

Carl Wozniak, Ph.D., G.G. (GIA)

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Employment

- 2016. Associate Professor. School of Education, Leadership, and Public Service. Northern Michigan University (SELPS, NMU), Marquette, MI
- 2011-2016. Assistant Professor, SELPS, NMU
- 2009-2012. Director, Freshman Fellowship Program, NMU
- 2009-2011. Director, McNair Post-baccalaureate Achievement Program,
- 2005-2009. Instructor, School of Education, NMU
- 2001-2005. Director, Upper Peninsula Center for Educational Development, Northern Michigan University (UPCED), Marquette, MI
- 2000-2001. Science Outreach Coordinator. NMU Seaborg Center for Science and Mathematics, Marquette, MI
- 1995-2000. Projects Coordinator. NMU Seaborg Center for Science and Mathematics
- 1991-1995. Director. NMU Upward Bound Regional Math and Science Center, Marquette, MI
- 1990-91. Community Relations Assistant. Marquette General Hospital, Marquette, MI
- 1987-90. High school science faculty and Planetarium Director. Grosse Pointe Public Schools, Grosse Pointe, MI
- 1985-87. Coordinator, Educational Services. University of Michigan Exhibit Museum of Natural History, Ann Arbor, MI
- 1979-85. Assistant Coordinator, Educational Services. University of Michigan Exhibit Museum of Natural History, Ann Arbor, MI

Education and Certification

- 2016. Tenure, NMU
- 2016. Promotion to Associate Professor, NMU
- 2010. Ph.D., Higher Educational Leadership, Western Michigan University, Kalamazoo, MI
- 2004. Graduate Gemologist. Gemological Institute of America, Carlsbad, CA
- 1987. M.A., Secondary Education. Eastern Michigan University, Ypsilanti, MI
- 1987. Michigan Continuing Secondary Teacher Certification with Highly Qualified status in biology, chemistry, general science, and speech, Eastern Michigan University, Ypsilanti, MI
- 1982. B.A., Communications. University of Michigan, Ann Arbor, MI

College Course Responsibilities (*Current)

- *MSED 250: Physical Science for Elementary Teachers
- *MSED 495: Science and Mathematics Methods for Secondary Teachers
- *ED 312: Science Methods for Elementary Teachers
- *ED 640: Educational Policy and Governance
- *EDSI 562: Modeling in the Science Classroom
- *EDSI 594: Master's Project in Science Education
- *PA 599: Public Administration Thesis
- MSED 350: Science Methods for Secondary Teachers
- PA 516: Organizational Theory
- ED 574: Seminar in Educational Research
- MSED 252: Earth Science for Elementary Teachers
- MSED 340: Fundamental Concepts in Science for Secondary Teachers
- ED 483: Educational Media and Technology
- ED 595: Filling the Gaps in Science Teaching
- ED 596: Reaching Out: Distance Learning in the K-12 Classroom
- ED 989: Geology of Michigan
- ED 989: Real-World Astronomy
- Student teacher supervisor

Grants

- 2016. NMU College of Health Science and Professional Studies, Capital Replacement Program Grant
- 2014. NMU College of Health Science and Professional Studies, *Student and Teacher Classroom Movement and Position as Indicators of Teacher Efficacy*, \$2,310. (Wozniak, C, Klett, M.)
- 2013. NMU Center for Rural Development, \$3,000. (Klett, M., Wozniak, C.)
- 2010-11. Wildcat Innovation Challenge Grant (Puncochar, J., Klett, M., Wozniak, C., & Broadway, M.)
- 2002. Kellogg Foundation, U.P. Middle Start Network, 3-year grant
- 2002. State of Michigan, Rudyard Middle School CSR. 3-year grant
- 2000. Great Lakes Education Network, Community-based Distance Learning
- 1998. U.S. Environmental Protection Agency, Lake Superior Watershed Project
- 1995. U.S. Dept. of Education, Upward Bound RMS Center, 4-year grant
- 1992. U.S. Dept. of Education, Upward Bound RMS Center, 3-year grant

Papers, Publications, and State/National Presentations

- Wozniak, C. & Boileau, C. (2017). *From Earth to sky: Using drones to map 3D surface*. National Science Teachers Association Conference. Milwaukee, WI.
- Boileau, C. & Wozniak, C. (2017). *Digital and physical terrain modeling for education*. NMU Celebration of Scholarly Work.
- Wozniak, C. (2016). *Aerial drones in education*. Michigan Earth Science Teachers Association Conference. Marquette, MI.

- Wozniak, C., Drum, S., Hugus, B., Wozniak, E., & Watts, P. (2015). “Clumping” in cross country skiing: How men and women finish races. Poster. American College of Sports Medicine Annual Conference, San Diego, CA.
- Wozniak, C. (2015). *Gems in the classroom: Using refraction and magnification to identify gemstones and diamond simulants*. NESTA Share-a-thon. National Science Teachers Association Conference. Chicago, IL.
- Mills, A., Klett, M., & Wozniak, C. (2014). *Train-the trainer: Experiential Education T²E²*. Poster: Lily Conference, Traverse City, MI.
- Wozniak, C. (2014). *Life in the Devonian*. Presentation. Michigan Earth Science Teachers Association Conference. Alpena, MI.
- Hugus, B. & Wozniak, C. (2014). *Finish time gaps in distance cross-country ski races: Gender and race start type differences*. Poster: Celebration of Student Research. Northern Michigan University.
- Wozniak, C. & Bierlein Palmer, L. (2013). Stakeholder Perceptions of Barriers and Solutions to Significant Post-Secondary Enrollment Option Expansion in the United States. *Inter. J. of Ed. Policy and Leadership*.
- McGrath, E. & Wozniak, C. (2013). Poster: *Water rights and quality: The Wind River Indian Reservation*. Celebration of Student Research. Northern Michigan University
- Wozniak, C. (2011). *Freshman Fellows: Recruitment and Retention of Great Students Through Research Opportunities*. Poster: International Society for the Scholarship of Teaching and Learning Conference, Milwaukee, WI
- Wozniak, C. (2011). *Freshman Fellows: Recruitment, Retention, and Socialization in an Undergraduate Research Program*. Poster: Lily Conference, Traverse City, MI
- Morley, D. J., Wozniak, C., & Selmsler, A. (2011). *New-onset Migraine in Combat Veterans with Blast-related Mild TBI*. Poster: Federal Interagency TBI Conference, Washington, DC
- Wozniak, C. (2011). Freshman Fellows: Recruiting and Retaining Great Students Through Research Opportunities. *CUR Quarterly* 32(2)
- Wozniak, C. (2010). *Re-Imagining High School*. Website created for Michigan Department of Education
- Wozniak, C. (2010). *Administrator Perspectives of Post-secondary Educational Opportunities for Michigan High School Students*. Doctoral thesis, Western Michigan University
- Wozniak, C. (2010). *Administrator Perspectives of Post-secondary Educational Opportunities for High School Students*, 2nd International Conference on Education Research, New Orleans, LA
- Wozniak, C. (2009). *Gemstones in the Classroom*, National Science Teachers Association Conference, New Orleans, LA
- Wozniak, C. (2008). *College Readiness*. White paper for Michigan Department of Education
- Wozniak, C. (2008). *Dual Enrollment in Michigan: A Case Study, 2008*. White paper for Michigan Department of Education

- Wozniak, C. (2004). *Measuring Adequate Yearly Progress in Small Michigan Schools Through the Use of Confidence Levels and Intervals*. U.P. Center for Educational Development (UPCED)
- Wozniak, C. (2004). *Mathematics 2004 MEAP Results in Michigan's Upper Peninsula*. UPCED
- Wozniak, C. (2004). *Summary of School-wide 2004 MEAP Data in the Upper Peninsula of Michigan*. UPCED
- Wozniak, C. (2004). *Science and Mathematics 2004 MEAP Results in Michigan's Upper Peninsula*. UPCED
- Wozniak, C. (2002). *A Synopsis of the No Child Left Behind Legislation*. UPCED
- Wozniak, C. (2002). *Aggregate Data of U.P. Middle Start School Self Studies*. UPCED
- Wozniak, C. (2000). *Using Distance Learning for Community Education*. Great Lakes Education Network
- Wozniak, C. (2000). *A Key to the Conifers of the Upper Great Lakes*. Great Lakes Education Network
- Wozniak, C. (1998). *Carl's 200: Photographs for Education*. The Great Lakes Collaborative
- Wozniak, C. (1997). *Earth History Resources*. The Great Lakes Collaborative
- Wozniak, C. (1997). *Clouds*. The Great Lakes Collaborative
- Wozniak, C. (1996). *Bugs on the Web*. The Great Lakes Collaborative
- Wozniak, C. (1996). *Insect Songs*. The Great Lakes Collaborative
- Wozniak, C. (1996). *Conifers of the North Woods*. The Great Lakes Collaborative
- Wozniak, C. (1990-91). Columnist, *Insights in Health*. Marquette General Hospital
- 1987-90. Author/editor; Grosse Pointe Planetarium *SkyWatch*
- 1979-87. Author/editor; U-M Exhibit Museum *Astronomical Events*
- 1987. Author/editor; U-M Exhibit Museum *The Display Case*
- Wozniak, C. (1986). *Invertebrate Megafossils from the Silica Formation*. Michigan Earth Science Teachers Association
- Wozniak, C. (1985). The Death of the Dinosaurs. *The Michigan Earth Scientist*
- Wozniak, C. (1985). Of Pachyderms and Paradigms. *The Michigan Earth Scientist*
- Wozniak, C. (1985). One Species or Two. *The Michigan Earth Scientist*
- Wozniak, C. (1982). *Docent Manual*. University of Michigan Exhibit Museum

Recent Local Trainings and Presentations

- Wozniak, C. (2017). Instructor, NSF INCLUDES Re-imagine STEM, NMU Center for Native American Studies.
- Wozniak, C. (2017). Instructor. Next Generation Science Exemplar training, cohorts I and II. NMU Seaborg Center.
- Wozniak, C. (2017). Instructor. Next Generation Science Exemplar training, cohort I. Delta-Schoolcraft ISD.
- Wozniak, C. (2016). Marquette Rotary. *The Science of Light*. (February 24)

- Wozniak, C. (2015). Marquette Rotary Family Day. *Fun with Physics*. (April 6).
- ED 312. (2014). Fr. Marquette Elementary. Second, third, and fourth grade Science Day.
- ED 312. (2014) Cherry Creek School Fifth Grade Science Day
- GEAR-UP. (2014). 10th grade science presentation. (June 23)
- ED 312 and MSED 350. (2013) Fr. Marquette Schools “Science Day” (March 18, 20)
- Wozniak, C. (2012). *The Science of Cold*. Fr. Marquette Middle School (May 2)
- Wozniak, C. (2011). *From Artifacts to Understanding: Exploring Regional Earth History with Pretty Cool Specimens*. Fall Conference for Educators, Marquette
- Wozniak, C. (2011). *Test Writing Rules*. Seaborg Center Science Team, NMU
- Wozniak, C. (2010-11). *Expect the Opposite*. Young Wildcat Scholars, NMU
- Wozniak, C. (2010). *Determining the Density of an Unknown Solid*. Fall Educators’ Conference
- Wozniak, C. (2010). *Sun, Earth and Moon in Space*. Seaborg Center Science Team, NMU
- Wozniak, C. (2010). *DNA Extraction in the Classroom*. Seaborg Center Science Team, NMU
- Wozniak, C. (2010). *Phylogenetic Trees*. Seaborg Center Science Team, NMU

Articles Reviewed

- Rogers, M. & McDowell, G. (2015). Assessing the impact of undergraduate research on graduation rates at the University of Georgia. *CUR Quarterly*. (Review chair.)
- Young, G., & Manak, J. (2014.) Incorporating undergraduate research into teacher education: Preparing thoughtful teachers through inquiry-based learning. *CUR Quarterly*. (Review chair.)
- Manak, J. & Young, G. (2014). Teacher education and undergraduate research: An impossible task or a great win-win? *CUR Quarterly*. (Review chair)
- Szecsi, T. (2014). Undergraduate student research in humane education: Benefits gained in action research. *CUR Quarterly*. (Review chair)
- Mekolichick, J. (2014). Should we be footing the bill? Supporting undergraduate presentations at disciplinary conferences. *CUR Quarterly*. (Review chair)
- Pancsofar, N. & Slobodzian, J. (2013). Models for integrating undergraduate research in teacher training programs: Supporting the transition from learner to educator. *CUR Quarterly*. (Review chair)
- Dahlquist, L. (2013). Time management: Balancing life with research. *CUR Quarterly*. (Review chair)
- Slobodzian, J. & Pancsofar, N. (2013). Models for integrating undergraduate research in teacher training programs: Supporting the transition from learner to educator. *CUR Quarterly*. (Review chair)
- Slocum, R., & Scholl, J. (2013). NSF Support of Research at Primarily Undergraduate Institutions (PUI) *CUR Quarterly*.

- Owerbach, D., Ohia, S., & Oyekan A. (2012). Description and evaluation of a summer undergraduate research program at an HBCU. *CUR Quarterly*. (Review chair)
- Author redacted. (2012). Effectiveness of food sustainability education among elementary age students. *Journal of Student Research*.

Thesis and Project Committees

- Bosek, L. (2017). *Information sharing, transparency, and e-governance technology solutions among county government offices in southeastern Michigan*. Master of Arts in Public Administration thesis chair, NMU.
- Simmons, R. (2017). *Developing a high school makerspace: Planning, funding, and lessons learned*. Master of Science Instruction final project director, NMU.
- Delpier, C. S. (2012). *Environmental adventures course: An analysis of student writing to guide curriculum development*. Master of Arts in Science Education thesis, NMU

Recent and Continuing Service

- 2014-16 and 2017-18. Chair, Honors Board, NMU
- 2017-present. Member, Graduate Policies Committee, NMU
- 2017-present. Chair, School of Education faculty
- 2013-present. Member. Teacher Selection and Retention Committee, NMU SELPS
- 2013-present. Member. Honors Board, NMU
- 2013-present. Member. Student/Faculty Conduct Board, NMU
- 2012-present. Member. Secondary Education Committee, NMU SELPS
- 2013-. Member or Chair, Undergraduate Review Committee, NMU School of Education, Leadership, and Public Service (SELPS)
- 2010-present. Parent Orientation Volunteer, NMU Dean of Students Office
- 2015-16. Chair. Secondary Education Committee, NMU SELPS
- 2014-15, Member, Evaluation and Promotion Committee, NMU School of Education
- 2012-15, Member, Middle College Advisory Committee, Marquette-Alger Regional Educational Service Agency
- 2012-2015. Councilor, Council on Undergraduate Research (CUR)
- 2012-2015. Divisional Editor, *CUR Quarterly*
- 2011-present. Member, NMU Institutional Review Board
- 2011-13. Member, Faculty Advisory Committee, NMU Center for Native American Studies
- 2012-13, Member, Asst. Provost Search Committee, NMU
- 2012. Chair, Seaborg Center Director Search Committee, NMU
- 2011. Secretary, Undergraduate Review Committee, NMU School of Education
- 2011. Member, Grievance Committee, NMU School of Education
- 2011. Event Supervisor, U.P. Science Olympiad Event, NMU Seaborg Center
- 2011. Member, COPS Grant Committee

- 2011. Mentor, NMU Student Leader Fellowship Program
- 2010-11. Faculty mentor, Freshman Fellowship Program
- 2010-11. Freshman Orientation Volunteer, NMU
- 2010-11. Member, High School Core Team, Michigan Department of Education
- 1995-2011. Webmaster, Michigan Earth Science Teachers Association
- 1995-2011. Board Member, Michigan Earth Science Teachers Association
- 2010. University Scholars Director, NMU
- 2008-10. Member, Early College Credit Earning Opportunities Advisory Committee, Michigan Department of Education
- 2008-10. Member, Student-Faculty Judiciary, NMU
- 2008-10. Member, Honors Board, NMU
- 1996-1999. Editor, *The Michigan Earth Scientist*

Professional Associations

- Life Member, Michigan Earth Science Teachers Association
- Member, National Earth Science Teachers Association
- Member, Council on Undergraduate Research
- Member, National Science Teachers Association
- Member, American Modeling Teachers Association
- Member, Michigan Science Teachers Association
- Member, American Educational Research Association
- Member, American Association for the Advancement of Science