

# Steve V. Coxon

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## Education

- PhD The College of William and Mary, 2012  
Educational policy, planning, and leadership in gifted education administration
- Cognate: Higher education
  - Cognate: Educational technology
  - Graduate assistantship at the Center for Gifted Education, 2008-2010
  - Dissertation: *The malleability of spatial ability under treatment of a FIRST LEGO League-based robotics unit* (Pass, with distinction)
  - Committee: Tracy Cross (chair), Joyce VanTassel-Baska, and Bruce Bracken
- MA Virginia Tech, 2000  
Secondary curriculum and instruction
- Teacher internship, eighth grade language arts, Blacksburg Middle School, Blacksburg, VA, Spring 2000
  - Teacher internship, eleventh grade English, Patrick Henry High School, Roanoke, VA, Fall 1999
  - Special education internship, fourth grade one-on-one targeted phonics, Price's Fork Elementary School, Blacksburg, VA, Spring 1999
  - Thesis: *A comparison of responses to literature* (creative writing in response to literature)
- BA Virginia Tech, 1998  
English, minor biology, computer science focus
- Field study, middle school language arts (Developed and taught a reciprocal poetry unit with middle school students who had been removed from their schools), Noel C. Taylor Learning Academy, Roanoke, VA, Spring 1998
  - *Silhouette Literary Magazine* art editor, radio show host, benefits coordinator, 1997-2000
  - *Collegiate Times* writer, photographer, and assistant features editor, 1996-1998

## Employment

### Academic Positions

2017 – present

Associate professor, School of Education

Executive director, Center for Access and Achievement

Maryville University, St. Louis, MO

- Founding Director of the pre-collegiate [Maryville Science and Robotics Program](#), with 50 faculty and staff serving more than 500 children ages 4-16 annually with 80 course offerings; including more than 40 scholarships for the [Maryville Young Scholars Program](#) and others supported by additional grants and gifts (2012-present)
- P.I., [The Maryville Young Scholars Program](#) to identify and serve high ability children from groups traditionally underrepresented in gifted programs in four urban, high poverty public elementary schools with grant funding; resulted in [state policy change](#) in 2016 (2010-present)
- P.I. [Children using Robotics for Engineering, Science, Technology, and Math](#) (CREST-M) to create mathematics curriculum using robotics to engage elementary students traditionally underrepresented in STEM fields (2015-present)
- P.I. [Maryville STEM Sprouts](#) to prepare teachers to engage 3-5 year olds in age-appropriate, constructivist STEM education (2017-2018)
- Co-P.I. [Maryville Computing in the Context of Communications](#) (C3) to engage middle school girls in computer science (2017)
- P.I. [Cyber Ready St. Louis](#) cybersecurity curriculum creation for high school (2018-2019)
- P.I. [Coding Creators](#) for middle school students in the Boys and Girls Clubs (2018-2020)
- Oversight of the [STEM Education Certificate](#) and [Gifted Education Certificate](#)
- Oversight of the [Coding Camp](#) for secondary students (2017-present)
- Sabbatical awarded (Fall, 2017)
- Oversight of adjunct-taught gifted and STEM education courses
- Generated \$2,820,854 in external revenue and more than 50 publications and 100 presentations
- Responsible for annual budgets in excess of \$700,000 (2018-19)

2015 – present

Associate professor

School of Education, Maryville University, St. Louis, MO

- Awarded tenure and promotion one year early

2010 – 2015

Assistant professor

School of Education, Maryville University, St. Louis, MO

### University Teaching Experience

Maryville University:

EDUC 690

Practicum in gifted education (graduate) – Fall 2016

EDUC 617

Psychology of the gifted (graduate) – Fall 2011, 2012, 2013, 2014, 2015, 2016

EDUC 615

Curriculum and instruction of the gifted (graduate) – Fall 2010; Spring 2011, 2012, 2013, 2014, 2015, 2016

EDUC 548	STEM Education for the 21 <sup>st</sup> Century – Summer 2016
EDUC 390/590	Children’s literature (undergraduate) – Spring 2016, 2017, 2018, 2019
EDUC 384	Practicum in reading (undergraduate) – Spring 2011, 2012, 2013, 2014
EDUC 381	Alternative reading methods (undergraduate) – Spring 2011, 2012, 2013, 2014, 2015
EDUC 380	Teaching reading (undergraduate) – Fall 2010, 2011
EDUC 371	Special methods practicum (undergraduate) – Fall 2010, 2011, 2012, 2013, 2014
EDUC 342	Practicum in teaching art K-12 (undergraduate) – Spring 2013
EDUC 333/533	Integrating the arts (undergraduate / graduate) – Fall 2012, 2013, 2014, 2015, 2016, 2018
INTD 101	University seminar: Unleash yourself (undergraduate) – Fall 2015
University of Oxford: ENGL 297/EDUC 297	From Wonderland to Hogwarts: British children’s fantasy and the people behind it (undergraduate) – Summer, 2013 Visiting lecturer, MOSAICS Study Abroad Program University of Oxford, U.K.

### **K-12 Teaching Experience**

Fall, 2018	Robotics teacher Homeschool co-op, West County, St. Louis, MO <ul style="list-style-type: none"> <li>▪ Taught LEGO WeDo 2.0 for six- to nine-year-olds</li> </ul>
Summers, 2009, 2010	Robotics teacher Summer Enrichment Program, Center for Gifted Education, Williamsburg, VA <ul style="list-style-type: none"> <li>▪ Created and taught multiple sections of “LEGO WeDo: The science and engineering of robotics” for five- to nine-year-olds</li> <li>▪ Involved students in learning about robotics including sensors, engineering including gear ratios, and computer programming including repeat loops</li> </ul>
Summer, 2010	Critical reading teacher Norfolk Academy, Norfolk, VA <ul style="list-style-type: none"> <li>▪ Co-created and co-taught with a NASA education specialist: Skies on fire: Air pollution in Hampton Roads</li> <li>▪ Integrated critical reading and My NASA Data for high ability high school students to use evidence to determine where a power plant should be located and how it should generate power</li> </ul>
2001 – 2008	Fourth and fifth grade classroom teacher

Christiansburg Elementary School, Christiansburg, VA

- Supported students with disabilities and giftedness in a full-inclusion classroom
- Taught reading, writing, and science using project- and problem-based instruction
- Taught mathematics using *Everyday Math*, InterAct units, and *Hands-on Equations*
- Coordinated annual field trips to Thomas Jefferson National Park, 2001-2008
- Designed, set-up, and maintained display Congo River (135 gallons) and Lake Malawi (120 gallons) biotope aquariums for the school, 2002-2008
- Morning Reading Intervention Program director, 2003-05
- School web master, 2005-2008
- Coordinated a field trip for seven fourth grade classes to Monticello and Ashlawn in Charlottesville, VA, 2008

Summers, 2003, 2006, 2007

Gifted summer enrichment program teacher

Montgomery County Public Schools, Christiansburg, VA

- Developed and implemented courses for gifted students in grades 3-11
- Courses taught included LEGO robotics, engineering, chess, creative writing in hypertext, science processes, and dystopian literature

Summer, 2005

Humanities teacher

Summer academy, Blacksburg Middle School, Blacksburg, VA

- Taught humanities, including creative writing in hypertext
- Program focused on traditionally underserved gifted middle school students

2000 – 2001

English teacher

Multimedia Academy, Mt. Diablo High School, Concord, CA

- Senior world literature, junior American literature
- Created literature-based projects for hypertext and animation

1999 –2000

Substitute teacher

Montgomery County Public Schools, Montgomery County, VA

- Served in a variety of teaching capacities including two months as an elementary special education teacher

Summer, 1999

Special education aide

Christiansburg Elementary School, Christiansburg, VA

Consultant and professional development

### **Consultancies**

Fall, 2018 – Spring, 2019

St. Louis Public Schools Foundation, St. Louis, MO

- Coordinated six STEM teacher leaders in developing district STEM policy recommendations
- Compiled a report of the recommendations and the reasoning behind them

- Spring, 2017 – present  
 Consultant and professional development  
 Washington University's MySci, St. Louis, MO
- Advise and provide training on robotics education for the Monsanto Fund's MySciDo grant project, including CREST-M and FIRST LEGO League
  - Collaborate with Washington University, the Monsanto Fund, The LittleBit Foundation, and the Disruption Department to provide robotics and makerspace tools and training for high poverty schools
- Fall, 2016  
 Consultant and professional development  
 University City School District, University City, MO
- Provided professional development for kindergarten and 3<sup>rd</sup> grade teachers on using LEGO to enhance science education
  - Advised on a grant-funded robotics project
- Fall, 2015 – 2017  
 Consultant and professional development  
 Chesterfield Day School, Chesterfield, MO
- Provided professional development for grades 2-6 on project-based learning, gifted education, and STEM education
  - Consulted on special programs
- Spring and Fall, 2013  
 Consultant and professional development  
 Oak Hill School, Ladue, MO
- Provided 8 sessions on serving high ability and gifted students, K-6
  - Special focus on leadership development
- Fall, 2012 – Spring, 2013  
 Consultant, Webster Groves Gifted Program Evaluation Committee  
 Webster Groves School District, St. Louis, MO
- Provided overview, research justification, and technical expertise for initiating Problem-based Learning (PBL) methods and models in districts gifted programs
  - Advised program director on best practice in gifted programming
- Spring – Summer, 2012  
 Consultant, Scientists in Residence (SiR) grant summer robotics program  
 Parkway School District, St. Louis Public School District, St. Louis, MO
- Program development for a three week summer robotics and problem-based learning program with physical science content relating to green energy production
  - Coordinated professional development for 60 teachers who in turn used robotics in the program with 120 students in grades 3-5

## Related Experience

- 2017 – present  
 Junior FIRST LEGO League coach (volunteer)  
 Ballwin, MO community teams
- Guide teams of 5-7 year-olds through designing and programming a LEGO robot and facilitated a research poster for competition
  - Engineering award (2017), programming award (2018)
- February – May, 2013  
 Evaluator, *Step inside the story: Building cognitive skills through drama*  
 Metro Theater Company, Patch Neighborhood Center, St. Louis, MO

- Evaluated a grant project with goals to increase parent involvement, student literacy, student creative play, and teacher use of theater techniques in two high poverty preschool classrooms
  
- 2009 – 2010

Field researcher, replication study of *Acid, Acid Everywhere* PBL unit effectiveness  
Center for Gifted Education, Williamsburg, VA

  - Utilized the Classroom Observation Scales-Revised (COS-R) to conduct multiple classroom observations of a group of teachers of the gifted participating in a curriculum evaluation study
  - Scored pre- and post-assessments (DCT) of student understanding of scientific investigation for both the treatment groups and the comparison groups
  - Conducted statistical analyses of collected data
  
- 2009

Evaluator, needs assessment  
Montgomery County Public Schools, Christiansburg, VA

  - Created, conducted, analyzed, and reported upon a survey for district classroom to assess their needs for serving gifted students
  
- 2008 – 2009

Research assistant to Dr. Joyce VanTassel-Baska, Executive Director,  
Center for Gifted Education, Williamsburg, VA

  - Served as a liaison between authors and editors on two book projects
  - Revised and presented Project Clarion professional development modules
  - Conducted literature reviews for journal articles and book chapters
  - Assisted in the revision of the Florida State Plan for the Gifted
  - Co-evaluator on a needs assessment of Cumberland Valley Public Schools, Mechanicsburg, PA
  
- 2006 – 2017

FIRST LEGO League judge and judge advisor (volunteer)

  - Qualifying competition judge advisor, St. Louis, MO, 2010, 2011, 2012, 2013, 2014, 2015, 2016
  - Certified Robot Design Judge, Certified Core Values Judge, Certified Project Judge
  - World Festival judge, Robot Design, St. Louis, MO, 2011, 2012, 2013, 2014, 2017
  - State competition assistant judge advisor, St. Louis, MO, 2011
  - State competition judge, Robot Design, St. Louis, MO, 2010
  - Head judge, Division II, Blacksburg, VA, 2008
  - State competition judge, Robot Design, Blacksburg, VA, 2006
  
- 2005 –2006, 2015

Therapeutic foster parent  
Family Preservation Services, Christiansburg, VA

  - Fostered an elementary-aged boy for 21 months
  - Taught bicycling, swimming, and snorkeling
  - Oversaw reading comprehension grade equivalent rise from 1.7 to 5.5
  - Facilitated successful transition back to biological family (age 10)
  - Helped obtain a driver's license (age 18)
  - Assisted with transition to the work and self-sufficiency (age 18)
  
- 2003 – 2008

FIRST LEGO League coach (volunteer)

Christiansburg Elementary School, Christiansburg, VA

- Guided ten elementary students through designing and programming LEGO robots for the competition annually
- Facilitated student research and presentation for each year's topic
- Coordinated parent volunteers and university engineering student mentors
- Taught Robotic Invention System and NXT-G programming
- State Judges' Award, 2004 and 2005
- Regional Robot Design Award, 2003, 2004, and 2005
- Regional Core Values Award, 2007
- Team won multiple other awards from 2003-2009

### External Funding

#### **Funded Grant and Gift Requests**

\$1,781,622 Funded to November, 2018

Coxon, S. V., Dohrman, R. L., & Gross, P. (2018-2019). *Cyber Ready St. Louis*. Proposal submitted to the Monsanto Fund. Amount granted: \$132,595 (year 1), \$130,000 (year 2).

Coxon, S. V. (2018). *Cyber Ready Expansion*. Proposal submitted to AT&T. Amount gifted: \$8,000.

Coxon, S. V., & Gross, P. (2018-2020). *Maryville Coding Creators*. Proposal submitted to Boeing. Amount granted: \$125,000 (year 1), \$125,000 (year 2), \$125,000 (year 3).

Coxon, S. V. (2018). *Maryville Science and Robotics Program Partial Scholarship Program*. Proposal submitted to Blueprint4Summer. Amount gifted: \$2,000.

Coxon, S. V. (2017). *Scholarships for Riverview Gardens students to attend App Development Camp*. Proposal submitted to AT&T. Amount gifted: \$7,500.

Dohrman, R. L., Coxon, S. V., & York, D. (2017). *C3: Computing in the Context of Communication*. Proposal submitted to the Monsanto Fund. Amount granted: \$124,710.

Coxon, S. V. (2016). *Maryville STEM Sprouts*. Proposal submitted to Boeing. Amount granted: \$85,000.

Coxon, S. V. (2016-2018). *Maryville Young Scholars Program*. Proposal submitted to Midwest BankCentre. Amount gifted: \$1,500 (year 1), \$1,500 (year 2), \$5,000 (year 3).

Coxon, S. V. (2015). *STEM Education Certificate Program*. Proposal submitted to Boeing. Amount granted: \$70,000.

Coxon, S. V. (2015-2016). *Maryville Young Scholars Program*. Proposal submitted to the Ayco Charitable Foundation (Greg and Lisa Boyce). Amount gifted: \$1500 (year 1), \$1500 (year 2).

Coxon, S. V., & R. L. Dohrman. (2015-2016). *Children using Robotics for Engineering, Science, Technology, and Math (CREST-M)*. Proposal submitted to the Monsanto Fund. Amount granted: \$124,995 (year 1), \$120,000 (year 2).

Coxon, S. V. (2015-2019). *Maryville Young Scholars Program*. Proposal submitted to Emerson. Amount gifted: \$50,000 (year 1), \$50,000 (year 2), \$50,000 (year 3), \$50,000 (year 4).

Coxon, S. V. (2013-2016). *Maryville Young Scholars Scholarships to Attend the Maryville Summer Science and Robotics Program*. Proposal submitted to parents of attendees of the Program. Amount gifted: \$250 (year 1), \$50 (year 2), \$1500 (year 3), \$500 (year 4).

Coxon, S. V., & Hausfather, S. (2013-2014). *Maryville Young Scholars Program*. Proposal submitted to Emerson. Amount gifted: \$30,000 (year 1), \$40,000 (year 2).

Coxon, S. V., & Hausfather, S. (2013-2015). *Maryville Young Scholars Scholarships to Attend the Maryville Summer Science and Robotics Program*. Proposal submitted to AT&T. Amount gifted: \$5,000 (year 1), \$5,000 (year 2), \$5,000 (year 3).

Coxon, S. V. (2012-2017). *Maryville Young Scholars Summer Robotics Transportation*. Proposal submitted to the Ryan Howard Foundation. Amount gifted: \$2,000 (year 1), \$2,000 (year 2), \$3,000 (year 3), \$5,000 (year 4), \$5,000 (year 5).

Coxon, S. V., & Hausfather, S. (2012-2015). *Maryville Young Scholars Program*. Proposal submitted to the Dana Brown Trust. Amount granted: \$50,000 (year 1), \$50,000 (year 2), \$50,000 (year 3).

Coxon, S. V., & Hausfather, S. (2012). *Expanding FIRST LEGO League to Diverse Students*. Proposal submitted to the Trio Foundation. Amount granted: \$10,000.

Coxon, S. V., & Hausfather, S. (2010-2016). *Young Scholars: Nurturing Academic Potential in Underrepresented Populations*. Proposal submitted to the Saigh Foundation. Amount granted: \$20,000 (year 1), \$15,000 (year 2), \$17,500 (year 3), \$17,500 (year 4), \$20,522 (year 5), \$20,000 (year 6), \$15,000 (year 7).

Coxon, S. V. (2005-2007). *FIRST LEGO League*. Proposal submitted to Appalachian Electric Power. Amount granted: \$500 (year 1), \$250 (year 2), \$250 (year 3).

### **Program Revenue Generation**

\$1,039,232 Generated to November, 2018

Coxon, S. V. (2012-2018). *The Maryville Science and Robotics Program*. Gross tuition revenue: \$62,059 (2012), \$96,108 (2013), \$135,065 (2014), \$160,000 (approximate 2015), \$180,000 (approximate 2016), 210,000 (approximate 2017), \$195,000 (approximate 2018).

### **In-kind Donations**

Coxon, S. V. (2014). *Robotics for Peabody Elementary*. Proposal submitted to LEGO Education. Amount gifted \$1,000 in WeDo robotics kits.

### **Selected Unfunded Grants**

Coxon, S. V., Dohrman, R. L., Nadler, D. R. (2018). *Project CALS: Computing in agriculture and life science*. Proposal submitted to The National Science Foundation Computer Science for All Researcher-Practitioner Partnership. Amount requested: \$997,519. [Unfunded].



Coxon, S. V., Dohrman, R. L., Nadler, D. R. (2018). *Network for school improvement*. Proposal submitted to The Gates Foundation. Amount requested: \$1,034,453. [Unfunded].

Coxon, S. V. (2014). *Young Scholars: Scaling up a successful model for increasing diversity in gifted education programs*. Proposal submitted to the Javits Gifted and Talented Students Education Program [USDOE]. Amount requested: \$2,114,111.06. [Unfunded].

Coxon, S. V., & Dohrman, R. L. (2014). *Children using robotics for engineering, science, technology, and mathematics (CREST-M)*. Proposal submitted to the Monsanto Fund. Amount requested: \$499,247 [Unfunded].

Coxon, S. V., & Dohrman, R. L. (2013). *Increasing interest and potential in STEM careers among diverse children and their teachers through robotics*. Proposal submitted to the National Science Foundation. Amount requested: \$2,881,353.66 [Unfunded].

## Publications

### **Refereed Publications**

Coxon, S. V., Dohrman, R. L., and Nadler, D. R. (2018). Children using Robotics for Engineering, Science, Technology, and Math (CREST-M): The development and evaluation of an engaging math curriculum using LEGO robotics and storytelling. *Roeper Review*.

VanTassel-Baska J., & Coxon, S. V. (2016). A tribute to Richard Paul. *Roeper Review*, 38(1), 6-8.

Senne, J., & Coxon, S. V. (2016). Architecture: A nexus of creativity, math, and spatial ability. *Gifted Child Today*, 39(1), 31-39.

Cotabish, A., Dailey, D., Coxon, S. V., Adams, C., & Miller, R. (2014). The Next Generation Science Standards and high ability learners. *Teaching for High Potential*, Winter.

Coxon, S. V. (2012). Innovative allies: Spatial and creative abilities. *Gifted Child Today*, 35(4), 277-284.

Coxon, S. V. (2012). The malleability of spatial ability under treatment of a FIRST LEGO League simulation. *Journal for the Education of the Gifted*, 35(3), 291-316.

Coxon, S. V., Bland, L. C., & Chandler, K. (2012). The changing weather: Developing conceptual understanding of weather phenomena in young children. *Teaching for High Potential*, Winter, 8-9, 13-14.

Bland, L. C., Coxon, S. V., Chandler, K., & VanTassel-Baska, J. (2010). Science in the city: Meeting the needs of urban gifted students through Project Clarion. *Gifted Child Today*, 33(4), 48-57.

Coxon, S. V. (2010). FIRST LEGO League, the sport of the mind. *Teaching for High Potential*, Winter, 6-8.

### **Books, Book Chapters, and Monographs**

Coxon, S. V. (2016). Spatial ability, engineering, and robotics for high-ability learners. In D. Dailey and A. Cotabish (Eds.), *Engineering instruction for high ability learners in K-8 classrooms*. Washington D. C.: National Association for Gifted Children and Prufrock Press.

- Kim, K. H., & Coxon, S. V. (2016). Fostering creativity using robotics among students in STEM fields to reverse the Creativity Crisis. In Melissa K. Demetrikopoulos and John L. Pecore (Eds.), *Interplay of creativity and giftedness in science*. Rotterdam, The Netherlands: Sense.
- Coxon, S. V. (2015). S is for science education at the secondary level: Curriculum and instructional methods for developing scientific thinking and habits. In B. D. MacFarlane (ed.), *STEM education for high-ability learners: Designing and implementing programming*. Waco, TX: Prufrock.
- Coxon, S. V. (2014). On the edge of chaos: Robots in the classroom. Ambrose, D. & Sriraman, B., (Eds.). *A critique of creativity and complexity: Deconstructing clichés*. Rotterdam, Netherlands: Sense.
- Kim, K. H., & Coxon, S. V. (2013). The creativity crisis, possible causes, and what schools can do about it. In J. B. Jones. & L. J. Flint (Eds.), *The creative imperative: School librarians and teachers cultivating curiosity together*. Santa Barbara, CA: Libraries Unlimited.
- Coxon, S. V. (accepted, unpublished). STEAM power: Reversing the creativity crisis in the science education. Accepted for a book which was never published by the editor.
- Coxon, S. V. (2013). [\*Serving visual-spatial learners\*](#). Waco, TX: Prufrock.
- Coxon, S. V. (2012). Developing creativity for future STEM innovation in young children. *Monograph of the American Creativity Association Innovation by Design Conference*. Philadelphia, PA: Drexel University. Retrieved from <http://aca.cloverpad.org/Resources/Documents/ACA%202012%20Conference%20Monograph%204.14.13e.pdf>
- Coxon, S. V. (2009). Challenging neglected spatially gifted students with FIRST LEGO League. In J. VanTasselBaska (ed.), *Addendum to leading change in gifted education*. Williamsburg, VA: Center for Gifted Education.

## State Policy

- Advisory Council on the Education of Gifted and Talented Children. (2016). *Identifying and serving traditionally underrepresented gifted students: Guidance for Missouri school districts*. Retrieved from <https://dese.mo.gov/sites/default/files/qs-Gifted-Underrepresented-Gifted-Students-2016.pdf>
- Coxon, S. V. (2013). *Young Scholars alternate identification pilot (4-year pilot)*. Agreement to accept children from populations traditionally underrepresented in gifted education into district gifted programs based on school norms. Maryville University and the Missouri Department of Elementary and Secondary Education.

## Instruments

- Coxon, S. V. (2014). *Alternatively Identified Gifted Assessment (AIGA)*. Missouri Department of Secondary and Elementary Education.
- Coxon, S. V. (2013). *Coach Fidelity Observation Scale (C-FOS)* [Database record]. Retrieved from PsycTESTS.

## Book Reviews

- Coxon, S. V. (2016). [Review of the book *The Roeper School: A model for holistic development of high ability*, by D. Ambrose, B. Sriraman, & T. L. Cross (Ed.s)]. *Roeper Review*, 38(4), 267-268.

Coxon, S. V. (2015). [Review of the book 30 days to better thinking and better living with critical thinking: *A guide for improving every aspect of your life, revised and expanded*, by L. Elder & R. Paul]. *Roeper Review*, 37(4), 255-256.

## Columns

[Note: Many of these Scientifically Speaking columns have been reprinted in GAMbit, the Gifted Association of Missouri's newsletter, and elsewhere including in J. Danielian, E. Fogarty, & C. Fugate (eds.) *Teaching gifted children: Success strategies for teaching high-ability learners*. (2017). National Association of Gifted Children, Washington DC.]

Coxon, S. V. (2017). Scientifically speaking: Budding Programmers. *Teaching for High Potential*.

Coxon, S. V. (2017). Scientifically speaking: Creating an outdoor STEM classroom. *Teaching for High Potential*.

Coxon, S. V. (2017). Scientifically speaking: Integrating STEM into reading with novel engineering. *Teaching for High Potential*.

Coxon, S. V. (2016). Scientifically speaking: The social and emotional benefits of nature. *Teaching for High Potential*.

Coxon, S. V. (2016). Scientifically speaking: Curiosity for all. *Teaching for High Potential*, Summer, 5.

Coxon, S. V. (2016). Scientifically speaking: Making a makerspace. *Teaching for High Potential*, Winter, 11.

Coxon, S. V. (2015). Scientifically speaking: Robots get schooled. *Teaching for High Potential*, Fall, 3.

Coxon, S. V. (2015). Scientifically speaking: STEM and human rights for student AWhereeness through GIS. *Teaching for High Potential*, Summer, 3.

Coxon, S. V. (2015). Scientifically speaking: Scientists of the past informing the scientists of the future. *Teaching for High Potential*, Winter, 6.

Coxon, S. V. (2014). Scientifically speaking: America's untapped STEM potential. *Teaching for High Potential*, Fall.

Coxon, S. V. (2014). Scientifically speaking: Nurturing student thinking isn't a frill: It's critical! *Teaching for High Potential*, Summer, 4.

Coxon, S. V. (2014). Scientifically speaking: No oxymoron: Differentiating the standards, *Teaching for High Potential*, Winter, 4.

Coxon, S. V. (2013). Scientifically speaking: Enhance your classroom context: Take science to the real world. *Teaching for High Potential*, Fall.

Coxon, S. V. (2013). Scientifically speaking: The four Cs in 21<sup>st</sup> century science education. *Teaching for High Potential*, Spring.

Coxon, S. V. (2013). Scientifically speaking: Art, science, and Elmo: STEAM Ahead for Creativity. *Teaching for High Potential*, Winter, 17-18.

Coxon, S. V. (2012). [Scientifically speaking: They have eyes, but do they see?](#) *Teaching for High Potential*, Summer, 3, 13.

Coxon, S. V. (2012). [Scientifically speaking: Science is a verb](#). *Teaching for High Potential*, Spring, 4.

### Newsletter Articles

Coxon, S. V. (2018, October). Filling America's STEM gap starts early: Why more educators should focus on teaching students STEM subjects at an early age. *Thrive Global*. Available at <https://thriveglobal.com/stories/filling-america-s-stem-gap-starts-early/>

Loeffler, D. R., & Coxon, S. V. (2018). ELearning news: Is Apple about to disrupt the classroom? *The Odyssey Online*. Available at <https://www.theodysseyonline.com/learning-news-is-apple-about-to-disrupt-the-classroom>

Coxon, S. V. (2015, May). Where are they now? *The Bridge Newsletter*. Center for Gifted Education at The College of William and Mary.

Coxon, S. V. (2015, April). Update from the Advisory Council on the Education of Gifted and Talented Children. *GAMbit*. Gifted Association of Missouri.

Coxon, S. V. (2014, November). *Non Satis Scire* (To know is not enough). In Legacy series: Joyce VanTassel-Baska. *Conceptual Foundations Network Newsletter*. Washington, DC: NAGC.

Coxon, S. V. (2014, May). [Increasing diversity in gifted education: The Maryville Young Scholars Program](#). *GAMbit*. Gifted Association of Missouri, Summer, 50-51.

Coxon, S. V. (2014, March). The Maryville Summer Science and Robotics Program for High Ability Students. *GAMbit*. Gifted Association of Missouri, Spring, 36.

Coxon, S. V. (2013, January). [Controllable but ignored: Environmental factors in early childhood that impede school success](#). *Early Childhood Network Newsletter*. National Association for Gifted Children: Washington D. C., 18-21.

Coxon, S. V. (2012, November). [The spatially-able, a neglected population of gifted children](#). *Mosaic: Special Populations Network Newsletter*. National Association for Gifted Children.

Coxon, S. V. (2012, spring). [The malleability of spatial ability under treatment of a FIRST LEGO League competition-based simulation](#). *The Bridge Newsletter*. Center for Gifted Education at The College of William and Mary.

### Curriculum Units

Gross, P., Dohrman, R. L., & Coxon, S. V. (under review). *Cyber Ready St. Louis*. Cybersecurity curriculum for high school students.

Coxon, S. V., Dohrman, R. L., & Washington University Institute for School Partnerships MySci. (2018; in preparation). *TBD*. Children using Robotics for Engineering, Science, Technology, and Math (CREST-M) math curriculum for grades 3.

Dohrman, R. L. York, D., Coxon, S. V. (2017). *Computing in the context of communication*. Coding curriculum to engage middle school girls. Available at <https://www.maryville.edu/mpress/monsanto-fund-grant/>

- Coxon, S. V., Dohrman, R. L., & Roberts, G. (2016; under review). *Explore fractions with Ana and John: The tale of the monarchs*. Children using Robotics for Engineering, Science, Technology, and Math (CREST-M) math curriculum for grade 5.
- Coxon, S. V., Dohrman, R. L., & Roberts, G. (2015; under review). *Explore measurement with John and Lucia: Strawberry harvest*. Children using Robotics for Engineering, Science, Technology, and Math (CREST-M) math curriculum for grade 4.
- Coxon, S. V. (2010). Design to succeed in LEGO WeDo challenges: An enrichment unit for ages 7-10. Available at <http://stevecoxon.com/>
- Lewis, P., & Coxon, S. V. (2010). *Skies on fire: Air pollution in Hampton Roads, a data-based critical thinking unit for high ability high school students*. NASA and The Center for Gifted Education, Norfolk, VA. Available for download at <http://stevecoxon.com/>
- Coxon, S. V. (2008). *STEMbotics: Using Edward deBono's Six Thinking Hats and LEGO NXT robotics to understand STEM careers*. Available for download at <http://stevecoxon.com/>

### **Curriculum Unit Revisions**

Center for Gifted Education. (2010). *How the Sun makes our day*. Waco, TX: Prufrock.

Center for Gifted Education. (2010). *Survive and thrive*. Waco, TX: Prufrock.

Center for Gifted Education. (2010). *Invitation to invent*. Waco, TX: Prufrock.

### **Evaluation Reports**

Coxon, S. V. (2013). Report to the Metro Theater Company on the evaluation of *Step inside the story*, St. Louis, MO.

Coxon, S. V. (2009). Needs assessment and evaluation report on Montgomery County Public Schools, Christiansburg, VA.

VanTassel-Baska, J., & Coxon, S. V. (2009). Needs assessment and evaluation report on Cumberland Valley Public Schools, Mechanicsburg, PA.

### **Completed Studies/Publications in Preparation**

Coxon, S. V., Nadler, D. (in preparation). The correlation between media use and creativity. [2014 study].

Coxon, S. V. (in preparation). The correlation between spatial ability and creativity. [2013 study].

Coxon, S. V., & Ma, H. (in preparation). Changes in creativity and spatial ability scores among children and adolescents under treatment of an academic robotics program. [2012 study].

### **Presentations**

#### **National Juried Presentations**

Coxon, S. V., & Dohrman, R. L. (2019, April). *Using PBL to incorporate life science into elementary math curriculum*. National Science Teachers Association. St. Louis, MO.

- Coxon, S. V., Schoeck, M., Senne, J., Davis, G. (2019, April). *STEM Sprouts: STEM for early childhood*. National Science Teachers Association. St. Louis, MO.
- Dohrman, R. L., York, D., & Coxon, S. V. (2018, June). *Project C3: Engaging middle school girls in coding through journalism*. Roundtable. International Society for Technology in Education. Chicago, IL.
- Coxon, S. V. (2018, March). *Early is better: STEM education for ages 3–5 results in long-term benefits as this project demonstrates in a diverse, high-poverty setting*. National Science Teachers Association National Conference on Science Education. Atlanta, GA.
- Lankin, J., Wai, J., & Coxon, S. V. (2017, November). *Spatial talents and STEM programs: Identification and curricular innovations*. National Association for Gifted Children. Charlotte, NC.
- Dohrman, R. L., York, D., & Coxon, S. V. (2017, October). *Computing in the Context of Communication: A pilot study of engaging middle school girls in computing through the study of journalism*. Presented to the annual meeting of the Organization for the Study of Communication, Language & Gender. Omaha, NE.
- Coxon, S. V., & Dohrman, R. L. (2017, June). *LEGO robotics to enhance mathematics learning*. International Society for Technology in Education. San Antonio, TX.
- Coxon, S. V. (2016, November). In D. Dailey (chair), *Developing critical STEM literacy and delivering better STEM programs* (panel). National Association for Gifted Children, Orlando, FL.
- Dohrman, R. L., Stephen, G., Buck, K., & Coxon, S. V. (2016, October). *The deciders: A pilot study of gendered parental beliefs & attitudes about children's participation in STEM extracurricular activities*. Organization for the Study of Language, Communication and Gender, Chicago, IL.
- Coxon, S. V. (2016, April). *Preparing high ability students from poverty for gifted programs: The Young Scholars Program*. Council for Exceptional Children Education Convention. St. Louis, MO.
- Coxon, S. V. (2015, November). *Creative math engagement in Fergusson*. National Association for Gifted Children Annual Convention, Creativity Network. Baltimore, MD.
- Dohrman, R. L. & Coxon, S. V. (2015, July). *Children using robotics for engineering, science, technology and math (CREST-M): An interdisciplinary study assessing the importance of narrative in anticipatory socialization for elementary students* (Work in Progress). Presented to the annual meeting of the Aspen Engaged Scholarship in Organizational Communication Conference. Aspen, CO.
- Coxon, S. V., & Senne, J. (2014, November). *Architecture: Where creativity and math merge*. National Association for Gifted Children Annual Convention, Creativity Network. Baltimore, MD.
- Dohrman, R., & Coxon, S. V. (2014, November). *Engaging girls in STEM with robotics*. National Association for Gifted Children Annual Convention, STEM Network. Baltimore, MD.
- Coxon, S. V. (2014, July). *Observation: The earliest critical thinking skill*. International Conference for Critical Thinking and Educational Reform, Foundation for Critical Thinking, Berkeley, CA.

- Coxon, S. V. (2013, November). *Generate some STEAM: Developing creativity in STEM through arts integration*. National Association for Gifted Children Annual Convention, Creativity Network. Indianapolis, Indiana.
- Coxon, S. V. (2013, November). *Robotics brings results: A study of creativity, spatial ability, and robotics*. National Association for Gifted Children Annual Convention, STEM Network. Indianapolis, Indiana.
- Coxon, S. V. (2013, March). *Serving visual-spatial learners*. National Curriculum Networking Conference, Center for Gifted Education, The College of William and Mary, Williamsburg, VA.
- Coxon, S. V. (2012, November). *Controllable but ignored: Environmental factors in early childhood that impede school success*. National Association for Gifted Children Annual Convention, Early Childhood Network, Denver, CO.
- Coxon, S. V. (2012, November). *Robotics for STEM success: Evaluation of a project to start robotics teams in high poverty schools*. National Association for Gifted Children Annual Convention, STEM Network, Denver, CO.
- Coxon, S. V. (2012, September). *Developing creativity for future STEM innovation in young children*. American Creativity Association Innovation by Design Conference. Drexel University, Philadelphia, PA.
- Coxon, S. V. (2012, April). *The Malleability of Spatial Ability Under Treatment of a FIRST LEGO League Competition-based Simulation*. American Educational Research Association Annual Meeting, Vancouver, Canada.
- Coxon, S. V. (2011, November). *Partners in innovation: Creative and spatial abilities*. National Association for Gifted Children Annual Convention, STEM Network, New Orleans, LA.
- Coxon, S. V., & Bilby, B. (2011, November). *To find and to serve: Experiences identifying and serving talented students in a low-income school*. National Association for Gifted Children Annual Convention, Special Populations Network, New Orleans, LA.
- Coxon, S. V. (2010, November). *The changing weather: Developing a conceptual understanding of weather phenomena in young children*. National Association for Gifted Children, Early Childhood Network, Atlanta, GA.
- Coxon, S. V. (2010, November). *The mother of invention: Involving elementary students in the invention process*. National Association for Gifted Children, STEM Network, Atlanta, GA.
- Coxon, S. V. (2010, March). *The changing weather: Developing a conceptual understanding of weather phenomena in young children*. National Curriculum Networking Conference, Center for Gifted Education, The College of William and Mary, Williamsburg, VA.
- Coxon, S. V. (2010, March). *Activities to challenge spatially gifted students*. National Curriculum Networking Conference, Center for Gifted Education, The College of William and Mary, Williamsburg, VA.
- Coxon, S. V. (2010, March). *STEMbotics: Using LEGO NXT robotics to engage students in STEM career possibilities*. National Curriculum Networking Conference, Center for Gifted Education, The College of William and Mary, Williamsburg, VA.
- Coxon, S. V. (2009, November). *Making scientists out of primary students: Project Clarion*. National Association for Gifted Children, Curriculum Network, St. Louis, MO.

- Coxon, S. V. (2009, November). *STEMbotics: Using robotics to understand STEM systems*, STEM Network, National Association for Gifted Children, St. Louis, MO.
- Coxon, S. V. (2009, March). *Serving spatially gifted children in the regular classroom*. National Curriculum Networking Conference, Center for Gifted Education, The College of William and Mary, Williamsburg, VA.
- Coxon, S. V. (2008, March). *LEGO robotics: Science, engineering, and computer programming logic*. National Curriculum Networking Conference, Center for Gifted Education, The College of William and Mary, Williamsburg, VA.
- Coxon, S. V. (2008, March). *Build It! Fun activities for problem solving and spatial reasoning*. National Curriculum Networking Conference, Center for Gifted Education, The College of William and Mary, Williamsburg, VA.
- Coxon, S. V. (2007, March). *Robots gone wild: LEGO and logic*. National Curriculum Networking Conference, Center for Gifted Education, The College of William and Mary, Williamsburg, VA.

### **State-Level Juried Presentations**

- Coxon, S. V., & Dohrman, R. L. (2018, November). *Integrating STEM into elementary math through robotics and science*. Missouri STEM Summit. Kansas City, MO.
- Coxon, S. V. (2018, October). *Bring the world to the classroom with virtual reality*. Gifted Association of Missouri. Springfield, MO.
- Davis, G., Ritenour School for Early Childhood Education faculty, & Coxon, S. V. (2018, March). *STEM Sprouts*. Conference on the Young Years. Osage Beach, MO.
- Senne, J., Marklin, K., & Coxon, S. V. (2017, October). *STEAM (science, technology, engineering, art, math) outdoor learning space*. Interior Design Educators Council Midwest Regional Conference. St. Louis, MO.
- York, D., Dohrman, R., Coxon, S. V., and Nadler, D. (2017, October). *Coding Through the Context of Communication*. Presented at JournalismSTL Conference, St. Louis, MO.
- Coxon, S. V., (2016, October). *Start a makerspace in your school or classroom*. Gifted Association of Missouri Conference, Columbia, MO.
- Coxon, S. V., & Dohrman, R. L. (2015, October). *CREST-M Curriculum: Children using Robotics for Science, Technology, Engineering, and Math*. Gifted Association of Missouri Conference, Columbia, MO.
- Berry, M., & Coxon, S. V. (2015, October). *Young Scholars: Identifying and Serving High Ability Students from Diverse Backgrounds*. Gifted Association of Missouri Conference, Columbia, MO.
- Senne, J., & Coxon, S. V. (2015, March). *Creative architectural activities to challenge gifted students in math*. Gifted Association of Missouri (District A), Maryville University, St. Louis, MO.
- Coxon, S. V. (2014, October). *Developing habits of mind for young critical thinkers*. Gifted Association of Missouri Conference, Springfield, MO.
- Coxon, S. V. (2014, October). *A path forward for increasing diversity in gifted programs*. Gifted Association of Missouri Conference, Springfield, MO.



- Senne, J., & Coxon, S. V. (2014, October). *Creative architectural activities to challenge gifted students in math*. Gifted Association of Missouri Conference, Springfield, MO.
- Coxon, S. V. (2014, March). *Teach for innovation with STEAM*. Gifted Association of Missouri (District A), Maryville University, St. Louis, MO.
- Coxon, S. V. (2013, October). *Missouri leads the way toward increasing diversity in gifted programs*. Gifted Association of Missouri Conference, Springfield, MO.
- Bilby, B., & Coxon, S. V. (2012, October). *Identify and serve high ability students from poverty: The Maryville Young Scholars model*. Gifted Association of Missouri Conference, Columbia, MO.
- Coxon, S. V. (2012, February). *Robotics for the gifted*. Gifted Association of Missouri (District A), Lindenwood University, St. Charles, MO.
- Coxon, S. V. (2012, February). *Kids are scientists with creative problem-based units*. Gifted Association of Missouri (District A), Lindenwood University, St. Charles, MO.
- Coxon, S. V. (2011, October). *Partners in innovation: Creative and spatial abilities*. Gifted Association of Missouri Conference, Columbia, MO.
- Coxon, S. V. (2011, March). *Challenge kids with creative and spatial abilities in your class*. Gifted Association of Missouri (District A), Lindenwood University, St. Louis, MO.
- Coxon, S. V. (2011, March). *Creativity and computer programming? Animations and video games*. Gifted Association of Missouri (District A), Lindenwood University, St. Louis, MO.
- Coxon, S. V. (2010, February). *Coaching a FIRST LEGO Robotics team*. Children's Engineering Convention, Richmond, VA.
- Coxon, S. V. (2010, February). *LEGO WeDo*. Children's Engineering Convention, Richmond, VA.
- Coxon, S. V. (2009, October). *Using LEGO Robotics to enhance student understanding of STEM careers*. Virginia Association for the Gifted, Virginia Conference on Gifted Education, Williamsburg, VA.
- Coxon, S. V. (2009, October). *Computer programming for kids*. Virginia Association for the Gifted, Virginia Conference on Gifted Education, Williamsburg, VA.
- Coxon, S. V. (2009, October). *Build it! Inexpensive activities for enhancing spatial reasoning*. Virginia Association for the Gifted, Virginia Conference on Gifted Education, Williamsburg, VA.
- Coxon, S. V. (2009, February). *Build It! Fun activities for problem solving and spatial reasoning*. Children's Engineering Convention, Richmond, VA.

### **Keynote addresses**

- Coxon, S. V. (2017, February). *Makerspace: Concept to reality* (Keynote address). Gifted Association of Missouri District A. Maryville University, St. Louis, MO.

Coxon, S. V. (2015, February). *Awakening the creative forces* (Keynote address). Gifted Association of Missouri District A. Lindenwood University, St. Charles, MO.

### **Commencement addresses**

Coxon, S. V. (May, 2013). Commencement address. McKinley Classical Leadership Academy (public, gifted magnet middle/high school). St. Louis Public Schools. St. Louis, MO.

### **Symposia**

Coxon, S. V. (chair), Holt, S., Lazzelle, L., Toney, C., & Winton, B. (2018, October). *Missouri Gifted Advisory Council update*. Panel discussion held at the Gifted Association of Missouri state conference. Springfield, MO.

Coxon, S. V. (2018, January). The Center for Access and Achievement STEM education pipeline. In F. Fowler (chair), *Workforce Development Panel*. Symposium conducted at the Boys and Girls Clubs of Greater St. Louis board retreat, St. Louis, MO.

Coxon, S. V. (2016, April). Preparing high ability students from poverty for gifted programs: The Young Scholars Program. In A. Cotabish (chair), *STEM opportunities for gifted learners*. Symposium conducted at the Council for Exceptional Children convention and expo, St. Louis, MO.

Coxon, S. V. (2016, September). In M. Dragoni (chair), *Most likely to succeed*. Symposium conducted at Ritenour High School, Ritenour, MO.

Coxon, S. V. (2016, February). In J. Horwitz (chair), *Most likely to succeed*. Symposium conducted at Maryville University, St. Louis, MO.

Coxon, S. V. (2015, November). S is for science education at the secondary level: Curriculum and instructional methods for developing scientific thinking and habits. In B. D. MacFarlane (chair), *STEM education for highability learners: Designing and implementing programming*. Symposium conducted at the National Association for Gifted Children annual convention, Phoenix, AZ.

Coxon, S. V. (2011, November). In D. Pupillo (chair), *Project Parkway Panel Discussion on Gifted Education*. Symposium conducted by Parkway School District. Parkway South High School, Ballwin, MO.

Coxon, S. V. (2011, November). Applying for faculty positions. In P. Gyles and C. Walker (Chairs), *Going to graduate school in gifted education: Choosing a program, surviving, and succeeding*. Symposium conducted by the Graduate Student Committee. National Association for Gifted Children Annual Convention, New Orleans, LA.

### **Webinars and Podcasts**

Coxon, S. V. (2018, January). *Creativity*. Unlimited Potential Podcasts. St. Louis, MO.

Coxon, S. V. (2016, March). *S is for science education at the secondary level: Curriculum and instructional methods for developing scientific thinking and habits*. Webinar on Wednesday (WoW). National Association for Gifted Children, Washington D.C.

Coxon, S. V. (2015, September). *Scientifically speaking: Best practices for science education with high-ability children*. Webinar on Wednesday (WoW). National Association for Gifted Children, Washington D.C.

Coxon, S. V. (2011, April). Applying for faculty positions. In P. Gyles and C. Walker (Chairs), *Going to graduate school in gifted education: Choosing a program, surviving, and succeeding*. Webinar on Wednesday conducted by the Graduate Student Committee of the National Association for Gifted Children, Washington D.C.

### **Workshop presentations**

Coxon, S. V. (2018, September). Language arts strategies for gifted students. Workshop at Mallinckrodt Academy of Gifted Instruction. St. Louis Public Schools, St. Louis, MO.

Coxon, S. V. (2018, January). *CREST-M curriculum and LEGO WeDo 2.0 robotics*. Train the trainer workshop for Washington University's MySci and The LittleBit Foundation. Washington University, St. Louis, MO.

Coxon, S. V. (2018, January). *Robotics across the curriculum*. STEMPact. Steelworkers Union Hall, St. Louis, MO.

Coxon, S. V. (2017, July). *CREST-M curriculum and LEGO WeDo 2.0 robotics*. Train the trainer workshop for Washington University's MySci and The LittleBit Foundation. Washington University, St. Louis, MO.

Coxon, S. V., Dunlop, E., Carr, A. (2017, January). *Coding and robotics for early childhood*. Ritenour School for Early Childhood Education, St. Louis, MO.

Coxon, S. V. (2016, August). *STEM and Project-Based Learning in gifted education*. Professional development day Rockwood gifted education faculty. Rockwood Public Schools, Wildwood, MO.

Coxon, S. V. (2014, August). *Jacob's Ladder and Literary Reflections implementation in the classroom*. Professional development day, Kennard Classical Junior Academy (gifted magnet elementary school), St. Louis Public Schools, St. Louis, MO.

Coxon, S. V. (2013, January). *The decline in creativity among U.S. youth and what you can do about it*. Faculty Development Day, Maryville University, St. Louis, MO.

Coxon, S. V. (2012, March). *WeDo robotics*. STEM Week. Prairie View Elementary third graders. O'Fallon, MO.

Coxon, S. V. (2012, March). *NXT robotics for LEGO Cares*. Adams Elementary School LEGO Cares team. St. Louis, MO.

Coxon, S. V. (2012, January). *A critical thinking model useful across disciplines*. Faculty Development Day, Maryville University, St. Louis, MO.

Coxon, S. V. (2011, March). *Problem-based learning*. EDW: 590 Curriculum and Instruction of the Gifted. Peabody eMints Academy, St. Louis Public School System, St. Louis, MO.

Coxon, S. V. (2010, March). *LEGO robotics*. Super Saturday for Parents of Gifted Children. Spotsylvania County Public Schools, Spotsylvania, VA.

Coxon, S. V. (2009, September). *Critical thinking models for understanding environmental issues*. Virginia Department of Environmental Quality, Virginia Naturally, Emerging Leaders Workshop, Williamsburg, VA.

Coxon, S. V. (2009, September). *Acid, Acid Everywhere: PBL training for fifth grade gifted educators*. Hampton County Public Schools, Hampton, VA.

- Coxon, S. V. (2009, August). *Think like a scientist: Project Clarion*. Isle of Wight County Public Schools, Isle of Wight, VA.
- Coxon, S. V. (2009, August). *Think like a scientist: Project Clarion*. Halifax County Public Schools, South Boston, VA.
- Coxon, S. V. (2009, July). *Think like a scientist: Project Clarion*. Washington County Public Schools, Abingdon, VA.
- Coxon, S. V. (2009, June). *The Center for Gifted Education science units*. Summer Institute, Center for Gifted Education, The College of William and Mary, Williamsburg, VA. [Three day session]
- Coxon, S. V. (2009, June). *Think like a scientist: Project Clarion*. Giles County Public Schools, Pearisburg, VA.
- Coxon, S. V. (2009, June). *Think like a scientist: Project Clarion*. Roanoke County Public Schools, Roanoke, VA.
- Coxon, S. V. (2009, May). *Think like a scientist: Project Clarion*. Rockbridge County Public Schools, Lexington City Public Schools, Nelson County Public Schools, Washington and Lee University education department leadership, Lexington, VA.
- Coxon, S. V. (2009, May). *Think like a scientist: Project Clarion*. Page County Public Schools, Luray, VA.
- Coxon, S. V. (2009, May). *Think like a scientist: Project Clarion*. Campbell County Public Schools, Rustburg, VA.
- Coxon, S. V. (2009, April). *Think like a scientist: Project Clarion*. Montgomery County Public Schools, Montgomery County Public Schools, Christiansburg, VA.
- Coxon, S. V. (2009, April). *Think like a scientist: Project Clarion*. Middlesex County Public Schools, Saluda, VA.
- Robbins, J., & Coxon, S. V. (2009, March). *Think like a scientist: Project Clarion*. Orange County Public Schools, Orange, VA.
- Bland, L. C., & Coxon, S. V. (2009, January). *Think like a scientist: Project Clarion*. Fairfax County Public Schools, Falls Church, VA.
- Coxon, S. V. (2006, March). *Build It! Fun activities for problem solving and spatial reasoning*. Differentiation Marketplace, Montgomery County Public Schools, Christiansburg, VA.
- Invited talks**
- Coxon, S. V. (2018, August). *Sabbatical report*. REAL Week. Maryville University, St. Louis, MO.
- Coxon, S. V. (2017, November). *Precocious, intense, complex: Understanding the special needs of gifted children*. Lindbergh Parents of the Gifted, Lindbergh, MO.
- Coxon, S. V. (2017, February). *Innovative allies: Creative and spatial abilities*. Presentation to superintendents. Western Kentucky University, Bowling Green, KY.
- Coxon, S. V. (2017, February). *Pathways forward for increasing diversity in gifted programs*. Presentation to superintendents. Western Kentucky University, Bowling Green, KY.

- Coxon, S. V. (2017, January). *Giftedness and gifted education*. Jennings Public Schools Gary Gore Community Center, St. Louis, MO.
- Coxon, S. V. (2015, November). *Curiosity panel: Development of curiosity*, Maryville University, St. Louis, MO.
- Coxon, S. V. (2015, November). *The Godfather*. Hum 254: Maryville Talks Movies. Maryville University, St. Louis, MO.
- Coxon, S. V. (2015, September). *Understanding the special needs of gifted children*. Parkway School District Instructional Service Center, St. Louis, MO.
- Coxon, S. V. (2015, September). *Veganism*. INTD 101: University Seminar on Animal Welfare. Maryville University, St. Louis, MO.
- Coxon, S. V. (2015, February). *Increasing diversity in gifted education*. Educators for Social Justice Educating for Change Curriculum Conference. Maplewood-Richmond Heights Elementary School, Maplewood, MO.
- Coxon, S. V. (2015, January). *Student engagement and the Maryville Young Scholars Program*. Faculty Development Day, Maryville University, St. Louis, MO.
- Coxon, S. V. (2014, November). *21<sup>st</sup> century college and careers for the highly gifted*. PEGS Parents Group. Lindbergh, MO.
- Coxon, S. V. (2014, October). *Critical thinking models and the highly gifted*. PEGS Parents Group. Lindbergh, MO.
- Coxon, S. V. (2014, October). *GAM talk: Science and the gifted*. Gifted Association of Missouri, Springfield, MO.
- Coxon, S. V. (2014, September). *Creativity and the highly gifted*. PEGS Parents Group. Lindbergh, MO.
- Coxon, S. V. (2014, March). *Welcome address*. Gifted Association of Missouri (District A), Maryville University, St. Louis, MO.
- Coxon, S. V. (2013, December). *Future trek: Robots invade your classroom*. Academy of Science, St. Louis Public Schools, Maryville University. St. Louis, MO.
- Coxon, S. V. (2013, October). *Serving visual-spatial learners*. Gifted Association of Missouri Conference, Springfield, MO.
- Coxon, S. V. (2013, September). *The Maryville Young Scholars alternative gifted identification state-approved pilot plan*. MAGC, Parkway Instructional Service Center, St. Louis, MO.
- Coxon, S. V. (2013, September). *Creativity for problem-based learning*. Kennard Junior Classical Academy. St. Louis Public Schools. St. Louis, MO.
- Coxon, S. V. (2013, March). *Precocious, intense, complex: Understanding the special needs of gifted children*. Meeting of the Hazelwood School District parents of the gifted group, Hazelwood, MO.
- Coxon, S. V. (2013, January). *Future trek: Robots invade your classroom*. Academy of Science, St. Louis Public Schools, Maryville University. St. Louis, MO.

- Coxon, S. V. (2012, December). *Creativity*. Ladue School District, St. Louis, MO.
- Coxon, S. V. (2012, December). *Multi-exceptional children in the elementary gifted program*. Ladue School District, St. Louis, MO.
- Coxon, S. V. (2012, November). *Increase Diversity in Your District with The Maryville Young Scholars Model*. St. Louis Metro Council. Maryville University, St. Louis, MO.
- Coxon, S. V. (2012, October). *Precocious, intense, complex: Understanding the special needs of gifted children*. Meeting of the Lindbergh LEAP parents group. Dressel School, Lindbergh, MO.
- Coxon, S. V. (2012, May). *Problem-based Learning*. Webster Groves School District gifted faculty. Maryville University, St. Louis, MO.
- Coxon, S. V. (2011, November). *Serving students with challenges requiring spatial and creative abilities*. Ladue School District gifted faculty. Reed Elementary School, Ladue, MO.
- Coxon, S. V. (2011, April). *The benefits of academic competitions for gifted children*. Webster Groves School District gifted faculty. Early Years Family Center, Webster Groves, MO.
- Coxon, S. V. (2011, April). *Identifying gifted students from traditionally underserved populations*. Webster Groves School District gifted faculty. Early Years Family Center, Webster Groves, MO.
- Coxon, S. V. (2010, November). *Overview of research on acceleration and accelerative policy recommendations*. Parkway Public Schools Acceleration Committee. Southwest Middle School, Manchester, MO.
- Coxon, S. V. (2004, August – 2006, December). *Education in Malawi, Africa*. Two churches and a school, Radford, Christiansburg, and Blacksburg, VA.

### **Guest Lectures**

- Coxon, S. V. (2014, September). *Animal welfare vegan/vegetarian panel*. EDUC 101: University seminar, Maryville University, St. Louis, MO.
- Coxon, S. V. (2014, June). *The Maryville Young Scholars Program as a model for increasing diversity in gifted programs*. EDUC 697: Special Populations in Education, Maryville University, St. Louis, MO.
- Coxon, S. V. Bilby, B., Brown, C., Dragoni, M., Engelkenjohn, K., & Schoeck, M. (2014, April). *Differentiation for beginning teachers*. EDUC 400, 402, 403, 404, 405: Student Teaching Seminar (elementary, art, early childhood, high school, middle school), Maryville University, St. Louis, MO.
- Coxon, S. V. (2013, December). *Problem-based learning in the elementary school*. EDW 615: Curriculum and Instruction for the Gifted Course for Young Scholars Program Faculty, Bermuda Elementary, St. Louis, MO.
- Coxon, S. V. (2013, October). *Maryville's precollegiate robotics program*. Academic Affairs Advisory Board, Maryville University, St. Louis, MO.
- Coxon, S. V. (2013, September). *Academic publishing*. Higher educational doctoral seminar class, Maryville University, St. Louis, MO.

- Coxon, S. V. (2013, September). *Make a real, working robot*. Alumni Weekend, Maryville University, St. Louis, MO.
- Coxon, S. V. (2012, December). *Problem-based learning in the elementary science classroom*. EDUC 615: Curriculum and Instruction for the Gifted, Young Scholars section. Johnson-Wabash Elementary School, Ferguson-Florissant School District, Ferguson, MO.
- Coxon, S. V. (2012, October). *Robots invade the classroom*. Family Weekend. Maryville University, St. Louis, MO.
- Coxon, S. V. (2012, June). *LEGO robotics and creativity*. EDUC 329: Creative Problem Solving. Maryville University, St. Louis, MO.
- Coxon, S. V. (2012, February). *Problem-based learning*. EDUC: 615 Curriculum and Instruction of the Gifted. Peabody eMints Academy, St. Louis Public School System, St. Louis, MO.
- Coxon, S. V. (2011, October). *Creativity in the sciences with robotics*. EDUC 333: Integrating the Arts. Maryville University, St. Louis, MO.
- Coxon, S. V. (2011, October). *Robots invade the classroom: Education and outreach at Maryville University*. Family Weekend. Maryville University, St. Louis, MO.
- Coxon, S. V. (2011, June). *Robotics and critical thinking*. EDUC 629: Creative Problem Solving. Maryville University, St. Louis, MO.
- Coxon, S. V. (2010, April). *Advocacy in gifted education*. EDUC 670: Gifted Program Planning. The College of William and Mary, Williamsburg, VA.
- Coxon, S. V. (2010, April). *The profession of teaching*. Social and Philosophical Foundations of Education. The College of William and Mary, Williamsburg, VA.
- Kim, M., & Coxon, S. V. (2009, December). *Advanced Placement overview for visiting Japanese teachers*. The College of William and Mary, Williamsburg, VA.
- Rose, V., & Coxon, S. V. (2009, March). *Problem-based learning: Saturday Enrichment Program faculty development*. Center for Gifted Education, The College of William and Mary, Williamsburg, VA.

### **Poster Sessions**

- Coxon, S. V. (2011, November). *Rampaging robots: Results of an intervention study of spatial ability and LEGO robotics*. National Association for Gifted Children Annual Convention, New Orleans, LA.

### **Service**

#### **Editorships**

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|-------------|---|
| 2012 – 2018 | Book review section editor, <i>Roeper Review</i>                                  |
| 2009 – 2010 | Assistant editor, <i>Journal for the Education of the Gifted</i>                  |
| 2008        | Reference editor, <i>Leading change in gifted education</i> . Waco, TX: Prufrock. |

## **Reviewerships**

2015 – present	Reviewer, <i>Roepers Review</i>
2015 – 2017	Reviewer, <i>Gifted Child Today</i>
2015 – 2017	Reviewer, National Association for Gifted Children annual convention, STEM Network
2014 – 2017	Reviewer, <i>Journal of Advanced Academics</i>
2013 – 2017	Reviewer, National Association for Gifted Children annual convention, Creativity Network
2011 – present	Reviewer, <i>Teaching for High Potential</i>
2011 – 2015	Reviewer, National Association for Gifted Children annual convention, Special Populations Network
2010 – 2017	Reviewer, <i>Journal for the Education of the Gifted</i>
2009 – 2015	Reviewer, American Educational Research Association (AERA) annual meeting, Special Interest Group (SIG) in Research on Giftedness, Creativity, and Talent

## **International-level Service**

2015 – 2017	Global Judging Advisory Committee, FIRST LEGO League
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## **National-level Service**

2014 – 2017	STEM Committee, National Association for Gifted Children
2014 – 2017	Creativity Committee, National Association for Gifted Children
2016	Invited book reviewer, National Association for Gifted Children
2014	Invited book reviewer, National Association for Gifted Children
2012	Invited book reviewer, Pearson
2011 – present	<i>Teaching for High Potential</i> Editorial Advisory Board, NAGC
2011 – 2015	Special Populations Committee, National Association for Gifted Children
2009 – 2011	Graduate Student Committee, National Association for Gifted Children

## **State-level Service**

2014 – present	Chair, Advisory Council on the Education of Gifted and Talented Children
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Appointed to four-year terms in 2014 and 2018 by the Missouri Commissioner of Education; Appointed as chair in 2018

2013 – 2017 Gifted Association of Missouri Higher Education Task Force

2013 – 2016 (alt. years) Co-sponsor, annual Gifted Association of Missouri District-A Conference at Maryville University

### **University-level Service**

2018 Search committee member, vice president of development, Maryville University

2018 Peer committee member, tenure review Eliza Prager, Maryville University

2018 Peer committee member, tenure review Dustin York, Maryville University

2018 Peer committee member, pre-tenure review Kevin Stokes, Maryville University

2017 – 2018 Innovations and Partnerships Task Force, Maryville University

2017 Peer committee member, pre-tenure review Michelle Hunter, Maryville University

2016 Chair, peer review committee, tenure review Kyra Krakos, Maryville University

2016 Peer committee member, pre-tenure review Renee Schuster, Maryville University

2015 Chair, peer review committee, tenure review Susan Bartel, Maryville University

2015 Peer committee member, tenure review Rebecca Dohrman, Maryville University

2014 – 2015 Innovation and entrepreneurship task force, Maryville University

2014 Scorer, Pathways critical thinking project, Maryville University

2014 – 2015 Reviewer, Undergraduate research proposals, Maryville University

2013 – 2014 Strategic Planning Task Force: Experiential & Innovative Learning, Maryville University

2012 – 2013 Technology Associate, Maryville University

2011 – 2017 Bascom Honors Committee, Maryville University

2011 – present Core Curriculum Committee, Maryville University

2011 – 2012 Academic Advising Associate, Maryville University

2010 – 2014 President's Cabinet, Maryville University

### **School of Education Service**

2017 – present	@MaryvilleSOE Twitter feed
2015	Chair, search committee for reading methods tenure-track faculty position, Maryville University
2013 – 2015	Chair, Maryville Young Scholars Program Advisory Board, School of Education, Maryville University
2012 – 2017	Advisor, Maryville Education Club (NEA affiliate), School of Education, Maryville University
2010 – 2017	Graduate Admissions Committee, School of Education, Maryville University
2010 – present	Chair, Technology Committee, School of Education, Maryville University
2010 – 2015	Chair, Programs in Gifted Education Advisory Board, Maryville University
2009 – 2010	Environmental Sustainability Committee, School of Education, The College of William and Mary

### **Public School Service**

2015	Interviewer, Profoundly and Exceptionally Gifted Students (PEGS), Lindbergh School District, St. Louis, MO
2013 – 2017	Peabody School Task Force, Peabody School, St. Louis Public Schools, St. Louis, MO
2011 – 2012	Project Parkway Gifted Advisory Team, Parkway School District, Chesterfield, MO
2005 – 2008	Gifted Evaluation Committee, Christiansburg Elementary School, Christiansburg, VA
2004 – 2007	Safety Committee, Christiansburg Elementary School, Christiansburg, VA
2003 – 2007	Superintendent’s Advisory Council, Montgomery County Public Schools, Christiansburg, VA
2002 –2004	Curriculum with Coherence Committee (co-chair), Christiansburg Elementary School, Christiansburg, VA
2002 – 2004	Site Council, Christiansburg Elementary School, Christiansburg, VA

### **Community Service**

2018 – present	STEM StL Steering Committee
2018 – present	Co-Leader, STEM StL Student and Family Engagement working group

2014 – present	Magic House Educational Advisory Committee
2014	InspireSTL Academic Preparation Committee
2012 – present	@STEMaryville Twitter feed
2010 – 2017	FIRST LEGO League Planning Committee (St. Louis region)

### **Honors and Awards**

2013	Adviser of the Year Award, Maryville University
2010	Joyce VanTassel-Baska Award for Excellence in Gifted Education, The College of William and Mary
2008	Regional Volunteer Award, Blacksburg-region FIRST LEGO League
2004	Fulbright-Hays Grant to teach in Malawi, Africa
1999	William Hahn Memorial Teaching Scholarship
1995	National Merit Scholar Semifinalist
1994	Rotary Youth Leadership Award

### **Certifications, Memberships, and Selected Travel**

#### **Certifications**

2001	Elementary Education preK-6 and English 6-12 in Virginia
2000	English Education 6-12 in California

#### **Memberships**

2018 – present	National Science Teachers Association
2017 – present	International Society for Technology in Education
2016	Council for Exceptional Children: Talented and Gifted
2012 – 2017	Missouri National Education Association
2012 – 2014	American Creativity Association
2011 – 2012	International Reading Association
2010 – present	Gifted Association of Missouri
2009 – 2010	Kappa Delta Pi International Honor Society in Education

2009 – 2014	American Educational Research Association
2006 – present	National Association for Gifted Children
2001 – 2008	Virginia Education Association
2001 – 2008	Montgomery County Education Association
2000 – 2001	California Teachers Association

### **Selected Travel Experience**

August-October, 2017	Germany, Switzerland, France, Spain, England (sabbatical)
July, 2013	Oxford, England
August, 2009	France and the Netherlands
June, 2007	Thailand
July, 2006	St. John, U.S. Virgin Islands; England; Scotland
July – August, 2004	Malawi <ul style="list-style-type: none"> <li>▪ Six weeks modeling the teaching of writing and science on a Fulbright-Hays Grant</li> <li>▪ Hosted a Malawian teacher in my home and in my classroom in October, 2004</li> </ul>
2000 – 2003	Denmark, Sweden, the Netherlands, Russia, Mexico, Luxembourg, Belgium, Germany, and Austria
May – July, 1998	England, Scotland, Spain, France, Italy, Austria, Czech Republic, Hungary, Germany, and the Netherlands <ul style="list-style-type: none"> <li>▪ Six weeks of literary study abroad in the U.K.</li> <li>▪ Six weeks of continental travel</li> </ul>