

JUSTINA A. OGODO

Baylor University
School of Education
Department of Curriculum & Instruction

254-710-6122 (office)
Justina_ogodo@baylor.edu


Teaching Statement

I believe all children can learn; therefore, my goal is to prepare better science teachers to meet learners where they are and take them where they need to be.

PROFESSIONAL EXPERIENCE

2019 – Present	Assistant Professor Curriculum & Instruction/Science Education Baylor University, Waco, TX
2017 – 2019	Post-Doctoral Researcher/Project Manager The Ohio State University, Columbus, OH <i>Principal Investigator: Karen Irving</i> NSF Funded ENABLE STEM Project.
2015 – 2017	Graduate Research Assistant The University of Alabama, Tuscaloosa, AL <i>Principal Investigator: Dennis Sunal</i> NSF (APEX) & Title I (PS-21) Funded projects.
2010 – 2014	Adjunct Professor Lawson State Community College, Birmingham, AL
200 – 2015	Science Teacher/Teacher mentor Birmingham City Schools, Birmingham, AL

EDUCATION

2012 – 2017	Ph.D., Curriculum and Instruction (Secondary Science) <i>“Examining the Influence of Physics Focused Professional Development on Advanced Placement Physics Teachers.” A mixed-method case study on enhanced in-service professional development on advanced placement physics teachers’ content knowledge and instructional practice.</i> <i>Advisor/Chair: Dr. Dennis Sunal</i>
-------------	---

University of Alabama at Birmingham,

- EDS Curriculum and Instruction - Secondary science curriculum

Birmingham, AL

2011

Justina Ogodo

University of Alabama at Birmingham,

- M.Ed. Secondary science and teaching effectiveness

Birmingham, AL

2003

Lagos State Polytechnic,

- B.S. Biochemistry & Lab. Technology

Lagos, Nigeria

1988

RESEARCH INTERESTS

- Curriculum and Instruction/STEM Education
- Preservice Teacher Preparation/In-service Teacher Professional Development.
- Teacher Pedagogical Content Knowledge.
- Urban Education and Culturally Relevant/Responsive Teaching.

PUBLICATIONS

Peer-Reviewed Journal Articles

Ogodo, J. A. (2022). Developing STEM Teachers' Cultural Competence through an Urban Teaching Curriculum: A Cultural Border Crossing Experience. *Journal of Science Teacher Education*.

Ogodo, J. A., Simon, M., Morris, D., & Akubo, M. (2021). Examining K-12 teachers' digital competency and technology self-efficacy during COVID-19 Pandemic. *Journal of Higher Education Theory and Practice*, 21(11), 13-27. <https://doi.org/10.33423/jhetp.v21i11.4660>

Ogodo, J. A. (2021). Uncharted Territories: COVID-19 and other 2020 events that changed our lives forever. *Journal of Multicultural Education*.

Ogodo, J. A. (2019). Comparing Advanced Placement Physics Teachers Experiencing Physics Focused Professional Development. *Journal of Science Teacher Education*, 30(6), 639-665. <https://doi.org/10.1080/1046560X.2019.1596720>

Book Chapters

Jeffery, T. D., Jackson-Osagie, E. A., **Ogodo, J. A.** (2022). Integrating social justice pedagogy in an online elementary science classroom. In F. S. Allaire, J. E. Killham, & J. D. O'Leary, (Eds.), *Teaching and learning online: Science for elementary grade levels*. Information Age Publishing (IAP).

Ogodo, J. A., Atanda, M. A., Adedoyin, A. C., Carter, S. A., & Thrasher, J. (2021). COVID-19, Cultural competency, and church responsiveness in Nigeria. In R. D. Smith, S. C. Bodie, & B. English (Eds). *Radicalized Health, COVID-19, and Religious Responses: Black Atlantic Contexts and Perspectives*. Routledge.

Ogodo, J. (2019). The intersection of culture, scholarship, and survival: Nigerian college graduates in America's higher institution. In R. M. Lowery, R. Pringle, & M. Oslick, (Eds.), *Land of opportunity: Immigrant experiences in the North American landscape*. Rowman and Littlefield.

Ogodo, J., Irving, K., Brosnan, P., & Ding, L. (2019). *Rise, Defy, Teach - The ENABLE STEM Project*. In J. Leonard, A. Burrows, & R. Kitchen, (Eds.): *Recruiting, preparing, and retaining STEM teachers for a global generation*. Sense Publishers.

Sunal, C. S., Sunal, D. W., **Ogodo, J.**, & Stephens, M. (2019). *High school physics teaching reform: Support for professional development in the literature*. In Sunal, D., Shemwell, J., Harrell, J. W., & Sunal, C. (Eds): *Physics Teaching and Learning: Challenging the Paradigm*. Information Age Publisher, Charlotte NC.

Sunal, D. W., Simon, M. E., Sunal, C.S., **Ogodo, J.**, Harrell, J. W., Aggarwal, M. (2019). Effects of professional development on reform in high school physics teaching. In *Physics Teaching and Learning: Challenging the Paradigm*. Sunal, D., Shemwell, J., Harrell, J. W., & Sunal, C. (Eds): Information Age Publisher, Charlotte NC.

Non-Academic Juried Publications

Ogodo, J. (2021). *The Thing Between My Two Ears. Active Brains and Minds*.
<https://medium.com/@ogodotna/the-thing-between-my-two-ears-d93de1cfa8fa>

Ogodo, J. (2021). *A Long “Summer” Vacation to Remember*. A biographical account of an experience with hot peppers. The Preservation Foundation, Inc.
<http://www.storyhouse.org/justinao.html>

Ogodo, J. (2021). *Lost in Switzerland*. The Preservation Foundation, Inc.
<http://www.storyhouse.org/justinao2.html>

Manuscripts Under Review

Ogodo, J. A., Nesmith, S., Sessa, C., Boddie, S. C., Spence, A... (2021). Think Like a Scientist and Engineer: Schools, University, and Community Partnerships Using Aquaponics Project during COVID-19. *Connected Science Learning Journal*.

Ogodo, J. A. (2021). Great Teachers Are Like School Bus Drivers. *Alpha Delta Kappan Journal*.

Ogodo, J. A., Simon, M., & Sunal, D. W. (2021). Teacher Disposition toward Professional Development and Impact on Learning Outcomes: A Case Study of Out-of-field Physics Teachers. *Journal of Education for Teaching*.

Manuscripts in Progress

Ogodo, J. A. (in-preparation). Conceptualizing culturally responsive pedagogical knowledge: A knowledge base for teaching 21st-century diversified learners.

Ogodo, J. A. (in-preparation). Teachers the New Endangered Species: Looming Crisis as the Teaching Workforce Dwindles

Morris, D. & **Ogodo, J. A.** (in-preparation). Mediated Reflective Mentor-Coaching Induction: An Approach for Developing Early Career Teachers' Self-Sustaining Practice.

Ogodo, J. A. (under-revision). Developing Preservice Teachers Constructivist Approach to Science Teaching.

Ogodo, J. A. (under revision). Urban Students' Perspective on Advanced Placement Enrollment in a High-need School District.

Ogodo, J. A. & Morris, D. (in preparation). COVID-19 Pandemic and beyond: Teaching K-12 science virtual world.

Ogodo, J. A. (in-preparation). Revisiting historical events that reformed science education and the impact of the current Covid-19 Pandemic.

Dana, M. & **Ogodo, J. A.** (in-preparation). COVID-19 and teacher emotional well-being: A case study of science teachers.

Ogodo, J. A. (in preparation). Teacher diversity and school report card: A literature review on the effect of non-White teachers in urban classrooms.

TEACHING EXPERIENCE

2019 – Present	Assistant Professor, <ul style="list-style-type: none">• Teaching for Understanding• Science Curriculum• Internship secondary• Graduate Teaching Internship• Social Issues in Education• The Family: A Global Perspective	<i>Baylor University</i> EDC 5350 TED 4325 TED 4640/1/2/3 TED 5699/EDC 5699 TED 3880 CFS 4356 (<i>Guest Instructor</i>)	Waco, TX
2017 – 2019	Postdoctoral Researcher <ul style="list-style-type: none">• Urban Teaching Seminar• Equity and Diversity• Learning and Cognition• Educational Psychology	<i>The Ohio State University</i> EDUTL 8890 EDUTL 5005 EDUTL 7741 EDUTL 5741	Columbus, OH
2015 – 2017	Graduate Research Assistant Secondary Instructional Method	The University of Alabama, CSE 390	Tuscaloosa, AL
2010 – 2014	Adjunct Instructor <ul style="list-style-type: none">• Introductory Chemistry• Inorganic Chemistry	<i>Lawson State Community College</i> CHM 104 CHM 105	Birmingham, AL
2001 – 2015	Science Teacher/Preservice Teacher Specialist <i>Birmingham City Schools</i> <ul style="list-style-type: none">• Teach Chemistry and AP courses.		Birmingham, AL

RESEARCH EXPERIENCE

Post-Doctoral Researcher -

The Ohio State University, OH

Justina Ogodo

- Project Manager on NSF-Funded Noyce project (**ENABLE STEM**)

Graduate Research Assistant/STEM Education

University of Alabama, AL

- Data collector/analyst on NSF-funded Noyce project (Alliance for Physics Excellence, APEX)

Physical Science for the 21st Century

University of Alabama, AL

Title I funded grant

- Data collected/Webpage editor

PROFESSIONAL PRESENTATIONS

Peer-reviewed Conference Presentations

Ogodo, J. A. Equity and Ethics Pre-Conference Workshop (Accepted). NARST annual conference, Vancouver, Canada. April 2022.

Ogodo, J. A., Simon, M., Morris, D., & Akubo, M. (April, 2021). Uncharted territories: Experiences of novice and veteran teachers in the era of COVID-19. American Educational Research Association (AERA) Virtual conference.

Ogodo, J. A. (April 2021). Pathway to constructivist lesson planning in K12 science classrooms. American Educational Research Association (AERA) Virtual conference.

Ogodo, J. A., Simon, M., Morris, D., & Akubo, M. (April, 2021). *Uncharted Territories. Teaching science virtually in the era of COVID-19.* National Association for Research in Science Teaching (NARST) Virtual conference.

Ogodo, J. A. (April 2021). *Enjoying or Enduring the Tenure Process, Especially during The COVID-19 Pandemic.* National Association for Research in Science Teaching (NARST) Virtual conference.

Ogodo, J. A. & Salisbury, K. (Nov. 2020) Constructivism in K12 Classrooms: A Cross-examination of Science and Mathematics Lessons. School Science and Mathematics Association (SSMA) Virtual conference.

Ogodo, J. A. (March 2020). *Equipping Preservice STEM Teachers with Culturally Responsive Pedagogical Knowledge for Urban High-Need Schools.* National Association for Research in Science Teaching (NARST) conference. Baltimore, MD.

Ogodo, J. (Accepted). Border Crossings: The Transformational Journeys of Preservice STEM Teachers toward Culturally Responsive Pedagogical Knowledge. American Educational Research Association (AERA) conference. San Francisco, CA, April, 2020.

- Ogodo, J.** (April, 2020). Students' Perspective on Factors Influencing Advanced Placement Enrollment in Urban Schools. American Educational Research Association (AERA), conference. San Francisco, CA.
- Nesmith, S. & **Ogodo, J.** (Nov, 2019). Engineering for Elementary Preservice Teachers. School Science and Mathematics Association (SSMA). Salt Lake City, UT.
- Nesmith, S. & **Ogodo, J.** (October, 2019) It's All about the E's: Enhancing Preservice Teachers' Elementary Engineering through the 5E Inquiry Model. South West Association of Science Teacher Educator (SW-ASTE). Fayetteville, AK.
- Ogodo, J.**, Irving, K., Brosnan, P., & Ding, L. (March, 2019). *Equipping Preservice STEM Teachers with Culturally Responsive Pedagogical Knowledge for Urban High-Need Schools*. National Association for Research in Science Teaching (NARST) conference. Baltimore, MD.
- Ogodo, J.**, Irving, K., Brosnan, P., & Ding, L. (January, 2019). *Preparing high quality STEM teachers for urban high-need classrooms: The ENABLE STEM project*. Association of Science Teacher Educator (ASTE). Savannah, GA.
- Sunal, D., Simon, M., Sunal, C., Harrell, J. W., **Ogodo, J.**, Wooten, M., Harville-York, H., Stephens, M., Tawbush, R., Aggarwal, M. (March, 2019). *Using Teacher Professional Development to Create High School Science Reform*. National Association for Research in Science Teaching (NARST) conference. Baltimore, MD.
- Ogodo, J.** (July, 2018). Comparing physics teachers experiencing differing professional development models. AAPT conference. Washington DC.
- Ogodo, J.** (June, 2018). Enhancing Advanced Placement Physics Teachers' Knowledge Base. International Science Education Conference. Singapore.
- Sunal, D., Sunal, C., Simon, M., Harrell, J.W., Wooten, M., Byrne, C., Davis, S., Ray, T., **Ogodo, J.**, Mohan D Aggarwal. (April, 2018) Reform in High School Physics Teaching and its Effect on Student Learning Outcomes. American Educational Research Association (AERA), conference. New York, NY.
- Sunal, D., Sunal, C., Simon, M., Harrell, J. W., Wooten, M., **Ogodo, J.**, Stephens, M., Aggarwal, M., Schamschula, M. (March, 2018). *“Creating Reform in High School Physics Classrooms: Does it Work?”* National Association for Research in Science Teaching (NARST) conference. Atlanta, GA.
- Sunal, D., Sunal, C., Simon, M., Ray, T., **Ogodo, J.**, Stephens, M., Harrell, J. W. (2017, April). *Impact of Professional Development on High School Physics Teaching and Student Learning*. Proceedings of the annual meeting of the National Association for Research in Science Teaching. San Antonio, TX.

- Ogodo, J.** (2016, August). *Examining the Influence of Physics Focused Professional Development on Advanced Placement Physics Teachers*. Paper presented at the Mixed Method International Research Association Conference, Durham, UK.
- Sunal, D., Aggarwal, M., Ray, T., **Ogodo, J.**, Stephens, M., Simon, M., Harrell, J. W. (2016, February). *Are You Frustrated Teaching Physics and Physical Science?* Paper presented at the ASTA conference. Birmingham, AL.
- Sunal, D., **Ogodo, J.**, Simon, M., Ray, T., Sunal, C., Dantzler, J., Harrell, J.W., & Aggarwal, M. (2015, April). *Alliance for Physics Excellence: A Professional Development Model for Enriching Teaching and Learning in Physics*. Proceedings of the annual meeting of the American Educational Research Association (AERA), Washington, DC.
- Ogodo, J.** (2015, November). *Motivating urban students toward advanced placement science courses: students' perspective*. A paper presented at the Mid-South Educational Research Association (MSERA) conference. Lafayette, LA.
- Ogodo, J.** (2015, November). *The impact of professional development on science teaching reform*. Paper presented at the Mid-South Educational Research Association (MSERA) annual conference. Lafayette, LA.
- Ogodo, J.** (2015, April). *PCK and Teacher Selection of Specific Content to Teach*. Paper presented at the AERA conference. Chicago, IL.
- Ogodo, J.** (2015, March). *Creating possibilities of meaningful learning of chemistry concepts using teacher pedagogical content knowledge (PCK)*. Paper presented at the ASTA conference. Birmingham, AL.
- Ogodo, J.** (2014, November). *PCK and Teacher Selection of Specific Content to Teach - Research in Progress*. Paper presented at the MSERA conference. Knoxville, TN.

Peer Reviewed Poster Presentations

- Ogodo, J.** (Accepted). Urban students' perspectives on advanced placement enrollment. National Association for Research in Science Teaching (NARST). Portland, OR. Virtual, 2020.
- Irving, K., **Ogodo, J.**, Brosnan, P., Ding, L. Krissek, L. (Sept, 2019). ENABLE STEM and Teacher Leadership: Years 1-3. MA-ASTE Regional Conference. Pipestem, WV.
- Ogodo, J.**, Irving, K., Brosnan, P., Ding, L., Krissek, L., Christine Harris. (July 2019). Preservice Teachers' Self-Efficacy and Urban Teaching. Noyce Conference. Washington, DC.

Ogodo, J., Irving, K., Brosnan, P., Ding, L., Krissek, L. (July 2018). ENABLE STEM: Targeted Preservice STEM Teacher Preparation for Urban High-Need Schools. Noyce Conference. Washington, DC.

Spirks, S., **Ogodo, J.**, Irving, K., Brosnan, P., Ding, L., Krissek, L. (July 2018). Formal Education from Informal Spaces: The ENABLE STEM-COSI Partnership. Noyce Conference. Washington, DC.

Ogodo, J. (April 2018). *The Impact of Physics Focused Professional Development on Advanced Placement Physics Teachers*. American Educational Research Association (AERA), conference. New York, NY.

Ogodo, J., Irving, K., Brosnan, P., Ding, L., Krissek, L., Kelley, C. Cosi. (2017, September). *Summer STEM Preservice Teacher Field Experiences at a Science Museum: An Innovative Collaboration*. MA-ASTE Regional Conference. Louisville, KY.

Ogodo, J. (2017, April). *Examining the Influence of Physics Focused Professional Development on Advanced Placement Teachers - A Case Study*. Poster presented at the National Association for Research in Science Teaching (NARST). San Antonio, TX.

Sunal, D., Sunal, C., Simon, M., Harrell, J. W., Ray, T., **Ogodo, J.**, Aggarwal, M., Cady, J., Davis, S., Irons, J. (2017, April). *Professional Development for High School Physics Teachers: Does it Matter?* Poster presented at the AERA conference. San Antonio, TX.

WORKSHOPS/ PROFESSIONAL DEVELOPMENT

American Association for the Advancement of Science (AAAS)

2020

- Promoting Equity in Undergraduate STEM Classrooms through Pedagogical Approaches (AAAS)
- Respecting and Responding to the Needs of Communities of Color in the Research Space (AAAS)
- Best Practices for Supporting Undergraduate STEM Faculty and Students in the Online Transition: Results of NSF RAPID Awards Supported by IUSE (AAAS)

Conference Workshop

- COVID and Course Design (AERA workshop)
- Socioscientific Issues in the Science Classroom (NARST workshop)

Summer Faculty Institute

- Gained new knowledge of Baylor as an institution, collaborated with peers from other departments, modeled different teaching techniques, and reflected on the importance of coherence between research, teaching, service, and collegiality. In addition to coaching these processes through Baylor's Christian faith.

Justina Ogodo

- 2019 **Presenter** - Balancing Acts: ENABLE STEM Leadership and Mentoring Induction workshop.
- 2018 **Presenter** - Post-docking at OSU – Using Storytelling in presentations: Office of Postdoctoral Association, Ohio State University.
- 2017 **Presenter** - Alliance for Physics Excellence (APEX) - comparing APEX advanced placement (AP) Physics classrooms with non-APEX classrooms in Alabama: What can we learn?
- 2016 **Presenter** - APEX - What’s happening in APEX Classrooms across Alabama?
- 2015 APEX training enacting effective teaching strategies in physics classrooms.
APEX – Reports on high school physics classrooms across Alabama
- 2014 Panel Member, Preservice teacher training. The University of Alabama.
- 2009 – 2011 In-service Professional Development Programs for teachers (Title II funded Workshop, Birmingham City Schools).

SERVICE

Journal Reviewer

- 2019 – Present **Member Editorial Board**, Journal of Science Teacher Education (JSTE).
- 2018 – Present **Member Editorial Board**, Theory into Practice Journal (The Ohio State University).
- 2019 – Present **Reviewer**, Science Education
- 2017 – 2018 **Ad hoc Reviewer**, Theory into Practice Journal (The Ohio State University).

Conference Proposal Reviewer

- 2017 - Present **International Conference Proposal Reviewer**, American Educational Research Association (AERA).
- 2016 - Present **International Proposal Reviewer**, National Association for Research in Science Teaching (NARST).
- 2020 – Present **Reviewer**, Jhumki Basu Scholarship Award reviewer. National Association for Research in Science Teaching (NARST).
- 2018 - Present **Conference Session Presider**, National Association for Research in

Science Teaching (NARST).

Professional Associations Administrative Roles

2022 – Present	Member , Advisory Board, Future Educators Academy, Waco ISD.
2022 – 2023	Chair , AERA Constructivism SIG
2021 – 2022	Chair , Equity and Ethics Committee, National Association for Research in Science Teaching (NARST).
2020 – 2021	Co-chair , Equity and Ethics Committee, National Association for Research in Science Teaching (NARST).
2020 – Present	Member – SSMA Elections Committee
2020 – 2021	Co-chair , Basu Scholar Application and Selection Committee.
2020 – 2021	Representative Equity and Ethics , NARST Elections Committee. National Association for Research in Science Teaching (NARST).
2020 – Present	Member , Baylor Curriculum & Instruction, Journal Task Force
2018 – 2020	Chair , Strand 4 – Middle & Secondary Science, National Association for Research in Science Teaching (NARST).
2018 – 2021	Member , Continental, and Diasporic Africa in Science Education (CADASE) Steering Committee, NARST conference
2019 – 2020	Secretary , Equity and Ethics Committee, National Association for Research in Science Teaching (NARST).
2017- 2019	International Conference Proposal Reviewer / Judge , Annual Edward F. Hayes Graduate Research Forum. The Ohio State University.
2016 – 2017	Membership Director , AERA Division C, Graduate Student Committee.
2017	Graduate Student Co-Leader , Mixed Method Research (SIG), AERA Conference, San Antonio, TX.
2015	Conference Session Presider , Mid-South Education Research Association (MSERA).
2014 – 2015	Board Member , Graduate Student Representative Mid-South Education Research Association (MSERA)

CERTIFICATION

2001 - 2022	Alabama Professional certificate (Licensure certification to teach science in the state) (HQT).
2011	Education Specialist Certification (Curriculum and Instruction), Highly Qualified Teacher (HQT).
2003	Alabama Secondary Science Teaching Certification, Highly Qualified Teacher (HQT).

HONORS AND AWARDS

Jhumki Basu Scholarship Award (\$700)	2016, 2019
National Association for Research in Science Teaching (NARST).	
Educational Research Award	
The Ohio State University, Office of Postdoctoral Association (\$500)	2018
Most Outstanding Graduate Student, Secondary Science Education	2017
The University of Alabama, Tuscaloosa.	
The School of International Studies, Graduate Research (\$350)	2016
The University of Alabama, Tuscaloosa (UA-Graduate International Presentation).	
Merit Award	2016
<i>The University of Alabama</i>	
Educational Studies in Psychology Research Methodology and Counselling (ESPRMC) 8th Annual Symposium.	
Research Award for Educational Research (\$750)	2016
College of Education, University of Alabama, Tuscaloosa.	
Research Award for Educational Research (\$750)	2015
College of Education, University of Alabama, Tuscaloosa.	
Research Award for Educational Research (\$750)	2014
College of Education, University of Alabama, Tuscaloosa.	
The Mid-South Educational Research Association (MSERA)	2014
Foundation Award (Presentation of Research in Progress).	

ORGANIZATION AFFILIATIONS

AERA: Member, American Educational Research Association.	2014 - Present
NARST: Member, National Association for Research in Science.	2014 - Present
MMIRA: Mixed Methods International Research Association	2018 - Present
SSMA: School Science and Mathematics Association	2019 – Present
ASTE: Member, Association of Science Teacher Education	2019 - 2020
SWASTE: South-West Association of Science Teacher Education	2019 - 2020
MSERA: Member, Mid-South Educational Research Association.	2013 - 2015
AFT: Member, American Federation of Teachers.	2012 – 2015
AEA: American Education Association	2001 – 2012