

## NEIL A. KNOBLOCH

### Academic Record

- Ph.D. Ohio State University 2002  
*Major:* Human and Community Resource Development: Agricultural Education  
*Specialization:* Instructional Leadership  
*Minor:* Research and Statistics  
*Dissertation:* “Exploration of Effects Caused by the First Ten Weeks of the School Year on Teacher Efficacy of Student and Beginning Teachers in Ohio Agricultural Education” (online at [www.ohiolink.edu/etd/](http://www.ohiolink.edu/etd/))
- M.S. Iowa State University 1997  
*Major:* Agricultural Education  
*Thesis:* “Perceptions Regarding Integration of Agricultural Awareness Activities by Elementary Teachers in East Central Iowa”
- B.S. Iowa State University 1992  
*Double Major:* Agricultural Education and Agricultural Extension Education (*Summa Cum Laude* and graduated with distinction)

### a. Academic Appointments

- Professor, Department of Agricultural Sciences Education & Communication (focus on discovery & engagement), Purdue University, August 2017-present
- Associate Professor, Department of Youth Development & Agricultural Education (focus on discovery), Purdue University, August 2009-August 2017
- Assistant Professor, Department of Youth Development & Agricultural Education (focus on discovery), Purdue University, August 2007-August 2009
- Assistant Professor, Department of Human and Community Development (50% research, 50% teaching), University of Illinois, July 2002-August 2007
- Lecturer, Department of Human and Community Resource Development (100% teaching), Ohio State University, July 1999-June 2002
- Agricultural Science Teacher, Mid-Prairie Community School District (100% teaching), Wellman, IA, July 1992-June 1999

### b. Administrative Responsibilities

- Chair, Purdue University College of Agriculture PK-12 Council, 2011-present
  - Organized a new PK-12 Council for the College of Agriculture; developed operating guidelines and a strategic framework
  - Implemented three new PK-12 Engagement and Outreach Awards for the College
  - Facilitated 26 workshops for over 520 faculty, staff and graduate students
  - Organized a dashboard to measure reach and impact for PK-12 engagement; documented over 100,000 youth, parents, and educators are reached annually
- Co-Director, Mentoring@Purdue Program (M@P), 2012-present
  - Built 1890-1862 partnerships between Purdue University and 11 HBLGU partners; outreach program has engaged 1,800 faculty, staff, students on HBLGU campuses and over 400 undergraduate students at professional conferences about graduate school opportunities in Purdue’s College of Agriculture

- Recruited 118 prospective graduate students to participated in a one-week pre-graduate program, and 4 out of 5 participants pursued a graduate degree
- 88% increase in URM enrollment in Purdue Agriculture since 2013
- Facilitated coordination of over 50 workshops or over 1,000 faculty, staff and graduate students at Purdue University and 70% were rated as highly effective
- Project Director, Interdisciplinary Education and Communication Hatch Project, Purdue College of Agriculture, 2008-present
  - Provided leadership for a diverse team of 7 researchers to conduct integrated discovery, learning, and engagement projects focused on advancing the engagement of P-20 students through STEM education
  - Collectively, the team of faculty supervised 30 theses/dissertations
  - Collectively, 330 scholarly products were generated from 2010-18
  - Collectively, 16,000 students, teachers, parents, and farmers were reached by the collaborative efforts of 7 faculty between 2013-18
  - Collectively, over 30 grant funded projects (\$7.5 million) were secured
- Graduate Chair, Department of Youth Development & Agricultural Education, 2010-15
  - Facilitated 6 faculty retreats and revised the graduate curriculum that resulted in 5 new graduate courses; 2 courses were moved to permanent status
  - Developed a new graduate application review form and implemented an online system for 100 graduate reviews
  - Fellowships in the department increased by 50%

**b. Certifications**

- LEAD21 - Leadership Development for the 21st Century: Linking Research, Academics, and Extension (2019-20)
- Purdue University Insights Leadership Development Forum (2018-19)
- Purdue University Intercultural Pedagogy Program (2018-19)
- Cornell Faculty Leadership & Professional Development Program (2018)
- AAAE Omega New Faculty Leadership Development Program (2006)
- Dimensions of Success Rubric Assessment Certification (active)
- State of Ohio PRAXIS III Assessor (inactive) and Pathwise Mentor (inactive)

**d. Awards and honors (selected of  $N = 44$ )**

- |                       |  |
|-----------------------|--|
| 2019                  | Distinguished Agricultural Educator, AAAE North Central Region   |
| 2003, '05<br>'17, '19 | Four Outstanding Article Awards, AAAE <i>Journal of Agricultural Education</i>                                       |
| 2019                  | National Land-Grant Diversity Conference Diversity Champion Team Award   |
| 2018                  | Violet Haas Advancement of Women Award, Purdue University  |
| 2018                  | Diversity and Inclusion Award, APLU National Experiment Station Section  |
| 2017                  | Fellow, American Association for Agricultural Education  |
| 2016                  | Distinguished Research Award, AAAE   |
| 2012, 17, 19          | Graduate Advisor of Three Outstanding Graduate Theses, AAAE  |
| 2007                  | New Teacher Award of Excellence in College and University Teaching in the Food and Agricultural Sciences Award, USDA |
| 2002-2017             | Fifteen Outstanding Paper and Poster P Awards: ACTER, AAAE, NC-AAAE  |

**e. Refereed articles (N = 35)**

1. Wang, H. H., Charoenmuang, M., Knobloch, N. A., & Tormoehlen, R. L. (2020). Defining interdisciplinary collaboration based on high school teachers' beliefs and practices of STEM integration using a complex designed system. *International Journal of STEM Education*.
2. Knobloch, N. A., Charoenmuang, M., Cooperstone, J., & Patil, B. S. (2020). Developing interdisciplinary thinking in a food and nutritional security, hunger, and sustainability graduate course. *Journal of Agricultural Education and Extension*, 26(1). doi: 10.1080/1389224X.2019.1690014
3. Wang, H., & Knobloch, N. A. (2018). Levels of STEM integration through agriculture, food, and natural resources. *Journal of Agricultural Education*, 59(3), 258-277  
<https://doi.org/10.5032/jae.2018.03258>
4. Kararo, M. J., & Knobloch, N. A. (2018). An analysis of education-related policies regarding the participation potential of homeschool students in Agricultural Education and FFA. *Journal of Agricultural Education*, 59(3), 36-57. <https://doi.org/10.5032/jae.2018.03036>
5. Ryu, M., Mentzer, N., & Knobloch, N. (2018). An examination of preservice teachers' learning of STEM integration: Implications for integrated STEM teacher preparation. *International Journal of Technology and Design Education*. <https://doi.org/10.1007/s10798-018-9440-9>
6. Knobloch, N. A., Brady, C. M., Orvis, K. S., & Carroll, N. J. (2016). Development and validation of an instrument to assess youth motivation to participate in career development events. *Journal of Agricultural Education*, 57(4), 16-28.  
<https://doi.org/10.5032/jae.2016.04016>
7. Kararo, M. J., Orvis, K. O., & Knobloch, N. A. (2016). Eat Your Way to Better Health: Evaluating a garden-based nutrition program for youth. *Horticulture Technology*, 26(5), 663-668. doi: 10.21273/HORTTECH03225-16
8. LaFollette, L. K., Knobloch, N. A., Schutz, M. M., & Brady, C. M. (2015). Consumers' motivations and dairy production beliefs regarding participation in an educational dairy farm event. *Journal of Agricultural Education*, 56(2), 153-169. doi: 10.5032/jae.2015.02153
9. Mueller, A. L., Knobloch, N. A., & Orvis, K. S. (2015). Exploring the effects of active learning on high school students' outcomes and teachers' perceptions of biotechnology and genetics instruction. *Journal of Agricultural Education*, 56(2), 138-152. doi: 10.5032/jae.2015.02138
10. Knobloch, N. A. (2008). Factors of teacher beliefs related to integrating agriculture into elementary school classrooms. *Agriculture and Human Values*, 25(4), 529-539. Available at: [www.springerlink.com/content/u44h872704816317/](http://www.springerlink.com/content/u44h872704816317/)
11. Knobloch, N. A., Ball, A. L., & Allen, C. A. (2007). The benefits of teaching and learning about agriculture in elementary and junior high schools. *Journal of Agricultural Education*, 48(3), 25-36.
12. Ball, A. L., Knobloch, N. A., & Hoop, S. E. (2007). Instructional planning experiences of intern teachers and novice teachers of agriculture. *Journal of Agricultural Ed.*, 48(2), 69-78.
13. Whittington, M. S., McConnell, E. A., & Knobloch, N. A. (2006). Teacher efficacy of novice teachers in agricultural education at the end of the school year. *JAE*, 47(4), 26-38.
14. Knobloch, N. A. (2006). Exploring relationships of teachers' sense of efficacy in two student teaching programs. *Journal of Agricultural Education*, 47(2), 36-47.
15. Ball, A. L., & Knobloch, N. A. (2005). A document analysis of the pedagogical knowledge espoused in agriculture teaching methods courses. *JAE*, 46(2) 47-57.

16. Ball, A. L., & Knobloch, N. A. (2004). An exploration of the outcomes of utilizing ill-structured problems in pre-service teacher preparation. *JAE*, 45(2), 62-71.
17. Knobloch, N. A., & Whittington, M. S. (2003). Differences in teacher efficacy related to career commitment of novice agriculture teachers. *JCTE*, 20(1), 87-98.
18. Knobloch, N. A., & Whittington, M. S. (2003). The influence of the initial ten weeks of the school year on novice teacher efficacy in agricultural education. *NACTA*, 47(4), 16-21.
19. Knobloch, N. A. (2003). Is experiential learning authentic? *JAE*, 44(4), 22-34.
20. Knobloch, N. A., & Whittington, M. S. (2002). Novice teachers' perceptions of support, teacher preparation quality, and student teaching experience related to teacher efficacy. *Journal of Vocational Education Research*, 27(3), 331-341.
21. Knobloch, N. A., & Martin, R. A. (2002). Teacher characteristics explaining the extent of agricultural awareness activities integrated into the elementary curric.. *JAE*, 43(4), 12-23.
22. Knobloch, N. A., & Martin, R. A. (2000). Ag. awareness activities and their integration into the curriculum as perceived by elementary teachers. *JAE*, 41(4), 15-26.

**Books and book chapters** ( $N = 9$ )

**Editor-reviewed articles** ( $N = 25$ )

**Editorships** ( $N = 3$ )

**Educational & Curriculum Resources** ( $N = 5$ )

**Invited presentations or papers presented at meetings** ( $N = 2,600$  people at 37 conferences)

**Refereed research papers** (selected of  $N = 76$ )

**Refereed abstracts and posters** (selected of  $N = 166$ )

**Research grants and awards received** (Research Grants and Contracts ( $N = 67$ ; PI or Co-PI of \$11.8 million; Purdue University and University of Illinois share received \$6.4 million; Responsible for \$3.5 million)

## **Section B. LEARNING**

### **1. Summary of instruction**

Dr. Knobloch's contribution to teaching and learning at Purdue University has primarily focused on graduate education. He teaches graduate courses, advises students, assists with graduate education, and plays an important role mentoring and developing graduate students in agricultural-related STEM education. He has provided leadership on advancing mentoring in the College of Agriculture as a co-PD on a women and minorities in STEM grant-funded project and by serving on various college committees. At the university level, Dr. Knobloch has served on the cross-campus Purdue University Integrated STEM Education Initiative, which involved hiring six new faculty as a cluster hire and developing the new, innovative curriculum for developing integrated STEM certificate for preservice teachers.

## 2. Courses taught at Purdue University and evidence of teaching excellence

The following table lists student evaluation scores for the last 5 years.

Course	Cr	Title	Percent Responsible	Semester & Enrollment	University Criteria	
					Course	Instructor
IT 472 / EDCI 590*	3	Methods of Integrated STEM	35%	F14: 6/6 F15: 7	4.3 n/a	4.5 n/a
YDAE 555/520	3	Principles of Extension	33%	F15: 5/10 F17: 10/18	4.3 4.5	4.9 4.8
YDAE 591	3	Nexus of Food & Nutritional Security	20%	F17: 3/6	4.0	4.0
YDAE 591 / BTNY 590+	1	Plant Breeding Educ. & Outreach	50%	S14: 3/4	3.8	4.0
YDAE 591 / YDAE 681	3	Research Design for Social Scientists	50%	Su15: 3/5 Su16: 9/14 Su17: 9/14 Su18: 2/9 Su19: 1/5	5.0 4.1 4.1 3.5 5.0	5.0 4.9 4.8 4.0 5.0
ASEC 545	3	Teaching STEM Through Agriculture, Food & Natural Resources	50%	S16: 3/5 S17: 8/10 S18: 3/3 S19: 3/7	4.3 3.8 4.8 5.0	n/a 4.2 5.0 5.0
YDAE 591	3	Theories of Learning	50%	F16: 6/10	4.5	n/a
YDAE 644	1	Graduate Seminar	50%	F15: 2/4	4.5	5.0
Overall University Average					4.3	4.5

## Section C. ENGAGEMENT

### 1. Summary of outreach efforts

Dr. Knobloch's engagement is a direct application of his research on teaching and learning and expands the reach and impact of his research to teachers, graduate students, and professors. As a teacher educator, his engagement efforts focus on enhancing K-12 education and on-campus pre-service teacher education through innovative and integrated learning experiences, and expanding access of agricultural-related STEM education for women and underrepresented minorities. His efforts have documented Purdue Agriculture reaches over 100,000 PK-12 students and teacher annually. His efforts through the Mentoring @ Purdue program and the M@P Summer Scholars Program, Purdue Agriculture URM enrollment increased 88%. Finally, Dr. Knobloch conducts outreach education programs to disseminate his scholarly discoveries by conducting workshops with PK-12 teachers and youth educators.

**Engagement & Service Activities** = see Evidence of Excellence #4 and #5