

Curriculum Vita
Brian Boyd
Wright State University
College of Education and Human Services – Teacher Education

Date of appointment to rank of Associate Professor at Wright State University – August 2013

EDUCATION

University of Louisville

Ph.D. in Teaching and Learning with a focus on Mathematics Education and Rural Education, May 2007

University of Dayton

Masters of Science in Educational Administration, 1997
Additional coursework for Principal Certification and Assistant Superintendent Certification

Miami University

Bachelor of Science in Arts and Science, 1994 (Mathematics and Statistics)
Bachelor of Science in Education, 1994 (Secondary Mathematics)

PROFESSIONAL EXPERIENCE

Associate Professor, Mathematics Education, Wright State University, 2013-present

Joint appointment in the Department of Teacher Education and the Department of Mathematics and Statistics
Program Director for the Adolescent-to-Young Adult Mathematics Licensure Program (2011-18)
Program Coordinator for all Adolescent-to-Young Adult and Multi Age Licensure programs (2011-16)
Professional Development School Faculty Site Coordinator for the Dayton Regional STEM School (2013-17)

Mathematics Teacher, Ponitz High School, Fall of 2018

Taught high school mathematics during Professional Development Leave (PDL) from WSU
Responsible for teaching for teaching Algebra and Algebra 2 classes

Director, Dayton Regional STEM Hub, 2013-present

Work with others in the Ohio STEM Learning Network (OSLN) and the identified STEM Schools in the Dayton Hub to promote and support STEM activities in the Dayton region

Director, Dayton Regional STEM School Training Center, 2013-17

Plan and coordinate provide professional development opportunities for teachers and school leaders that focus on practices and curriculum used at DRSS

Director, Wright State University Center of Pedagogy, 2013-15

Coordinate, support, and promote work between College of Education and Human Services programs and partner schools and organizations
Coordinate professional development programs for area educators and school districts

Founding Principal and Chief Administrative Officer, Dayton Regional STEM School, Dayton, OH, 2008-11

Responsible for hiring initial teachers and staff to start the school
Worked closely with teaching staff and regional partners to develop the initial curriculum for the school
Worked with governing board and staff to implement the mission and vision of the school
Coordinated nearly 30 searches and the interview process for all staff hired at the school
Coordinated professional development for all staff, including visits to other STEM Schools and common reading and discussions to implement practices consistent with the mission of the school
Supported and evaluated all staff of the school
Organized and conducted the planning for the first three years of the school
Promoted DRSS to prospective students, parents, and partners through information session, public presentations, and community events
Worked with a developer, the governing board, and other partners to help secure and design both a temporary facility and a permanent facility for the school

Assistant Professor, Mathematics Education, Wright State University, 2006-08, 2011-13

Joint appointment in the Department of Teacher Education and the Department of Mathematics and Statistics
Responsible for teaching mathematics methods courses for Early Childhood, Middle Childhood, and Adult-Young Adolescent teaching candidates
Responsible for teaching mathematics content courses for pre-service teachers
Organized and provide professional development opportunities for teachers implementing *Connected Mathematics Project (CMP)* materials into their classrooms

Principal, Brookville Middle School, Brookville, OH, 2000-06

Responsible for overseeing instructional programs and day-to-day operations for 625 students
Responsible for evaluating and managing approximately 45 teachers and 8 support personnel
Responsible for planning and providing professional development for teachers in grades 4-8 in all content areas
Facilitated the implementation and use of NSF materials in grades 5-8 (Everyday Math and Connected Math)
Worked to completely implement the Middle School philosophy
Oversaw the transition to a grades 4-8 middle school, which included planning for a new facility for grades 4-12

Mathematics Teacher, Oakwood High School, Dayton, OH, 1996-2000

Taught with NSF funded materials (COMAP and Core-Plus)

Mathematics Teacher, Brookville High School, Brookville, OH, 1994-96

PROFESSIONAL CERTIFICATES

Assistant Superintendent	ODE	July, 2016 – June 2021
High School Principal	ODE	July, 2016 – June 2021
Mathematics Teacher (7-12)	ODE	July, 2016 – June 2021

SCHOLARSHIP

Publications

- Buckner, T. & Boyd, B. (2015). *STEM leadership: How do I create a STEM culture in my school?* Alexandria, VA: ASCD
- Boyd, B. & Grushon, M. (2013). Administrative support of STEM culture. Book chapter for *Improving Urban Schools: Equity and Access in K-16 STEM Education for ALL Students*. Information Age Publishing.
- Patel, N., Franco, M. S., Miura, Y., & Boyd, B. (2012). Including curriculum focus in mathematics professional development for middle school mathematics teachers. *School Science and Mathematics, 112*, 300-9. (R)
- Patel, N., Franco, M. S., Boyd, B., & Wonders, K. (2009). Investigating the effectiveness of a teacher education program using qualitative data from graduates and their principals. *Ohio Journal of Teacher Education, 22*(2), 41-50. (R)
- Boyd, B., & Bargerhuff, M. E. (2009). Mathematics education and special education: Searching for common ground and the implications for teacher education. *Mathematics Teacher Education and Development, 11*, 54-67. (R)
- Boyd, B. (2008). Effects of state tests on classroom test items in mathematics. *School Science and Mathematics, 180*, 251-62. (R)

Reports

- Lindsey, J., Carr, K., Boyd, B., Allen, A., Plano, & Clark, V. and Stringfield, S. (2014). Implementation, Fidelity & Preliminary Impact in Ohio Network of Education Transformation (ONET) Schools (#PB-2014-08). Columbus: Ohio Education Research Center.
- Boyd, B. (2012, September). Wright State University NCATE/NCTM Adolescent to Young Adult Mathematics Report. Washington, DC: National Council for Accreditation of Teacher Education.
- Boyd, B. (2007, September). Wright State University NCATE/NCTM Adolescent to Young Adult Mathematics Report. Washington, DC: National Council for Accreditation of Teacher Education.

Professional Presentations

National

Boyd, B. & Nirode, W. (2019, February). *High School Geometry Textbooks, the Common Core, and Proof: Implications for Secondary Methods Courses*. Presentation at the Annual Association of Mathematics Teacher Educator Conference

Boyd, B. (2018, October). *A Continuing Partnership to Improve Mathematics Teaching for English Language Learners*. Presentation at the National Network for Education Renewal Annual Conference

Boyd, B. (2017, October). *A Partnership to Improve Mathematics Education for English Language Learners*. Presentation at the National Network for Education Renewal Annual Conference

Boyd, B. & Tomlin, J. (2016, October). *Candidates, Classroom Management, and Criticisms*. Presentation at the National Network for Education Renewal Annual Conference

Holbert, R., Boyd, B., Mills, J., & Elston, A (2016, March). *Balancing Faculty Roles, School Mandates and PDS Establishment: Lessons from Partnership Development*. Presentation at the National Association of Professional Development Schools Annual Conference

Regional

Boyd, B. (2006, November). *Lesson Study with Early Childhood Teacher Candidates*. Presentation at the Appalachian Association of Mathematics Teacher Educators Annual Conference.

Boyd, B (2003, January). *Problem-based, Integrated Mathematics Instruction*. Presentation at the National Council of Teachers of Mathematics Regional Conference in Indianapolis

State

Boyd, B. & Basora, M. (2014, November). *Project-based Learning and Partnerships for Deeper Learning*. Presentation at the Ohio School Boards Association Annual Conference

Boyd, B. (2014, November). *Assessment for Learning: How the edTPA Can Make Candidates Better Prepared Mathematics Teachers*. Presentation at the Ohio Council of Teachers of Mathematics Annual Conference.

Boyd, B., Wright, K., White, A., Gordon, S., Harvey, L., Martz, T., Raymond, M., & Jackson, D. (2013, October). *STEM Strategies Across the Curriculum*. Presentation at the 2013 Ohio Annual Statewide Education Conference.

Boyd, B. (2011, October). *The Common Core and Standards for Mathematical Practice*. Presentation at the Ohio Council of Teachers of Mathematics Annual Conference.

Polk, B. and Boyd, B. (2011, October). *Successful Interdisciplinary Integration*. Presentation at the Ohio Council of Teachers of Mathematics Annual Conference.

Boyd, B. (2007, October). *Teachers, Assessment, and the OAT: What You Should Know about Preparing Students for the OAT*. Presentation at the Ohio Council of Teachers of Mathematics Annual Conference.

Boyd, B. (1999, October). *Using Cabri and the TI-92 Graphing Calculator for High School Geometry*. Presentation at the Ohio Council of Teachers of Mathematics Annual Conference.

Local

Boyd, B. (2018, November). *Challenges and Benefits to Students Working in Groups*. Presentation for Career Technical Education Teachers at Dayton Public Schools District-wide Professional Development Day

Boyd, B. & Whitt, K. (2014, April). *Project-based Learning 101*. Presentation at the Wright State University Network for Educational Renewal Conference

Boyd, B. (2012, April). *Models of STEM Education: From Dayton and Beyond*. Presented at the Annual Ohio Mathematics Contest hosted by the Mathematics Department at Wright State University

Boyd, B. (2007, April). *Effects of State Tests in Ohio on Assessment Practices of Mathematics Teachers*. Presented at the Department of Mathematics and Statistics Colloquium, Wright State University, Dayton, OH

Provided professional development for implementing COMAP materials
April, 2003, Stark County ESC
January, 2003, Arlington Heights School District, Suburban District of Chicago
Fall, 2000, Brookville High School

Invited presentations and panels

Boyd, B. (2015, September). *Mathematics Teaching Practices*. Presentation to Miamisburg City School District

Boyd, B. (2012, May). *Building the Dayton Regional STEM School: Core Practices and Lessons Learned*. Presentation to Chattanooga Public Education Foundation Corporate Round Table

Panelist for *The Future of Math Education in Ohio* (2012, February). Sponsored by the Nord Family Foundation, ESC of Central Ohio and the Thomas B. Fordham Institute

Boyd, B. (2011, October). *A Perspective on STEM School Models*. Presentation at Colloquium on STEM Awareness at Wittenberg University

Boyd, B. (2011, September) *STEM Education in Dayton*. Presentation to Rootstown Local School District and Northeast Ohio Medical University Partnership

Boyd, B. (2007, May). *Effects of State Tests in Ohio on Assessment Practices on Mathematics Teachers*. Presentation at the Assessing for Student Learning Mini-Conference, Rio Grande, OH

Grants Awarded

Grant Title: Authentic In-Class Integration of Reasoning and Content Support for Teachers
PI: Lisa Kenyon, Len Kenyon, Brian Boyd, and Ann Farrell
Office: Department of Biology
Period: January 27, 2017-May 31, 2018
Sponsor: Ohio Department of Higher Education
Account #: 670426
Amount: \$118,079

Grant Title: OSLN/Battelle DRSS Hub Investment and Embed Support
PI: Brian Boyd
Office: Dayton Regional STEM School Hub
Period: January 1, 2017-December 31, 2017
Sponsor: Ohio STEM Learning Network (OSLN)
Account #: 551097
Amount: \$25,000

Grant Title: OSLN/Battelle DRSS Hub Investment and Embed Support
PI: Brian Boyd
Office: Dayton Regional STEM School Hub
Period: January 1, 2016-December 31, 2016
Sponsor: Ohio STEM Learning Network (OSLN)
Account #: 551097
Amount: \$25,000

Grant Title: OSLN/Battelle DRSS Hub Investment and Embed Support
PI: Brian Boyd
Office: Dayton Regional STEM School Hub
Period: January 1, 2015-December 31, 2015
Sponsor: Ohio STEM Learning Network (OSLN)
Account #: 551097
Amount: \$25,000

Grant Title: OSLN/Battelle Race to the Top Professional Development
PI: Brian Boyd
Office: Dayton Regional STEM School Training Center
Period: October 1, 2014-April 30, 2015
Sponsor: Ohio STEM Learning Network (OSLN)
Account #:
Amount: \$42,845.00

Grant Title: OSLN/Battelle DRSS Hub Investment and Hub Support
PI: Brian Boyd
Office: Dayton Regional STEM School Training Center
Period: January 1, 2014-December 31, 2014
Sponsor: Ohio STEM Learning Network (OSLN)
Account #: 551097
Amount: \$25,000

Grant Title: OSLN/Battelle Race to the Top Professional Development
PI: Brian Boyd
Office: Dayton Regional STEM School Training Center
Period: September 1, 2013-June 30, 2014
Sponsor: Ohio STEM Learning Network (OSLN)
Account #:
Amount: \$27,500.00

Grant Title: Creative STEM Professional Development
PI: Brian Boyd
Office: Dayton Regional STEM School Training Center
Period: June 3, 2013 – June 30, 2013
Sponsor: Ohio STEM Learning Network
Account #:
Amount: \$5,742.00

Grant Title: Ohio STEM Learning Network
PI: Brian Boyd
Office: Dean's Office, College of Education and Human Services
Period: 5/01/2009-8/31/2011
Sponsor: Ohio STEM Learning Network
Account #: 667641
Amount: \$160,000.00

Grant Title: Science and Math Academies for Teachers through EXCEL
PI: Beth Basista, Brian Boyd, Jim Tomlin, Becky Krakowski (UD) and Mike Sandy (UD)
Office: Physics
Period: 3/01/2007-6/30/2007
Sponsor: Ohio Department of Education
Account #: 666813
Amount: \$122,619.00

Grant Title: Science and Math Academies for Teachers through EXCEL
PI: Beth Basista, Brian Boyd, Jim Tomlin, Becky Krakowski (UD) and Mike Sandy (UD)
Office: Physics
Period: 7/01/2007-6/30/2008
Sponsor: Ohio Department of Education
Account #: 666946
Amount: \$726,748.00

Grant Title: Science and Math Academies for Teachers through EXCEL
PI: Beth Basista, Brian Boyd, Jim Tomlin, Suzanne Franco, Virginia Keen (UD), Nephi Thompson, Becky Krokowski (UD) and Mike Sandy (UD)
Office: Physics
Period: 7/01/2008-9/30/2009
Sponsor: Ohio Department of Education
Account #: 667298
Amount: \$537,076.32

Professional Organizations

Association of Mathematics Teacher Educators
National Council of Teachers of Mathematics
Ohio Council of Teachers of Mathematics

TEACHING

Courses Taught at Wright State University

<u>Course Number</u>	<u>Title</u>	<u>Sections taught</u>
ED 2260	Middle Childhood and Adolescent Young Adult Math Pedagogy and Content Seminar	1
ED 411/ECE 4200	Early Childhood Mathematics Philosophy, Curriculum, and Materials	8
ED 600/ ED 6800	Classroom Management	13
ED 610/ED 6350	Middle Childhood Mathematics: Curriculum and Methods	9
ED 637/ED 6650	AYA Mathematics: Curriculum and Methods, Part I	6
ED 638/ED 6750	AYA Mathematics: Curriculum and Methods, Part II	7
ED 651/653	Internship and Seminar: AYA Mathematics	2
ED 732	Principles and Practices of the Middle School	2
ED 771	Inquiry Project	3
ED 772	Inquiry Project	2
ED 6750	AYA Mathematics: Curriculum and Methods	4
ED 6950	Content Seminar, AYA Mathematics	5
MTH 345/MTE645 MTH 3450/6450	Geometry for Middle Childhood Teachers	8
MTH 244	Fundamental Math Concepts II	1
UVC 1010	First Year Seminar	1

Other

Instructor, Book Study of The Teaching Gap, Fall, 2003

Mini-course offered jointly through the Montgomery County Education Service Center and The University of Dayton

SERVICE

National

Executive Board Member, National Network for Education Renewal, 2017-present
Reviewer, *Urban Education*, 2012-14
Principal Advisory Group, Gates Foundation, 2011
Program Committee, Association of Mathematics Teacher Educators, 2008 Annual Conference
Reviewer, *School Science and Mathematics Journal*, 2007-12

Regional

Board Member, Appalachian Association of Mathematics Teacher Educators, 2005-07

State

General Chair, Ohio Council of Teachers of Mathematics Annual Meeting, October, 2013
Reviewer, *Ohio Journal of School Mathematics*, 2012-present
Mathematics Advisory Committee, Ohio Department of Education, 2009
Ohio Department of Education Grade 8 Mathematics Content Advisory Committee, 2005

Local

Board Member, Global Impact STEM Academy, 2015-present
Board Member, Vandalia Butler City School District, 2012-13
STEM Fellow, Dayton Regional STEM Center, 2011-12
Board Member, Wright State University Area of Council of Teachers of Mathematics, 2006-08; NCTM Liaison, 2006-08
Consultant and presenter to area schools on implementing NSF-funded Curricula Mathematics: Modeling Our World, developed by the Consortium for Mathematics and its Applications (COMAP)

- April, 2003, Stark County ESC
- January, 2003, Arlington Heights School District
- Fall, 2000, Brookville High School

Connected Mathematics Project (CMP)

- January, 2008, Dayton Public Schools
- November, 2007, Mad River Middle School
- April, 2006, Dayton Public Schools

University, College, and Department

Chair, Department Promotion and Tenure Committee, 2016-17
Member, Presidential Search and Screening Advisory Committee, 2016-17
Member, University Faculty Senate, 2014-16, 2019-21,
Member, University Faculty Senate Executive Committee, 2015-16
PDS Faculty Site Coordinator, Dayton Regional STEM School, 2013-17
Member, University College Student Success Committee, 2012-13
Member, Local Professional Development Committee, 2014-18
Member, College of Education and Human Services Faculty Senate, 2012-present
Program Director, Adult to Young Adolescent Mathematics Licensure Program, 2007-08, 2011-18

Program Director, Adult to Young Adolescent Science Licensure Program, 2011-12
Program Coordinator, Adult to Young Adolescent and Multi-Age Licensure Programs,
2011-16
Writer, NCATE report for Adolescent-to-Young-Adult Mathematics Program, 2007 and
2012
Member, University Athletic Council, 2011-12
Member, College of Education and Human Services Strategic Planning Committee,
2007-08
Faculty Advisor, Collegiate Middle Level Association, 2007-08
Site Liaison, Wright State University Office of Professional Field Experience and Stivers
School for the Arts, 2006-08