATIVE I	Commonwealth of Pennsylvania
2002-Present	PENNSYLVANIA SUPERVISORY I	Commonwealth of Pennsylvania
1991-Present	PENNSYLVANIA INSTRUCTIONAL II <i>Secondary Mathematics</i>	Commonwealth of Pennsylvania
1987-1991	PENNSYLVANIA INSTRUCTIONAL I <i>Secondary Mathematics</i>	Commonwealth of Pennsylvania

ACADEMIC AND PROFESSIONAL EXPERIENCE

2009-Present	UNIVERSITY OF LOUISVILLE <i>Assistant Professor</i> <ul style="list-style-type: none">• Teach middle school and secondary mathematics methods courses• Member of Geometry Assessments for Secondary Teachers (GAST) team	Louisville, KY
2007-2009	JOURNAL FOR RESEARCH IN MATHEMATICS EDUCATION <i>Assistant Editor (Assistant Editor-Designate 2007-2008)</i> <i>National Council of Teachers of Mathematics</i> <ul style="list-style-type: none">• Prepare manuscripts for review• Prepare editorial panel reports• Process manuscripts for publication as part of editorial team	University Park, PA
2003-2009	MID-ATLANTIC CENTER FOR MATHEMATICS TEACHING AND LEARNING <i>MAC-MTL Fellow</i> <i>The Pennsylvania State University</i> <ul style="list-style-type: none">• Assisted in the development of curricular materials for a data analysis course for prospective secondary mathematics teachers• Assisted in interview schedule development, interviews, and analysis of interviews with prospective secondary mathematics teachers to investigate distributional reasoning• Contributed to a comprehensive literature review of research related to teacher knowledge	University Park, PA

- Participated in instrument development and data collection from classroom observations and interviews to investigate prospective secondary mathematics' teachers engagement with mathematical processes in interview and classroom settings
- Analyzed data to investigate prospective secondary mathematics' teachers engagement with mathematical processes in interview and classroom settings
- Co-conducted three case studies of prospective secondary mathematics teachers

2006-2007 **THE PENNSYLVANIA STATE UNIVERSITY** University Park, PA
Supervisor of record, CI 495C: Clinical Applications of Instruction – Secondary Education

- Supervised 7 prospective secondary mathematics teachers in their middle-level field experience in the spring semester of 2007
- Supervised 11 prospective secondary mathematics teachers in their middle-level field experience in the fall semester of 2006
- Conducted on-campus seminars with student cohort
- Collaborated with methods course instructor (for the third of three mathematics methods courses) and other supervisors to coordinate seminar topics with methods course topics and assignments

2005-2006 **THE PENNSYLVANIA STATE UNIVERSITY** University Park, PA
Instructor of record, MTHED 412: Teaching Secondary Mathematics II

- Taught the third of three mathematics methods courses with 14 prospective secondary mathematics teachers in the spring semester of 2006
- Taught the third of three mathematics methods courses with 21 prospective secondary mathematics teachers in the fall semester of 2005
- Collaborated with supervisors and general education methods instructors as part of students' middle-level field experience and courses "block"
- Participated in ongoing course development

1987-2003 **TWIN VALLEY HIGH SCHOOL** Elverson, PA
Teacher

- Taught mathematics courses including: algebra I, algebra II, AP[®] calculus, AP[®] statistics, computer science, general mathematics, geometry, precalculus, statistics
- Served on committees including: strategic planning committee, mathematics curriculum committee, technology committee
- Wrote curriculum for courses including: calculus, precalculus, statistics

PUBLICATIONS AND CREATIVE WORKS

BOOKS

Carroll, A., Carver, R., Peters, S., & Ricks, J. (2003). *Preparing for the Statistics AP[®] Exam: With Stats: Modeling the world*. Boston, MA: Pearson.

JOURNAL ARTICLES

Zbiek, R. M., Conner, A., & Peters, S. (submitted). A mathematical processes approach for examining teachers' mathematical understandings and classroom practices.

Peters, S. (in press). Engaging with the art and science of statistics. *Mathematics Teacher*. Reston, VA: National Council of Teachers of Mathematics.

CONFERENCE PROCEEDINGS

Peters, S. (in press). Conceptions of statistical variation, *Proceedings of the 31st annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, Atlanta, GA.

Peters, S. (2008). Robust understanding of variation: An interaction of three perspectives. In O. Figueras, & A. Sepúlveda (Eds.), *Proceedings of the Joint Meeting of the 32nd Conference of the International Group for the Psychology of Mathematics Education and the 30th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Vol. 1, p. 300. Morelia, Michoacán, México: PME.

Heid, M. K., Perkinson, D., Peters, S., & Fratto, C. (2005). Making and managing distinctions: The case of sampling distributions. In G. M. Lloyd, M. Wilson, J. L. M. Wilkins, & S. L. Behm (Eds.), *Proceedings of the 27th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Roanoke, VA: PME-NA.

OTHER PAPERS

Zbiek, R. M., Peters, S., Boone, T., & Johnson, K. (2009, April). *Locally logical mathematics: An emerging teacher honoring both students and mathematics*. Paper presented at the 2009 American Educational Research Association (AERA) Annual Meeting, San Diego, CA.

Heid, M. K., Peters, S., Fratto, C., & Perkinson, D. (2006). *Making and managing distinctions: The case of sampling distributions*. Paper presented at the Research Pre-session of the NCTM 2006 Annual Meeting and Exposition, St. Louis, MO.

OTHER CURRICULUM MATERIALS

Kucera, L., Peters, S., & Swaynos, J. (2001). *JMP INTRO[®] Lab Activities (JILA Project)*, from http://courses.ncssm.edu/math/Stat_Inst2001/Intro/Introduction.htm

OTHER PUBLICATIONS AND CREATIVE WORKS

Carver, R., & Peters, S. (2002). *Web guide for AP[®] Statistics*, from http://apcentral.collegeboard.com/apc/members/courses/teachers_corner/21971.html

PRESENTATIONS

PRESENTATIONS (INTERNATIONAL AND NATIONAL)

Peters, S. (Accepted, 2009, September). Conceptions of statistical variation, Research presentation at the 31st annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Atlanta, GA.

Peters, S. (2009, June). Conceptions of statistical variation, Poster presentation, United States Conference on Teaching Statistics, Columbus, OH.

Zbiek, R. M., Heid, M. K., Blume, G., & Peters, S. (2009, April). Mathematical processes lens for prospective secondary teachers' mathematics, Research Pre-session of the National Council of Teachers of Mathematics 2009 Annual Meeting and Exposition, Washington, D.C.

Peters, S. (2008, July). Robust understanding of variation: An interaction of three perspectives, Research presentation at the 32nd Conference of the International Group for the Psychology of Mathematics Education and the 30th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Morelia, Mexico.

Heid, M. K., & Peters, S. (2006, April). Making and managing distinctions: The case of sampling distributions, Research Pre-session of the National Council of Teachers of Mathematics 2006 Annual Meeting and Exposition, St. Louis, Missouri.

Heid, M. K., Peters, S., Fratto, C., Perkinson, D. (2005, October). Making and managing distinctions: The case of sampling distributions, Research presentation at the 27th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Roanoke, Virginia.

Short, T., Krow, C., Peters, S., & Ricks, J. (2002, August). Experiences in Advanced Placement Statistics, Joint Statistical Meetings (JSM) sponsored by the American Statistical Association, Institute of Mathematical Statistics, International Biometrics Society, and the Statistical Society of Canada, New York City, New York.

PRESENTATIONS (REGIONAL)

Peters, S., Fratto, C., Heid, M. K. (2007, October). Investigating statistical concepts from a distributional perspective, National Council of Teachers of Mathematics (NCTM) Regional Conference, Richmond, Virginia.

Peters, S. (2003, February). Fathom[™] Dynamic Statistics software: It's not just for statistics!, Research for Better Schools (RBS), State College, Pennsylvania.

- Peters, S. (2003, January). Using software in AP[®] Statistics and The 2002 AP[®] Statistics Reading, AP[®] Mathematics & Computer Science Conference for the Middle States Region of the College Board, Maritime Institute of Technology, Linthicum Heights, Maryland.
- Peters, S. (2002, November). Using Software in AP[®] Statistics and The 2002 AP[®] Statistics Reading, AP[®] Mathematics & Computer Science Conference for the Middle States Region of the College Board, Nevele Grand Resort, Ellenville, New York.
- Peters, S. (2001, November). One-day experienced workshop for the College Board in AP[®] Statistics, Mainland Regional High School, Linwood, New Jersey.
- Peters, S. (2000, March). One-day introductory workshop for the College Board in AP[®] Statistics, Taylor Allderdice High School, Pittsburgh, Pennsylvania.
- Peters, S. (1995, May). Public key cryptography, Rutgers University Leadership Program in Discrete Mathematics Follow-up Session, Piscataway, New Jersey.

PRESENTATIONS (STATE)

- Peters, S., & Cuff, C. (2003, August). Data analysis in the math content area, Governor's Institute for Data Driven Decision Making, Gannon University, Erie, Pennsylvania.
- Peters, S., & Cuff, C. (2002, August). Data analysis in the math content area, Governor's Institute for Data Driven Decision Making, Gannon University, Erie, Pennsylvania.
- Ricks, J., & Peters, S. (2000, March). Why you should teach AP[®] Statistics – Everything you need to know!, Pennsylvania Council of Teachers of Mathematics Conference, Harrisburg, Pennsylvania.
- Bohan, J., Cuff, C., Peters, S., & Ricks, J. (1998, March). Grading the AP[®] Statistics test: A report by the four Pennsylvania Readers, Pennsylvania Council of Teachers of Mathematics Conference, Harrisburg, Pennsylvania.

PRESENTATIONS (OTHER)

- Peters, S. (2008, August). Work session discussion focused on analysis of content interview data using examples from dissertation data, MAC-MTL Doctoral Student Research Conference, State College, Pennsylvania.
- Jansen, A., Badertscher, E., Hwang, S., & Peters, S. (2007, August). Panel: Developing a researchable question for the dissertation, MAC-MTL Doctoral Student Research Conference, Newark, Delaware.
- Peters, S. (2007, August). Work session discussion focused on robust understanding of variation using examples from pilot study, MAC-MTL Doctoral Student Research Conference, August, Newark, Delaware.
- Peters, S. (2006, August). Roundtable discussion focused on methodology and data collection for examining teachers' perceptions and recollections of critical moments in their developing understandings of statistical variation, MAC-MTL Doctoral Student Research Conference, College Park, Maryland.
- Peters, S. (2005, August). Roundtable discussion focused on brainstorming potential research questions for dissertation study to examine secondary teachers' conceptions/understandings of statistical variation, MAC-MTL Doctoral Student Research Conference, State College, Pennsylvania.
- Peters, S. (2004, June). Roundtable discussion focused on brainstorming potential research questions for research interests in statistics education, MAC-MTL Doctoral Student Research Conference, State College, Pennsylvania.
- Peters, S., & Bailey, M. (2002, March). JMP INTRO[®] activities, PASTA (Philadelphia Area Statistics Teachers Association) Workshop, Villanova, Pennsylvania.
- Peters, S., & Ricks, J. (2001, December). The 2001 AP[®] Statistics Reading, PASTA (Philadelphia Area Statistics Teachers Association) Workshop, Villanova, Pennsylvania.
- Peters, S., & Bailey, M. (2001, October). JMP INTRO[®] and Fathom[™] activities for introductory and AP[®] Statistics, ATMOPAV (Association of Teachers of Mathematics in Philadelphia and Vicinity) Conference, Philadelphia, Pennsylvania.
- Carroll, A., Peters, S., & Ricks, J. (2001, October). The 2001 AP[®] Statistics Reading, ATMOPAV (Association of Teachers of Mathematics in Philadelphia and Vicinity) Conference, Philadelphia, Pennsylvania.

- Short, T., Carver, R., Ricks, J., & Peters, S. (2001, January). Experimental design, PASTA (Philadelphia Area Statistics Teachers Association) workshop, Villanova, Pennsylvania.
- Ricks, J., & Peters, S. (2000, December). The 2000 AP[®] Statistics Reading, PASTA (Philadelphia Area Statistics Teachers Association) Workshop, Villanova, Pennsylvania.
- Peters, S., & Ricks, J. (2000, March). AP[®] Statistics, Berks County Intermediate Unit, Reading, Pennsylvania.
- Paull, S., Peters, S., & Syer, M. (2000, January – April). Series of 11 professional development workshops for elementary mathematics teachers, Twin Valley School District, Elverson, Pennsylvania.
- Peters, S., & Ricks, J. (1999, November). AP[®] Statistics, Delaware County Intermediate Unit, suburban Philadelphia, Pennsylvania.

GRANTS AND SCHOLARSHIPS

- USCOTS (United States Conference on Teaching Statistics) Travel Grant, The Consortium for the Advancement of Undergraduate Statistics Education (CAUSE), 2009, 2005
- Graduate Student Travel Grant, The Pennsylvania State University, 2008
- Mid-Atlantic Center for Mathematics Teaching and Learning, PME Conference Travel Support, 2008
- Robert E. and Virginia L. Mountz Scholarship in Mathematics Education, The Pennsylvania State University, 2007-2008
- Graduate Student Travel Grant, The Pennsylvania State University, 2007
- Mid-Atlantic Center for Mathematics Teaching and Learning, Dissertation Travel Support, 2007-2008
- Alumni Society Research Initiation Grant, The Pennsylvania State University, 2006-2007
- Graduate Student Travel Grant, The Pennsylvania State University, 2006
- Graduate Student Travel Grant, The Pennsylvania State University, 2005
- Mid-Atlantic Center for Mathematics Teaching and Learning, Graduate Fellowship, National Science Foundation, 2003-Present

PROFESSIONAL SERVICE

COORDINATOR

- Coordinator for The Pennsylvania State University site, The Knowledge of Algebra for Teachers (KAT) pilot for Michigan State University, 2006

REVIEWER/JUDGE

- Reviewer of article manuscripts, *Journal for Research in Mathematics Education*, 2009
- Reviewer of article manuscripts, *Statistics Education Research Journal*, 2006, 2007
- Reviewer of article manuscripts, *Pennsylvania Council of Teachers of Mathematics Yearbook*, 2004, 2006
- Judge, Pennsylvania Statistics Poster Competition, 2004
- Reviewer of article manuscript, *Journal of Statistics Education*, American Statistical Association, 2002

CONSULTANT

- AP[®] Statistics, Educational Testing Service, 1997 – 2004
- AP[®] Statistics, Middle States Region of the College Board, 1999 – 2003
- AP[®] Statistics Test Preparation book, D & S Marketing Systems, Inc., 2001
- Embedded Assessment Prototype for AP[®] Statistics, Educational Testing Service (ETS), 1999 – 2001

MEMBERSHIPS

INTERNATIONAL

International Group for the Psychology of Mathematics Education (PME)

International Group for the Psychology of Mathematics Education – North American Chapter (PME-NA)

NATIONAL

American Educational Research Association (AERA)

National Council of Teachers of Mathematics (NCTM)

Phi Delta Kappa

Pi Lambda Theta (Education Honor Society)

Special Interest Group – Research in Mathematics Education (SIG-RME)

STATE

Pennsylvania Association of Mathematics Teacher Educators (PAMTE)

Pennsylvania Council of Teachers of Mathematics (PCTM)