Barbara Ann (Kitchell) Swartz

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Education

2013 **Doctor of Philosophy in Mathematics Education**, University of Virginia
24 credit hours of graduate mathematics and statistics coursework

2008 **Master of Arts in Secondary Education**, Lehigh University
Pennsylvania Secondary Mathematics Teaching Certification (grades 7-12)
27 credit hours of undergraduate mathematics coursework

2006 **Bachelor of Arts in Political Science**, Lehigh University, *Magna cum Laude*
Minors in Economics and Spanish

TEACHING

Courses Taught at McDaniel College

General Education

- ***FYS 1114 Technology in Education***
- ***MDC 1100 My Design***
- ***MAT 1107 College Algebra and Trigonometry***
- ***MAT 1117 Calculus 1***

Elementary Education Major

- ***MAT 2242 Math Structures I***
- ***MAT 3342 Math Structures II***
- ***EDU 3326 Teaching with Classroom Technology*** **course I developed*
- ***EDU 3314/556 Teaching Elementary Mathematics***

Elementary Mathematics Instructional Leader Certification

- ***MAT 501 Algebra for Elementary Teachers*** **course I converted into an online course (taught online version)*
- ***MAT 502 Geometry for Elementary Teachers*** **course I converted into an online course (taught both face to face and online versions)*
- ***MAT 520 Mathematical Foundations*** **course I converted into an online course (taught both face to face and online versions)*

Secondary Mathematics Education Minor

- ***EDU 2304/622 Instructional Plans in Middle School Mathematics*** **course I developed*
- ***EDU 3344/623 Instructional Plans in High School Mathematics*** **course I developed*
- ***EDU 610 Instructional Plans in Secondary Mathematics***

Graduate Electives

- ***EDU 571 Reimagining the Mathematics Classroom*** **course I developed*
- ***EDU 503 Incorporating Classroom Technology*** **course I developed as both face to face and also converted into an online course (taught both face to face and online versions)*
- ***STM 511 Instructional Technology in the K-12 STEM Classroom (online)*** **course I developed*

Special Offerings

- ***EDU 551 Special Studies in Education: Moving EMIL Math Content Courses Online*** (Summer 2017)
- ***EDU 551 Special Studies in Education: Algebra 1 Curriculum Rewrite*** (Fall 2016)
- ***EDU 590 Thesis: Algebra 1 Curriculum Pilot*** (Fall 2016)

Prior Teaching Experiences

Co-Instructor of Secondary Mathematics Teacher Education courses, *Curry School of Education, University of Virginia* (2010—2013). Co-taught weekly seminar for student teachers to discuss relevant education issues pertinent in their field placements. Created the syllabus, and assessed lesson plans, teaching episodes, and reflections. Also, co-taught the yearlong secondary mathematics teacher pedagogy course that students take prior to student teaching. These courses integrate various technologies throughout.

Supervisor of Student Teachers, *Curry School of Education, University of Virginia* (2010—2013). Supervised secondary mathematics student teachers during their field placements. This consisted of helping plan lessons, giving feedback on lesson plans, meeting with students and their cooperating teachers to improve instructional techniques and completing mid-term and final evaluations of their teaching.

Adjunct Instructor, *Mathematics Department, University of Virginia* (Fall 2012 & Spring 2013). Taught two mathematics content courses for prospective elementary teachers (MATH 1150 The Shape of Space and MATH 1160 Algebra, Number Systems and Number Theory), covering algebra, number theory, geometry, data analysis and probability.

Co-Instructor of Teaching with Technology, *Curry School of Education, University of Virginia* (Spring 2012). Created and taught lessons that showcase how different technologies, such as spreadsheets (i.e. Excel), and graphing calculators can enhance mathematics and science lessons by creating multiple representations of the content.

Instructor & Supervisor of Pre-Student Teaching Field Placement, *Curry School of Education, University of Virginia* (2010 – 2013). Created the syllabus, graded assignments and supervised lessons for students in elementary, middle and high school field placements.

Coordinator for Early Field Placements, *Curry School of Education, University of Virginia* (2010—2011). Scheduled student placements, held group meetings and graded student journals and final papers for students tutoring ELL students and in the AVID program.

Mathematics Teacher, *Freedom High School, Bethlehem, PA* (2007—2010). Taught courses in Geometry, Algebra 2, Pre-Calculus, Calculus, and Consumer Math (grades 10 – 12).

Mathematics Student Teacher, *Nitschman Middle School, Bethlehem, PA* (2007). Taught courses in Pre-Algebra, Algebra, and Geometry (grades 7 – 8).

Tutor, *Center for Academic Success, Lehigh University* (2003—2008). Tutored undergraduate students enrolled Calculus 1, 2, and 3, International Relations and Spanish courses.

RESEARCH & SCHOLARSHIP

Project Leader, *Creating Co-Educational Experiences for Preservice Teachers, Inservice Teachers, and Mathematics Teacher Educators to Improve the Professional Development School Model*, *McDaniel College*, (Spring 2017 – Present). To research how the professional development school (PDS) model can create more effective learning experiences for the teacher candidates, mentor teachers, and a mathematics teacher educator by creating a professional learning community (PLC) among these parties. The purpose of this professional learning would be to support mentor teachers in providing exemplary models of teaching mathematics for the teacher candidates and to improve the connection between the teacher preparation courses and the realities of the classroom.

Project Consultant, *ems&tl (Elementary Math Specialist & Teacher Leader), McDaniel College,* (May 2013 – September 2018). Collected and analyzed data each year for annual report about demographics, professional responsibilities, and typical days/weeks in the field, and participated in monthly meetings with cohort of Math Specialists.

Research Assistant, *CANLEAD* (*Collaboration and Networking Learning Environment and Database*), *Curry School of Education, University of Virginia*, (Fall 2011—Fall 2016). Created professional development materials to help middle school mathematics and science teachers integrate technology into their teaching as part of a US Department of Education IES funded project. Technologies include spreadsheets, graphing calculators, dynamic geometry software, simulations, and virtual manipulatives. Created both pre-assessment and post-assessment materials in mathematics for students of the teachers in the program, created video-scoring tool, and collected and analyzed data on teachers' use of multiple representations and technological fluency in their teaching by coding teacher-submitted videos of their teaching.

Research Assistant, *Curry School of Education, University of Virginia*, (2010—2013). Conducted research study evaluating the impact of secondary mathematics pedagogy course on pre-service teachers' teaching practices. Participated in grant writing for grants submitted to the Institute for Educational Sciences and the National Science Foundation.

Publications

*Denotes student collaborator

Trembley, K.* & Swartz, B. A. (under review). Going beyond the standards: Implementing research-based activities to introduce fractions.

Swartz, B. A., Debinski, R.* & Queen, S.* (in press). Make 10! Challenge. *Teaching Children Mathematics.*

Swartz, B. A., Billings, E., Knapp, M., Virmani, R., Lynch, S. D., Woods, D. & Pinter. H. H. (2018). Working to Understand Mediated Field Experiences and Study their Impact. *Proceedings of the 40th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Greenville, SC: University of South Carolina.

Swartz, B. A., Lynch, J. M., & Lynch, S. D. (2018). Embedding elementary teacher education Coursework in local classrooms: Examples in mathematics and special education. In D. Polly, M. Putman, T. M. Petty, & A. J. Good (Eds.) *Handbook of research on innovative practices in teacher preparation and graduate-Level teacher education programs* (pp. 262-292). Hershey, PA: IGI Global.

Wessman-Enzinger, N. M., Swartz, B. A., Lynch, S. D. (2018). Base-ten Block Challenge. *Teaching Children Mathematics. 24*(4), 218-222.

Virmani, R., Taylor, M. W., Rumsey, C., Box, T., Hedges, M., Kazemi, E., Knapp, M. Lynch, S., Schwartz, K., Swartz, B. A., Weston, T., & Woods, D. (2017). Bringing Methods into Schools. In Tyminski, A., Kastberg, S., & Lischka, A. (Eds) *Building Support for Scholarly Practices in Mathematics Methods*. Association of Mathematics Teacher Educators.

Harper, F., & Swartz, B. A. (2016). (Re)Defining smartness: Exploring multiple abilities in elementary and secondary mathematics teacher education. *Proceedings of the 38th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Tucson, AZ: Arizona State University.

Fennell, F., Swartz, B. A., Kobett, B. M., & Wray, J. A. (2015). Classroom-based formative assessments: Guiding teaching and learning. *Teaching Children Mathematics, 21*(6), 324-327.

Garofalo, J., Trinter, C. P., & Swartz, B. A. (2015). Engaging with constructive and non-constructive proofs. *The Mathematics Teacher*, *108*(6), 422-428.

Swartz, B. A., & Garofalo, J. (2013). Pre-service mathematics teachers' growth in incorporating technology into their teaching practices. In L. Liu (Ed.), *Research Highlights in Technology and Teacher Education 2013*. Chesapeake, VA: SITE.

Swartz, B. A., & Garofalo, J. (2013). Pre-service mathematics teachers' growth in incorporating technology into their teaching practices. *SITE conference proceedings,* New Orleans. ***Received Outstanding Paper Award.***

Swartz, B. A., Patel, Y., Dexter, S., & Garofalo, J. (2013) Focusing the technology leadership: Key technologies to integrate into secondary math and science classrooms. *SITE conference proceedings,* New Orleans.

Garofalo, J., Fraser, V., Juersivich, N., & Kitchell, B. A. (2011). Preparing teachers to use technology: Following our students. *ISTE conference proceedings*, Philadelphia, PA.

Kitchell, B. A., & Garofalo, J. (2011). Software for helping students link function representations. *National Consortium for Specialized Secondary Schools of Mathematics, Science and Technology Journal, 16(2)*, 38-39.

Garofalo, J., & Kitchell, B. A. (2010). Using technology to improve equity in financial decision making. *National Consortium for Specialized Secondary Schools of Mathematics, Science and Technology Journal, 16*(1), 22-23.

Keynote & Invited Speaker Presentations

Swartz, B. A. (2019, May). "Building Understanding of Functions." Professional development workshop.

Swartz, B. A. (2018, February). "Teaching Elementary Mathematics Content Courses" in Lynch, S. D., James, J. S., Eskelson, S. L., Wilkerson, T., & Waller, P. P. *I am New to Mathematics Teacher Education: Realities of Teaching, Scholarship, and Service.* (Presentation at the Annual Meeting of the Association of Mathematics Teacher Educators, Houston, TX).

Swartz, B. A. (2017, March). *Importance of Reasoning and Sense-Making in Mathematics.* Kappa Mu Epsilon Mathematics Honor Society, McDaniel College, Westminster, MD.

Swartz, B. A. (2016, August). *Making Thinking Paramount.* Mathematics in-service day for Carroll County Public Schools, Westminster, MD.

Swartz, B. A., & Jett, C. (February 2015). "Large Teaching Loads and Finding Time for Scholarship," Lead the discussion during lunch at the annual AMTE conference. Each table has a designated discussion topic with a discussion leader, and participants can choose what table they would like to sit at according to the topics. (Presentation at the Annual Meeting of the Association of Mathematics Teacher Educators, Orlando, FL).

Conference Proceedings Publications (Refereed)

Swartz, B. A., Billings, E., Knapp, M., Virmani, R., Lynch, S. D., Woods, D. & Pinter. H. H. (2018). Working to Understand Mediated Field Experiences and Study their Impact. *Proceedings of the 40th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Greenville, SC: University of South Carolina.

Harper, F., & Swartz, B. A. (2016). (Re)Defining smartness: Exploring multiple abilities in elementary and secondary mathematics teacher education. *Proceedings of the 38th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Tucson, AZ: Arizona State University.

Conference Presentations – International & National Organizations (All Refereed)

*Denotes student collaborator

Swartz, B. S., & Swartz, B. A. (2019, April). Building Understanding of Functions Using Blocks. (Presentation at the Annual Meeting of the National Council of Teachers of Mathematics, San Diego, CA).

Swartz, B. A. (2019, February). Rethinking Professional Development and the Professional Development School. (Presentation at the Annual Meeting of the Association of Mathematics Teacher Educators, Orlando, FL).

Billings, E. & Swartz, B. A. (2019, February). Learning Mathematics through Teaching: Building Preservice Teachers' Content Knowledge through Early Mediated Field Experiences. (Presentation at the Annual Meeting of the Association of Mathematics Teacher Educators, Orlando, FL).

Lynch, S. D., Billings, E., Swartz, B. A., Knapp, M., Virmani, R., & Pinter. H. H. (2019, February). Better than Bridging: How mediated field experiences transform teacher preparation to meet the AMTE Standards. (Presentation at the Annual Meeting of the Association of Mathematics Teacher Educators, Orlando, FL).

Swartz, B. A., Billings, E., Knapp, M., Virmani, R., Lynch, S. D., Woods, D. & Pinter. H. H. (2018, November). Working to Understand Mediated Field Experiences and Study their Impact. (Presentation at the Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Greenville, SC).

Knapp, M., Swartz, B. A., Virmani, R., Woods, D., Schwartz, C., & Lynch, S. D. (2018, February). The Power of Debriefs in Practice-Based Mathematics Education Courses. (Presentation at the Annual Meeting of the Association of Mathematics Teacher Educators, Houston, TX).

Swartz, B. A., Junor Clarke, P., Wheeler, A., Wieman, R., Rhine, S., Smith, R., & Perry, J. (2018, February). Supporting Mathematics Teacher Educators in Online and Hybrid

Teaching. (Presentation at the Annual Meeting of the Association of Mathematics Teacher Educators, Houston, TX).

Swartz, B. A., & Lynch, S. D. (2017, November). How Groupworthy Tasks Break Down Barriers. (Presentation at the National Council of Teachers of Mathematics Innov8 Conference, Las Vegas, NV).

Swartz, B. A., Lynch, S., & Enzinger, N. W. (2017, April). Teaching is Tough, but What Makes it Complex? Implementing Complex Instruction. (Presentation at the Annual Meeting of the National Council of Teachers of Mathematics, San Antonio, TX).

Swartz, B. A., & Lynch, S. (2017, April). Rethinking Groupwork: How Groupworthy Tasks Truly Promote Collaborative Learning. (Presentation at the Annual Meeting of the National Council of Teachers of Mathematics, San Antonio, TX).

Swartz, B. A., Lee, M. Y., Powell, A., Rhine, S., Wheeler, A., & Wieman, R. (2017, February). Preparing Teachers of Mathematics for the Realities of Technology in the Classroom. (Presentation at the Annual Meeting of the Association of Mathematics Teacher Educators, Orlando, FL).

Rumsey, C., Virmani, R., Knapp, M. Lynch, S., Schwartz, K., Swartz, B. A., & Woods, D. (2017, February). Embedding Mathematics Teacher Preparation Courses in the PK-12 Setting. (Presentation at the Annual Meeting of the Association of Mathematics Teacher Educators, Orlando, FL).

Swartz, B. A. (2016, November). Rethinking Assessment: Focusing on Student Learning, Not Student Achievement. (Presentation at the National Council of Teachers of Mathematics inaugural Innov8 Conference, St. Louis, MO).

Harper, F., & Swartz, B.A. (2016, November). (Re)Defining Smartness: Exploring Multiple Abilities in Elementary and Secondary Mathematics Teacher Education. (Poster presentation at the annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education).

Swartz, B. A., Lischka, A., & VanIngen, S. (2016, January). DBR: A Scholarly Approach to Teaching – What it Means for New [and Veteran] MTEs. (Presentation at the Annual Meeting of the Association of Mathematics Teacher Educators, Irvine, CA).

McCoy, A., Fennell, F., Kobett, B. M., Wray, J., Swartz, B. A., Utley, J., Reeder, S., & Webel, C. (2016, January). The Elementary Mathematics Specialist Movement: Maintaining Momentum. (Presentation at the Annual Meeting of the Association of Mathematics Teacher Educators, Irvine, CA).

Swartz, B. A. (2015, September). Intervention Project in Elementary Methods Course. (Invited poster presentation at the NSF-funded Scholarly Inquiry & Practices Conference).

Fennell, F., Kobett, B. M., Wray, J. A., & Swartz, B. A. (2015, February). Elementary Mathematics Specialists: roles, responsibilities and impact. Implications for teacher education, and professional development. (Presentation at the Annual Meeting of the Association of Mathematics Teacher Educators, Orlando).

Pinter, H. H., & Swartz, B. A. (2014, April). Lesson Study Utilizing A Measure of Standards-based Teaching Practices. (Presentation at the Annual Meeting of the National Council of Teachers of Mathematics, New Orleans).

Berry, R. Q., Swartz, B. A., & Pinter, H. H. (2014, February). Using a Multidimensional Observation Instrument to Support Pre-Service In-Service Teachers' Development of Standards-Based Instructional Practices. (Presentation at the Annual Meeting of the Association of Mathematics Teacher Educators, Irvine).

Swartz, B. A. (2013, April). Engaging with existence proofs in middle and high school classrooms. (Presentation at the Annual Meeting of the National Council of Teachers of Mathematics, Denver).

Swartz, B. A. (2013, March). Pre-service mathematics teachers' growth in incorporating technology into their teaching practices. (Paper presented at the Annual Meeting of Society for Instructional Technology in Teacher Education, New Orleans).

Swartz, B. A., Patel, Y., Dexter, S., & Garofalo, J. (2013, March). Focusing the technology leadership: Key technologies to integrate into secondary math and science classrooms. (Paper presented at the Annual Meeting of Society for Instructional Technology in Teacher Education, New Orleans).

Trinter, C. P., Swartz, B. A. & Garofalo, J. (2013, January). Using Simulations to Foster Pre-Service Mathematics Teachers' Self-Assessment. (Presentation at the Annual Meeting of the Association of Mathematics Teacher Educators, Orlando).

Garofalo, J., Kitchell, B. A., & Trinter, C. P. (2012, April). Thinking Flexibly with Representations. (Presentation at the Annual Meeting of the National Council of Teachers of Mathematics, Philadelphia).

Garofalo, J., Juersivich, N., & Kitchell, B. A. (2011, June). Preparing Mathematics Teachers to Use Technology. (Paper presented at the Annual Meeting of the International Society for Technology in Education, Philadelphia).

Conference Presentations – State/Regional (All Refereed)

*Denotes student collaborator

Swartz, B. A., McGuire, T. J.*, Fondersmith, A.*, Herzog, C.*, Noll, O.*, & Wimmer, J.* (2018, October). Rethinking Elementary Math Content Courses to Create the New Vision of

Teaching Math. (Presentation at the Annual Meeting of the Maryland Council of Teachers of Mathematics, Baltimore, MD).

Swartz, B. S., & Swartz, B. A. (2018, October). Using Blocks to BUILD Understanding of Functions. (Presentation at the Annual Meeting of the Maryland Council of Teachers of Mathematics, Baltimore, MD).

Swartz, B. A. & Shiloh, D.* (2018, October). Engaging Cooperating Teachers in a Community of Learners. (Presentation at the Annual Meeting of the Maryland Council of Teachers of Mathematics, Baltimore, MD).

Swartz, B. A. (2016, November). Not Graded?! Why do it? Focusing on Learning, Not Grades. (Presentation at the Regional Meeting of the National Council of Teachers of Mathematics, Philadelphia, PA).

Swartz, B. A., & Lynch, S. (2016, November). Engaging the UDL Principles through the Standards for Mathematical Practice. (Presentation at the Regional Meeting of the National Council of Teachers of Mathematics, Philadelphia, PA).

Swartz, B. A., Lutz, C.,* Mason, A.,* & Powers, B.* (2016, October). Teaching is Tough, but what makes it complex? Implementing Complex Instruction in the Elementary Classroom. (Presentation at the Annual Meeting of the Maryland Council of Teachers of Mathematics, Pasadena, MD).

Taylor, N.* & Swartz, B. A. (2016, March). It's Not Graded?! Why Do It? Let's Focus on Learning, Not Grades. (Presentation at the Annual Meeting of the Virginia Council of Teachers of Mathematics, Richmond, VA).

Swartz, B. A. & Taylor, N.* (2015, October). It's Not Graded?! Why Do It? Let's Focus on Learning, Not Grades. (Presentation at the Annual Meeting of the Maryland Council of Teachers of Mathematics, Baltimore, MD).

Swartz, B. A. (2014, November). Students Reveal How Ongoing Assessments Helped them Learn Math. (Presentation at the Regional Meeting of the National Council of Teachers of Mathematics, Richmond, VA).

Pinter, H. H., & Swartz, B. A. (2014, November). Lesson Study Utilizing a Measure of Standards-Based Teaching Practices. (Presentation at the Regional Meeting of the National Council of Teachers of Mathematics, Richmond, VA).

Swartz, B. A. (2014, October). Assessment as a Means for Feedback, Not Grades! (Presentation at the Annual Meeting of the Maryland Council of Teachers of Mathematics, Baltimore, MD).

Patel, Y., & Swartz, B. A. (2012, December). Probeware and Spreadsheets: Key Technologies for Every Secondary Science and Math Classroom. (Presentation at the Annual Meeting of the Virginia Society for Technology in Education).

Garofalo, J. & Kitchell, B. A. (2011, March). Preparing Mathematics Teachers to Use Dynamic Representations. (Paper presented at the Annual Meeting of the Virginia Association of Teacher Education, Sweet Briar, VA).

Student Presentations (All Refereed)

Fondersmith, A. (2019, February). Making math fun: Implementing mathematics education practices in a summer camp. (Presentation at the Association of Maryland Mathematics Teacher Educator's Annual Early Career Teaching Conference, Baltimore, MD).

Herzog, C. (2019, February). The power of manipulatives. (Presentation at the Association of Maryland Mathematics Teacher Educator's Annual Early Career Teaching Conference, Baltimore, MD).

Thompson, T. (2016, September). Why would we play Scrabble for math class? (Presentation at the Association of Maryland Mathematics Teacher Educator's Annual Early Career Teaching Conference, Greenspring, MD).

Mason, A., & Lutz, C. (2016, September). Teaching is tough, but what makes it complex? Implementing Complex Instruction. (Presentation at the Association of Maryland Mathematics Teacher Educator's Annual Early Career Teaching Conference, Greenspring, MD).

Howard, J., & Mason, A. (2016, September). How can we get students to practice their facts? (Presentation at the Association of Maryland Mathematics Teacher Educator's Annual Early Career Teaching Conference, Greenspring, MD).

Koslak, V. (2015, September). Implementing the Mathematical Practices with the Pythagorean Theorem. (Presentation at the Association of Maryland Mathematics Teacher Educator's Annual Early Career Teaching Conference, Owings Mills, MD).

SERVICE

Participation within the Mathematics Education Community

Association of Maryland Mathematics Teacher Educators (AMMTE) President (November 2017 – November 2019), **President-elect** (November 2016 – November 2017) **Member at Large** (November 2015 – November 2016), & **Secretary** (November 2013 – November 2015). Elected president of the Association in the Fall 2016 to serve a one-year term as president-elect and then a two-year term as president. Previously served the board as a Member at Large and the Secretary.

- Plan and run the semi-annual meetings for members (every January & June)
- Sponsored webinars open all AMTE members (March & April 2019)

- Maintain the organization's website (ammte.org)
- Coordinate the Early Career Teaching Conference

Constitution and By-Laws Committee (February 2019 – February 2022)**,** *Association of Mathematics Teacher Educators***.** Revisits the constitution and by-laws making suggestions and changes as needed.

Reviewer, National Council of Teachers of Mathematics' journals (2012 – present): *Teaching Children Mathematics*, *Mathematics Teaching in the Middle School*, and *Mathematics Teacher*; Association of Mathematics Teacher Educators and National Council of Teachers of Mathematics joint publication: *Mathematics Teacher Educator* (2014 – present); Association of Mathematics Teacher Educators' annual conference proposals (2012 – present); and Psychology of Mathematics Education-North American Chapter's annual conference proposals (2016 – present).

Strand leader for Organizing, Facilitating, and Reviewing Conference Proposals (Summer 2018), 40th Annual Meeting of North American Chapter of the International Group for the Psychology of Mathematics Education.

Technology and Mathematics Teacher Education Committee Associate Vice-President (February 2016 – February 2018) & **Member** (February 2015 – February 2018)**,** *Association of Mathematics Teacher Educators***.** Invited to serve a term on the AMTE Technology Committee in Fall 2014 after applying for the second time and then after my first year on the committee, was appointed to serve as the committee chair, called the Associate Vice President. This committee is tasked with recommending strategies, policies, and activities related to increasing awareness and improving integration of technology in mathematics teacher education. It oversees the AMTE-NTLI Award process, identifies an annual fellow, and the chair prepares an annual report for the AMTE Board of Directors.

Invited Author, *Mathematics Teacher Blog*, National Council of Teachers of Mathematics

Swartz, B. A. (2016, February 29). Making sense of factoring (Part 3): Building on prior knowledge and connecting representations. *Mathematics Teacher Blog*. Stable URL: http://www.nctm.org/Publications/Mathematics-Teacher/Blog/Making-Sense-of-Factoring-(Part-3)_-Building-on-Prior-Knowledge-and-Connecting-Representations/

Swartz, B. A. (2016, February 16). Making sense of factoring (Part 2): Using context to create purpose and meaning. *Mathematics Teacher Blog*. Stable URL: http://www.nctm.org/Publications/Mathematics-Teacher/Blog/Making-Sense-of-Factoring-(Part-2)_-Using-Context-to-Create-Purpose-and-Meaning/

Swartz, B. A. (2016, February 1). Making sense of factoring (Part 1): Laying the foundation. *Mathematics Teacher Blog*. Stable URL: http://www.nctm.org/Publications/Mathematics-Teacher/Blog/Making-Sense-of-Factoring-(Part-1)_-Laying-the-Foundation/

Swartz, B. A. (2016, January 19). Focus on learning, not grades. *Mathematics Teacher Blog*. Stable URL: http://www.nctm.org/Publications/Mathematics-Teacher/Blog/Focus-on-Learning,-Not-Grades/

AMTE Annual Conference, Discussion Leader "Large Teaching Loads and Finding Time for Scholarship," *2015 AMTE Annual Conference, Orlando, FL* (February 2015). Lead the discussion during lunch at the annual AMTE conference. Each table has a designated discussion topic with a discussion leader, and participants can choose what table they would like to sit at according to the topics.

AMTE Service, Teaching, and Research (STaR) Social Committee Chair, *Summer Institute* (June 2014). Planned and implemented daily warm-up/ice-breaker activities for the 2014 STaR cohort during the week-long summer institute. As a committee, we also compiled things to do around town and organized get-togethers between the participants of the institute, along with creating a spreadsheet for people to post their evening plans in order to promote camaraderie and social connections.

Participation within the McDaniel College Community

Advising

- **Elementary Education Major Advisor**, (Fall 2017 – Present)
- **Secondary Mathematics Education Minor Advisor**, (Fall 2014 – Present)

Elected Committees

- **Curriculum Committee** (August 2018 – Present)
- **Faculty Technology Committee** (August 2016 – Present), **Chair** (January 2018 – May 2019)

Ad hoc Committees

- **First Look Visioning Subcommittee** (Spring 2018 – Present). Worked closely with the First Year Team to re-envision and revise the "First Look Series" flex sessions associated with the First Year Seminar. Met with presenters to create more "engaging" presentations. We have been working to develop curricular outcomes, training materials, and programmatic schedules.
- **Internal Workgroup for Placement Exam Evaluation** (Fall 2017 – August 2018). Collected survey and focus group data from faculty, staff, and students to evaluate and make recommendations to revise the placement exam processes and policies.

My Design Coordinator, (July 2018 – Present). Implements the administrative aspects of the program and ensures the quality of the student experience.

Guest Lecturer, *Mathematics Department* (Fall 2018 & Spring 2014). Planned and taught two classes of Calculus II while a colleague was away at a conference.

McDaniel Commitment Leadership Team, (May 2017 – Present). The development of the McDaniel Commitment is part of the College's Strategic Plan. The Commitment specified that every McDaniel student would: 1) experience enhanced mentoring and advising, 2) participate in more than one experiential learning opportunity, and 3) learn practical skills that would aid them in life after graduation. It is made up of four components that span the four years of a student's undergraduate degree: My Place, My Design, My Experience, and My Career. My part of the Leadership Team was on the second component, My Design.

Exploring an Elementary Education Major Workgroup, *Education Department* (February 2016 – October 2016). Participated in the committee charged with exploring and writing the proposal for the elementary education major. We met regularly throughout the spring and summer to collect information on local schools' programs and used that information along with our existing program to design the major. Janet Medina and I wrote the course proposal for, "Creating Inclusive Classrooms" and I wrote the course proposal for "Teaching with Technology."

Council for Accreditation for Educator Preparation (CAEP) Training, *Maryland State Department of Education, Race to the Top Maryland Teaching Consortium* (Fall 2014). Race to the Top funded Site Visitor Training for joint Council for Accreditation of Educator Preparation (CAEP)/Maryland accreditation visits. This training included training on the use of *Preparing Educators for High Poverty/Culturally and Linguistically Diverse Schools*: *A Manual for Teacher Educators, Teachers and Principals* in accreditation and program approval visits. This is a two-day residential training experience was held on Thursday, September 18, 2014 and Friday, September 19, 2014.

First Year Orientation, *First Year Experience* (Fall 2013 & 2014). Presented information to incoming first year students during orientation about the Education minor at McDaniel College with other faculty members and current students.

Lesson Plan Committee, *Education Department* (Fall 2013 – Fall 2014). Helped revise the McDaniel College Education Department's lesson plan format that is used throughout the teacher education program.

Admitted Students Day, *Education Department* (Spring 2014). Represented the Education Department at a half-hour information session and a one-hour open house reception for admitted students on Sunday, April 6, 2014.

SMARTboard Presentation, *Education Department* (Fall 2013 & 2014). Gave SMARTboard presentations to EDU 1150, EDU1141, and FYS 1114 to demonstrate the capabilities of the technology and how to use them in one's teaching.

Participation within the Student Community

Supervisor of Independent Studies

- Developing Understanding of School Mathematics in lieu of Non-Credit Remedial Math Classes (Fall 2018)
- Teaching High School Mathematics (Fall 2018)
- Instructional Plans in Secondary Mathematics (Fall 2014)

Supervisor of Student Internships

- Design Team (four internships – January 2019)
- Implementing Number and Estimation Routines for Elementary School Students During Summer Camp (Summer 2018)
- Investigating the Impact of Positive Behavior Intervention Strategies in Preschool Classrooms (Summer 2018)

AMMTE's Early Career Teaching Conference Co-founder and Program Chair, *Stevenson University* (January 2016 – Present). With colleagues on the Board of the Association of Maryland Mathematics Teacher Educators, we created and implemented the inaugural and second-annual conference for teachers of mathematics early in their careers (5 years of service or less). We solicited proposals from teachers early in their careers, reviewed the proposals, and organized the conference program. I created and maintained the website (ammte.org/ectc) including the proposal submission, conference registration and payment. We are in the planning stages for the third iteration of this extremely successful conference.

Kappa Delta Pi Educational Honor Society Faculty Advisor/Counselor, *Education Department* (Fall 2014 – Fall 2016). Advisor of the Educational honor society chapter at McDaniel College. At the time, it had 27 student members (both graduate and undergraduate) and 12 faculty members. Coordinate officer meetings, chapter meetings, annual elections, and the annual initiation ceremony.

Professional Development Workshops

Swartz, B. A. & Madsen, S. (2018, August, October, & December). *My Design New Instructor Training*. Created training materials to help new instructors develop vision and understand course materials and expectations for teaching course in January 2019.

Morris, W., Swartz, B. A., Staab, K., Leahy, C., Hamblen, S, & Nida, S. (2017, October & November). "Designing Groupwork," and "Delaying the Grade: How to Get Students to Read Feedback" presentations in *Let's Talk About It* monthly lunch presentations.

Swartz, B. A. (2016, December). *Algebra 1 Institute: Enacting the Effective Teaching Practices*. Two-day institute targeting teachers' pedagogical practices to help them enact NCTM's eight effective teaching practices and developing teacher's pedagogical content knowledge for Algebra 1 teachers in Middletown, NY.

Graybeal, C. D., & Swartz, B. A. (2016, October). *Visual Mathematics to Benefit Elementary Students*. Strengthening Professional Practice: An FCPS Educational Symposium. Professional development workshop for Frederick County Public Schools, Frederick,

MD.

McKay, G., Morris, W., Paynter, J., & Swartz, B. A. (2016, October). *Wisdom and Techniques from Books about Pedagogy*. Presentation open to the faculty of McDaniel College, presented by the Center for Faculty Development, McDaniel College.

Swartz, B. A., & Pinter, H. H. (2016, September). *Algebra 1 Institute*: *Teacher-structured, not Teacher-centered*. Three-day institute targeting student-centered pedagogical practices and developing teacher's pedagogical content knowledge for Algebra 1 teachers in Middletown, NY.

Swartz, B.A. (2016, August). *Groupworthy Tasks: Ensuring Equitable Participation in Groupwork*. Professional development workshop for Carroll County Public Schools, Westminster, MD.

Swartz, B.A. (2016, August). *Worthwhile Tasks: Encouraging Sense-Making and Productive Struggle.* Professional development workshop for Carroll County Public Schools, Westminster, MD.

Swartz, B. A. (2016, February, March, & April). *Worthwhile and Groupworthy Tasks: Encouraging Sense-Making and Productive Struggle.* Professional development workshop for Carroll County Public Schools, Westminster, MD.

Swartz, B. A. (2015, September, October, & November). *Incorporating the standards for mathematical practice and the "Upside-Down Teaching Model".* Professional development workshop for Carroll County Public Schools, Westminster, MD.

Swartz, B. A. (2015, June). *How using multiple technology-based representations helps students learn about measures of central tendency.* Professional development workshop for CANLEAD Summer Institute, Charlottesville, VA.

Swartz, B. A. & Patel, Y. (2015, June). *Teaching and learning math and science. Why use (multiple) representations?* Professional development workshop for CANLEAD Summer Institute, Charlottesville, VA.

Swartz, B. A. (2014, June). *Using Geogebra to explore similar figures.* Professional development workshop for CANLEAD Summer Institute, Charlottesville, VA.

Swartz, B. A. & Patel, Y. (2014, June). *What are multiple representations and why should they be used in teaching math and science?* Professional development workshop for CANLEAD Summer Institute, Charlottesville, VA.

Swartz, B. A. (2012, November). *Using spreadsheets and dynamic geometry software to create multiple representations in middle school mathematics classrooms.* Professional development workshop for Albemarle County Public Schools, Charlottesville, VA.

Swartz, B. A. & Garofalo, J. (2012, August). *Using technology to create multiple representations in the science and mathematics classroom.* Project orientation work session for middle school leaders participating in an IES funded project.

Kitchell, B. A., & Trinter, C. P. (2011, October). *Geometer's Sketchpad.* Professional Development for Albemarle County Public Schools, Albemarle, VA.

Trinter, C. P., Kitchell, B. A. & Garofalo, J. (2011, October). *Mathematical problem solving for middle and high school teachers.* Professional Development for Albemarle County Public Schools, Albemarle, VA.

Grants, Awards, And Other Recognition

Faculty Development Instructional Development Grant ($3,214) Spring 2019 for classroom supplies to support the mediated field experiences in the content and pedagogy courses for prospective elementary and secondary mathematics teachers (MAT 2242 Math Structures I, MAT 3342 Math Structures II, EDU 3314 Teaching Elementary Mathematics, EDU 2304 Teaching Middle School Mathematics, and EDU 3344 Teaching High School Mathematics)

Faculty Development Travel Grant ($1,185) Spring 2019 to travel to San Diego, CA to present at the NCTM Annual Conference

Faculty Development Travel Grant ($1,470) Spring 2019 to travel to Orlando, FL to present at the AMTE Annual Conference

Distinguished Scholar Award (2017-2018) to study the current implementation of the Professional Development School (PDS) model in elementary mathematics and to create a professional learning community between the mentor teachers, teaching candidates, and teacher educator(s) at McDaniel College in hopes of improving the preparation of teacher candidates to teach mathematics. *The Distinguished Scholar Awards is to provide additional time for faculty members to pursue projects that are exceptional in nature. These projects must not only exceed the expectations of normal scholarship but should also represent a unique window of opportunity for the applicant. Each academic year, the Faculty Development Committee will evaluate the proposals and present one Distinguished Scholars Award. During the designated academic year, the award recipient will teach two classes and receive a course reassignment to work on his/her proposed project for one semester.*

Faculty Development Travel Grant ($1,295.65) Spring 2018 to travel to Houston, TX to present at the AMTE Annual Conference

Faculty Development Travel Grant ($1,234) Spring 2017 to travel to San Antonio, TX to present at the NCTM Annual Conference

Faculty Technology Committee Small Grant ($500) Spring 2016 to purchase Go-Pro Cameras and body mounts for my students to wear in the classroom so that I could video record lessons from the "students' perspective"

Participant, Scholarly Inquiry & Practices Mathematics Methods Education Conference, Atlanta, GA (September 2015). One of forty participants accepted to attend the NSF-Funded Conference. Collaborated with other mathematics teacher educators to discuss our pedagogy and content courses for prospective teachers of mathematics (elementary and secondary). Wrote a monograph chapter with other attendees based on our experiences embedding aspects of our teacher preparation courses into local elementary schools.

STaR Fellow (2014) The Service, Teaching and Research (STaR) Program is a 1-year induction program for early career mathematics educators working at institutions of higher education. The program was initiated through a grant from the National Science Foundation. It includes a 5-day summer institute, academic year networking via electronic means, and a follow-up session in conjunction with the annual meeting of the Association of Mathematics Teacher Educators (AMTE). Eligibility is limited to new faculty with a doctorate in mathematics education in their first or second year of a tenure track appointment as a mathematics educator at a U.S. institution of higher education. Admission is competitive as space is limited to 30 Fellows.

Faculty Technology Committee Small Grant ($1,000) Fall 2013 to purchase probeware and TINspire handheld calculators for use in teacher preparation courses

Faculty Development Grant ($1,665) Spring 2014 to travel to New Orleans, LA to present at the NCTM Annual Conference and Fall 2014 to travel to Richmond, VA to present at the NCTM Regional Conference

SITE 2013 Outstanding Paper Award for "Pre-Service Mathematics Teachers' Growth in Incorporating Technology into their Teaching Practices"

Professional Association Memberships

Association of Maryland Mathematics Teacher Educators (AMMTE)

Association of Mathematics Teacher Educators (AMTE)

Maryland Council of Teachers of Mathematics (MCTM)

National Council of Teachers of Mathematics (NCTM)

Society for Information Technology and Teacher Education (SITE)

TODOS: Mathematics for *ALL* (TODOS)