

**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***

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**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***

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

Joint appointment in the Department of Teacher Education and the Department of Mathematics and Statistics  
Faculty Senate Vice President (2019-21)  
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)  
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***

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|                            |     |                        |
|----------------------------|-----|------------------------|
| 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***

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### **Publications**

Nirode, W. & Boyd, B. (*in press*). High School Geometry Textbooks' Proving Opportunities of Common Core Theorems. *School Science and Mathematics* (R)

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. (2020, February). *Leveraging Dynamic Geometry Software to Promote Authentic Mathematics*. Presentation at the Annual Association of Mathematics Teacher Educator Conference
- Nirode, W. & Boyd, B (2020, February). *Developing Preservice and Inservice Teachers' Ability to Teach Proof in High School Geometry*. Presentation at the Annual Association of Mathematics Teacher Educator Conference
- Boyd, B. (2019, October). *Returning to a high school classroom: Exploring the renewal of on teacher educator and the realities of teaching in a culturally diverse setting*. Presentation at the National Network for Education Renewal Annual Conference
- 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. (2019, June). *Using relevant contexts to develop and deepen understanding of exponential functions*. Presentation at Cleveland State University STEM Education Conference
- 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
- 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 #: 551097  
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**

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### **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 | 3                      |
| ED 411/ECE 4200                 | Early Childhood Mathematics Philosophy, Curriculum, and Materials             | 9                      |
| ED 600/<br>ED 6800              | Classroom Management                                                          | 13                     |
| ED 610/ED 6350                  | Middle Childhood Mathematics: Curriculum and Methods                          | 10                     |
| ED 637/ED 6650                  | AYA Mathematics: Curriculum and Methods, Part I                               | 7                      |
| ED 638/ED 6750                  | AYA Mathematics: Curriculum and Methods, Part II                              | 8                      |
| 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 6950                         | Content Seminar, AYA Mathematics                                              | 5                      |
| MTH 345/MTE645<br>MTH 3450/6450 | Geometry for Middle Childhood Teachers                                        | 8                      |



|              |                                         |   |
|--------------|-----------------------------------------|---|
| MTH 244/2435 | Elementary Math Concepts for Teachers 2 | 2 |
| 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***

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### **National**

Executive Board Member, National Network for Education Renewal, 2017-20

Reviewer, *Urban Education*, 2012-14, 2019-20

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 Chair, 2017-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**

Faculty Vice President, 2019-21

Member, Undergraduate Academic Policies Committee, 2019-21

Member, Racial Equity Task Force, 2020-21

Member, University Faculty Senate, 2014-16, 2019-21

Member, University Faculty Senate Executive Committee, 2015-16, 2019-21

Chair, Department Promotion and Tenure Committee, 2016-17

Member, Presidential Search and Screening Advisory Committee, 2016-17

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, 2012-20

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