

University of Louisiana at Lafayette

College of Education Faculty Curriculum Vitae Information

Nathan Dolenc, Ph.D.

Title	Assistant Professor of Science Education
Department	Department of Curriculum and Instruction
Office Number	Girard Hall 111B
Extension	337.482.5265
Email Address	nathan.dolenc@louisiana.edu
Education	Ph.D. in Science Education, University of Virginia
Teaching Philosophy	I take a constructivist approach with my pre-service teachers in learning characteristics of science inquiry by having them engage in student-centered science lessons from the perspective of a student before discussing their role as a teacher. I continually guide and encourage them to use a variety of student engagement strategies such as developing formative assessments, creating active and authentic learning environments, and using effective learning technologies while still covering scientific principles delineated in the Next Generation Science Standards.
Courses Taught	EDCI 425: Science in the Elementary School EDCI 423: Middle School Science Methods EDCI 453: Secondary Science Methods EDCI 469: Phase I Observations
Research Interests	<ul style="list-style-type: none"> • Teaching and mentoring practices in out-of-school-time science and engineering programs • Student learning outcomes, experiences, and development in out-of-school-time science and engineering programs • Interest-driven learning projects to prepare preservice teachers to teach science
Teaching Experience	<p><i>Co-Instructor:</i> Science in the Elementary School, University of Virginia</p> <p><i>Lead Instructor:</i> Science Teaching Methods, Roosevelt University</p> <p><i>Secondary Science Teacher:</i> Prosser Career Academy, Chicago Public Schools 008 - 2011</p>
Publications	Dolenc, N. R., Wood, A., Washburn, M., Batson, Y, Fan, B, Dickens, V, & Armstrong, S. (2016). Science &

	<p>Superheroes: The use of role-play as a means of teaching science. <i>Science and Children</i> 54(2), 56-62.</p> <p>Dolenc, N. R., Wood, A., Soldan, K., & Tai, R. H. (2016). Mars Colony: Using role-play as a pedagogical approach to teaching science. <i>Science and Children</i>, 53(6), 30-35.</p> <p>Dolenc, N. R., Mitchell, C., & Tai, R. H. (2016). Hands Off: Mentoring a student led robotics team. <i>International Journal of Science Education, Part B</i>, 6(2), 188-212. DOI: 10.1080/21548455.2015.1039467</p> <p>Mumba, F., Banda, A., Chabalengula, V., & Dolenc, N. R. (2015). Chemistry Teachers' Perceived Benefits and Challenges of Inquiry-based Instruction in Inclusive Chemistry Classrooms. <i>Science Education International</i>, 26(2), 180-194.</p> <p>Dolenc, N. R., Mitchell, C., & Tai, R. H. (2014). Evidence of self-directed learning on a high school robotics team. <i>Journal of Youth Development</i>, 9(4), 77-88.</p> <p>Wyss, V. L., Dolenc, N. R., Kong, X., & Tai, R. H. (2013). Time on text and science achievement for high school biology students. <i>American Secondary Education</i>, 41(2), 49-59.</p>
Presentations	<p>Dolenc, N. R., Williams, D., & Barber, A. <i>Approaching Self-Directed Learning: A comparison of mentoring styles on two robotics teams.</i> Society for Information Technology and Teacher Education (SITE). Austin, Texas. March, 2017.</p> <p>Ely, E. & Dolenc, N. R. <i>Mixed-Reality simulation to prepare teachers to use evidence-based practices.</i> Society for Information Technology and Teacher Education (SITE). Austin, Texas. March, 2017.</p> <p>Dolenc, N. R., Barber, A. H., & Kazanis, W. <i>Associating Career Choice with Science: An interest driven learning project for preservice elementary teachers.</i> Association for Science Teacher Education (ASTE). Des Moines, Iowa. January, 2017.</p>

	<p>Dolenc, N. R., Wood, A., & Washburn, M. <i>Science and Superheroes: Integrating science and literacy learning with active role-play and comic books.</i> National Science Teachers Association (NSTA). Nashville, Tennessee. March 2016.</p> <p>Williams, D., Dolenc, N. R., Barber, A., & Lai, G. <i>Learning From Nature: Pre-service teachers use of biomimicry as a teaching strategy.</i> Society for Information Technology and Teacher Education (SITE). Savannah, Georgia. March 2016.</p> <p>Dolenc, N. R. <i>Grit and the relationship between winning and learning.</i> Louisiana Education Research Association (LERA). Lafayette, Louisiana. March 2016.</p> <p>Dolenc, N. R., Chabalengula, V., & Frackson, M. <i>Assessing high school science teachers' conceptions of inquiry through scenarios and lesson narratives.</i> Association for Science Teacher Education (ASTE). Portland, Oregon. January 2015.</p> <p>Frackson, M., Chabalengula, V., & Dolenc, N. R. <i>Chemistry teachers' perceived benefits and challenges of inquiry-based instruction in inclusive chemistry classrooms.</i> Association for Science Teacher Education (ASTE). Portland, Oregon. January 2015.</p> <p>Dolenc, N. R. & Tai, R. H. <i>Self-directed versus Apprenticeship: Comparing mentoring on high school robotics teams.</i> The Mentoring Institute at the University of New Mexico Annual Mentoring Conference. Albuquerque, NM. October 2014.</p> <p>Dolenc, N. R., Kong, X., & Tai, R. H. <i>Success on a losing robotics team.</i> National Association for Research in Science Teaching (NARST). Pittsburgh, Pennsylvania. April 2014.</p> <p>Kong, X., Dolenc, N. R., & Tai, R. H. <i>Interaction influences on doctoral students' academic pursuits in biomedical research: an exploratory qualitative study.</i></p>
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	<p>American Education Research Association (AERA). Philadelphia, Pennsylvania. April, 2014.</p> <p>Dolenc, N. R. & Tai, R. H. <i>Taking different paths: A comparative study of mentoring models among robotics competition teams.</i> American Society for Engineering Education (ASEE). Atlanta, Georgia. June, 2013.</p> <p>Dolenc, N. R. & Tai, R. H. <i>Mentor vision and student behavior: A case study of two robotics teams.</i> National Association for Research in Science Teaching (NARST). San Juan, Puerto Rico. April, 2013.</p> <p>Dolenc, N. R. & Tai, R. H. <i>Developing a mentor model for out-of-school time robotics teams.</i> Curry Research Conference, Charlottesville, Virginia. February, 2013.</p>
Professional Memberships	NARST, ASTE, NSTA
Dissertation	<p><i>Examining Relationships Between Activities We Use To Engage Students In Learning and Their Attitudes Towards Science</i></p> <p>Advisor: Robert H. Tai University of Virginia</p>
Service	<ul style="list-style-type: none"> • Academic Affairs Grant Review Committee • Tenure Track Reform Committee • Advising • Supervision • Community Outreach / Professional Development – Establish relationships with Lafayette Parish elementary and middle school inservice teachers to improve their science instruction and model science lessons to their students. • Saturday STEM Camp – Organize and collaborate with other science and technology education faculty in hosting a Saturday science and engineering camp through the Center for Innovative Learning and Assessment Technology (CILAT) • Ed.D. Planning Committee - Organize and collaborate with several faculty members in the Department of Curriculum and Instruction to form a new Curriculum Leadership Ed.D. program.