

# Mandie R. Sanderman

mandie.sanderman@gmail.com

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## Education:

PK-12 Principal, March 2021  
Iowa Principal Leadership Academy  
Keystone AEA; Elkader, IA

Masters in Education, July 2007  
Viterbo University; LaCrosse, WI  
Cumulative GPA: 4.00

Bachelor of Arts, May 1996  
Wartburg College; Waverly, IA  
Major: **Elementary and Secondary Education**  
Cumulative GPA: 3.96

## Certifications:

License folder number: #330311  
Coaching authorization (expired)  
Child and Dependent Adult Abuse Training (exp 2028)  
Endorsements:

**PK-12 Principal/PK-12 Special Ed Coordinator  
Evaluator**

**K-8 basic science**

**5-12 general science**

**5-12 physical science**

**5-12 biology**

**5-12 earth science**

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## Teaching and Professional Experience:

Science Consultant: Central Rivers Area Education Agency; Cedar Falls, IA (2015-2024)

- Provide professional development to school districts on various topics
- Use of Canvas and Google Classroom to provide remote learning opportunities
- Organizes and facilitates events and conferences for students and educators
- Write integrated units, facilitate pilot and release after revisions
- Advise administrators and educators in the area of science education and gifted/talented
- Consult with state-wide science consultants to provide continuity across Iowa
- Provide information and coaching to science and gifted/talented educators to improve instructional practices and district programming
- Analyze district data to assist in needs assessments for professional learning and areas of growth

Professional Learning Facilitator: Independent contractor Dimensional Learning LLC; Waverly, IA (2020-present)

- Professional Learning Event Coordinator; OpenSciEd (May-August, 2024)
- Facilitate professional learning around OpenSciEd middle school; BSCS (June, July 2024)
- Mentor OpenSciEd facilitators for Boston MA field test of elementary; OpenSciEd (August 2023)
- OpenSciEd Facilitation Team; OpenSciEd (2022-present)
- Provided face to face professional learning for ; University of Illinois Extension (July 2023)
- Facilitated OpenSciEd B.1 unit training for facilitators; OpenSciEd (May 2023)
- Provided face to face professional learning for Massachusetts High School OpenSciEd pilot teachers in Physics; UC Boulder (October 2022)
- Content Expert in science, Iowa eLearning Center project; Iowa Department of Education (2022-present)
- Provided virtual/remote professional learning for Massachusetts High School OpenSciEd pilot teachers in Physics; UC Boulder (August 2021)

Director of the Office of Student Field Experiences/School Partnerships: Wartburg College; Waverly, IA (2010-2015)

- Served as liaison between Wartburg College and any public or parochial school within 45 miles
- Placed nearly 600 field experience students into classrooms each year
- Arranged all student teaching placements, resulting in 150 placements per year
- Directed and facilitated the 6th grade Community Builder's program in conjunction with course *Leadership Theories and Practices*
- Facilitated several conferences at Wartburg hosting a variety of elementary student groups

Adjunct Instructor: Wartburg College; Waverly, IA (2010-2015)

- Taught introductory level leadership course *Exploring Elements of Leadership*
- Taught graduate level course *Teacher Mentoring and Induction*
- Taught *Human Relations* in a 3 hour daily/ 5 day a week/5 week format
- Taught *Secondary Science Methods* to pre-service secondary science educators
- Developed course syllabi in accordance to college policy and accreditation standards

Science Educator: Waverly-Shell Rock Middle and High School; Waverly, IA (1997-2010)

- Environmental Conservation (2007-2010)
- Physical Science (2003 – 2010)
- AP Environmental Science (2005-2007)
- Environmental Science (2003 – 2005)
- Biology (2002 – 2004)
- 7th grade life science (1999-2000)
- 7th grade physical science (1997-1999)

Science Educator: Rockwell City/Lytton Middle School; Lytton, IA (1996-1997)

- 7th grade integrated science
- 8th grade integrated science

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**Publications:**

Sanderman, A. & Byram, C. Dog Days At School: Using Authenticity to Guide Cross-Curricular Learning in Kindergarten. *Science & Children* (accepted) (2024)

Sanderman, A. & Byram, C. A Group Learning Activity with Surprises. *Edutopia*, August 2, 2023.  
<https://www.edutopia.org/article/group-learning-activity-grades-6-12> (2023)

Byram, C. & Sanderman, A. (2023). Designing Interdisciplinary Units in Elementary School. *Edutopia*, May 17, 2023  
<https://www.edutopia.org/article/integrating-science-social-studies-elementary-school>

Sanderman, A. & Byram, C. (2022). Doing it all. *Science & Children*, November/December 2022

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**Refereed Presentations:**

2024 NSTA National Conference (Denver, Colorado)

- Presented “Meaningful integration of Science across content”
- Presented presentation “Assessing Notebooking through the Practices”

2023 NSTA National Conference (Atlanta, Georgia)

- Presented “Doing it All - Meaningful Integration of Science, Social Studies, ELA and Math”
- Presented “Assessing Notebooking Through the Practices”

2022 NSTA National Conference (Houston, Texas)

- Presented “Don’t Choose Between Science and Social Studies - Integration is the Solution”

2021 MEEC (Midwest Environmental Education Conference (Decorah, Iowa)

- Presented session entitled “Creating Deeper Connections through Cross Cutting Concepts”

2021 ISTS (Iowa Science Teachers Section) Conference (Ankeny, Iowa)

- Presentation of session entitled “Rising to the Challenge through STEM” on the use of STEM activities to build student skills in the universal constructs.

2019 ISTS (Iowa Science Teachers Section) Conference (Ankeny, Iowa)

- Presented session on the facilitation and analysis of the Iowa Science Standards Innovation Configuration Map.

2018 ISTS (Iowa Science Teachers Section) Conference (Ankeny, Iowa)

- Presented session titled “Moving beyond Traditional Assessments” to direct participants in developing three-dimensional assessments.
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## Professional Service:

<i>2023-Present</i>	Central Rivers AEA Diversity, Equity, Inclusion, Belonging Committee
<i>2022</i>	Central Rivers AEA Equity Audit Focus Group
<i>2020-Present</i>	Content lead for science and TAG, Central Rivers AEA
<i>2018-Present</i>	Iowa Regents Center for Early Developmental Education Advisory Board
<i>2015-Present</i>	Iowa Department of Education Science Leadership team
<i>2015-Present</i>	Reviewer for McElroy Excellence in Education grant applications
<i>2017-2018</i>	STEM Scale Up program Selection Committee
<i>2016-2018</i>	Writing team member for Science Literacy state-wide professional development
<i>2017</i>	Selection Committee Member for Iowa Presidential Award for Excellence in Mathematics and Science Teaching
<i>2012-2015</i>	Organized and facilitated annual Leadership 360 Conference for 5 <sup>th</sup> grade students from Waverly-Shell Rock and St. Paul's Elementary
<i>2011 - 2015</i>	Leadership Education and Service Committee
<i>2011-2015</i>	Organized and facilitated annual Developing Young Writers Conference for 2 <sup>nd</sup> -4 <sup>th</sup> grade talented and gifted students from Waverly-Shell Rock and St. Paul's Elementary school
<i>2012</i>	Member of the executive committee for the Youth Leadership in Action conference
<i>2007-2010</i>	Department chair for W-SR science department
<i>2005-2010</i>	W-SR Prairie restoration project
<i>2003-2010</i>	Advisor to Science/Environmental Club

## Community Service:

<i>2020-present</i>	Bremer County Conservation Board Chairman
<i>2012-present</i>	Bremer County 4H/FFA superintendent for dog project participants.
<i>2018-present</i>	Iowa Regents Center for Early Developmental Education Advisory Board
<i>2014-present</i>	Bremer County Conservation Board member
<i>2010-2015</i>	Assisted community members in securing tutors for local students

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## Honors and Awards:

<i>2019</i>	Iowa Academy of Science Excellence in Science Teaching Award: Science Supervisory Role
<i>2014</i>	Engaged Campus: Partnership Award for Community Builders
<i>2014</i>	Outstanding Service Award: W-SR Chapter FFA
<i>2009</i>	Recipient of Classroom of the Future Grant (\$5000): Use of classroom technology
<i>2008</i>	McElroy Excellence in Education grant (\$1000) for GPS technology incorporation
<i>2008</i>	Recipient of Leighty Foundation grant (\$1500): Prairie restoration
<i>2008</i>	Recipient of Waverly Community Fund Grant (\$2000): Prairie restoration
<i>2007</i>	Recipient of McElroy Excellence in Education Grant (\$1000) for Classroom Performance System
<i>2006</i>	Recipient of State Farm Grant (\$500): Investigation of Iowa water systems
<i>2006</i>	Recipient of Izaak Walton League Grant (\$400): Student exploration of Mississippi River
<i>2005</i>	Recipient of McElroy Excellence in Education Grant (\$1500): Education in Jeopardy
<i>2004</i>	Recipient of Wal-Mart Environmental grant (\$800)
<i>1998</i>	Recipient of McElroy Excellence in Education Grant (\$1500) : Investigation through Horticulture