#### PETER TROY WHITE

Agricultural Leadership, Education, & Communications University of Nebraska-Lincoln Scottsbluff, NE 69361 Panhandle Research & Extension Center cell: (208) 530-0076 Scottsbluff, NE 69361 Email: troy.white@unl.edu

### **EDUCATION:**

Ph.D., Education, University of Idaho, August 2015

Dissertation Title: Utilizing the Concerns-Based Adoption Model to Assess the Integration of Science, Technology, Engineering, and Mathematics (STEM) in Secondary Introductory Agricultural Mechanics Courses: A Descriptive Study of Idaho Secondary Agricultural Educators

2902 Avenue B

M.S., Agricultural Education, University of Idaho, August 2002

Thesis Title: The current status of supervised agricultural experience programs in the Inland Pacific Northwest.

B.S., Agricultural Education, University of Idaho, May 2001

#### PROFESSIONAL EXPERIENCE:

**University Teaching:** 

Course #	Title	Credits/Type		
University of Nebraska—Lincoln				
ALEC 431	Student Teaching			
ALEC 824	Foundations of CTE	3 cr. Online		
South Dakota State	e University			
AGED 295	Practicum	1 cr. Lecture		
AGED 401/501	Parliamentary Procedure	2 cr. Online		
AGED 404	Methods of Teaching Ag Ed	3 cr. Lecture		
AGED 405	Phil Career/Technical Ed	2 cr. Lecture		
AGED 408	Supervision Work Experience/Youth Organizations	2 cr. Lecture		
AGED 412/L	Prep Student Teaching in AGED	4 cr. Lecture		
AGED 491	Welding	1 cr. Lab		
AGED/EDER 610	Introduction to Research	3 cr. Lecture		
AGED 650	Foundations of Ag Education	3 cr. Online		
AST 202 & 202L	Construction & Materials & Labs	2 cr. Lecture/ Labs		
AST 211 & 211L	Ag/Outdoor Power for Teachers & Lab	1 cr. Lecture/ Lab		
AST 311 & 311L	Applied Electricity – Teachers & Lab	1 cr. Lecture/Lab		
EDER 614	Adv. Ed. Research, Design, & Analysis	3 cr. Online		
EDFN 365	Computer-Based Tech & Learning	2 cr. Lecture		
EDFN 730	Current Issues in Education	3 cr. Online		
EDFN 760	Informational Literacy	3 cr. Online		
EPSY 302	Educational Psychology	3 cr. Lecture		
SEED 420	5-12 Teaching Methods	2 cr. Lecture		
EDFN 454	Teaching & Learning IV-Student Teaching	11 cr. Student Teaching		
AGED 488	7-12 Student Teaching Ag Ed	6 cr. Student Teaching		

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University of Idaho			
AGED 454	Facilities Operation & Management (Co-Taught)	3 cr. Lecture/Lab	
ASM 107	Beginning Welding	2 cr. Lecture/Lab	
ASM 210	Small Engines	2 cr. Lecture/Lab	

## **Transdisciplinary Research Appointments:**

Graduate Research Assistant, Regional Approaches to Climate Change for Pacific Northwest Agriculture, Agricultural & Extension Education Department, Moscow, Idaho. NIFA Award No. 2011-68002-30191

**Major Responsibilities:** Create semester-based curriculum, communicate with PI's and graduate students to ensure curriculum mirrors project research, provide graduate student training on creating educational resources, represent education objective at regional and national meetings, Create lab activities mirroring agriculture-related climate science on the project, write for a variety of audiences for professional and popular press audiences, provide template and other resources for the creation of educational resources, conduct teacher workshop sessions, assist in planning teacher workshops, and recruiting teachers for summer workshops.

#### **Guest Lectures:**

Climate Science in Secondary Education (October 2015). ISEM101 Climate Change: Myth and Science, University of Idaho (Skype Lecture), Bill Loftus Instructor.

## **Secondary Teaching:**

- Agricultural Science & Technology Teacher & FFA Advisor, Marsh Valley High School, Arimo, Idaho, 2008-2012.
- Agricultural Science & Technology Teacher & FFA Advisor, Lebanon High School, Lebanon, Oregon, 2004-2008.
- Agricultural Science & Technology Teacher & FFA Advisor, Adrian High School, Adrian, Oregon, 2002-2004.

#### **TEACHING ACCOMPLISHMENTS:**

# **Curriculum Materials Developed:**

- Carter, A., **White, P.T.**, Hasselquist, L., Nepal, M. P. (2018) Interactive Parliamentary Procedure Notebook. FAST-REEU Teaching Resources. <a href="https://openprairie.sdstate.edu/tll\_cr/1/">https://openprairie.sdstate.edu/tll\_cr/1/</a>
- Burwitz, S, K.M. Roe, M.P. Nepal, L.B. Browning, M.L. Miller and **P.T. White**. 2019. <u>Recycling</u> Aluminum. ILEARN Teaching Resources. 2(3):43-48. DOI: 10.13140/RG.2.2.36712.32002
- Colombe, S., J. McLaughlin, M.P. Nepal, L.B. Browning, M.L. Miller and **P.T. White**. 2019. <u>Sustainable Agriculture Lesson for Middle School Classrooms</u>. ILEARN Teaching Resources. 2:34-37. DOI: 10.13140/RG.2.2.12804.78727
- Mueller, J. M., L. Edwards, M.P. Nepal, L.B. Browning, M.L. Miller, **P.T. White**. 2019. Gases. ILEARN Teaching Resources.2:18-22. DOI: 10.13140/RG.2.2.34361.21600
- Hoover, A., B. Blaha, J. Englin, M.P. Nepal, L.B. Browning, M.L. Miller, and **P.T. White**. 2019. <u>Using a Case Study Approach to Teach Invasive Species and Climate Change</u>. ILEARN Teaching Resources. 2:10-7. DOI: 10.13140/ RG.2.2.36281.42082
- Kruse, T., L. Forcier, M.P. Nepal, L.B. Browning, M.L. Miller, and **P.T. White.** 2019. Biome. ILEARN Teaching Resources 1:5-9. DOI: 10.13140/RG.2.2.20865.71520

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Colombe, S., M.P Nepal, L.B. Browning, M.L. Miller, and **P.T. White**. 2018. <u>Three Sister Crops:</u>

<u>Understanding American Indian Agricultural Practices of Corn, Beans and</u>

Squash. ILEARN Teaching Resources. 1:1-4. DOI: 10.13140/RG.2.2.10696.16647

- White, P.T. 2018. Introduction to Integrated Crop-Livestock Systems. NIFA funded, Back to the Future: Enhancing Food Security and Farm Production with Integrated Crop-Livestock Production Systems Curricular Resources. https://openprairie.sdstate.edu/tll\_cr/2/
- Interdisciplinary Crop Science. (2015). **White, P.T.** Curriculum Developer. NIFA funded, REACCH curriculum, a cooperative project by the University of Idaho, Washington State University, Oregon State University, and USDA-NRS. <a href="https://www.reacchpna.org/education/secondary-curriculum">https://www.reacchpna.org/education/secondary-curriculum</a>

**Video Teaching Resources:** 

Title	URL	Date Published
Introduction to Parliamentary Procedure	https://ffa.app.box.com/s/1rsnddb4pftcfn79372o7 n0tlmb7qhyg/file/751980513613	10/10/2020
How to Change a Motion: Amend	https://ffa.app.box.com/s/1rsnddb4pftcfn79372o7 n0tlmb7qhyg/file/751981551184	10/10/2020
Small Gas Engine Disassembly	https://www.youtube.com/watch?v=7U1JMcdOK Ts&t=6s	4/1/20
Small Gas Engine Assembly 1	https://www.youtube.com/watch?v=oR9c8ZbUsa U&t=27s	4/2/20
Small Gas Engine Assembly 2	https://www.youtube.com/watch?v=q_FtapPZBS k&t=81s	4/7/20
Small Gas Engine Assembly 3a	<pre>https://www.youtube.com/watch?v=R3rWKu1yc T0</pre>	4/14/20
Small Gas Engine Assembly 3b	https://www.youtube.com/watch?v=YPuBN1lhV pM&t=8s	4/17/20
Idaho FFA Agronomy CDE: How to Calculate Fertilizer Application Problems	https://www.youtube.com/watch?v=k3WEWPesu Gc	4/26/17

## **Professional Development Workshops:**

- Teaching Basic Electrical Wiring to meet NEC Requirements. (June 2022). NCE Conference. Kearney, NE.
- Briggs & Stratton Field School. (June 2021). National professional development opportunity sponsored by the SDSU Ag Ed Club. Brookings, SD. 20 teachers from across the nation attended.
- Basic Electrical Wiring & Teaching Aids. (Jan 2020). SDSU Ag Ed Club & SDAAE Winter Professional Development. Brookings, SD.
- Briggs & Stratton Field School. (June 2019). National professional development opportunity sponsored by the SDSU Ag Ed Club. Brookings, SD. 20 teachers from across the nation attended.
- Parliamentary Procedure Interactive Notebooks. (Jan 2019). SDSU Ag Ed Club & SDAAE Winter Professional Development. Brookings, SD.
- Integrated Crop Livestock Systems. (July 2018). SDACTE Summer Conference, Rapid City SD.
- iLEARN (Immersive Learning Experiences & Rural Networking). (June 2018). Teacher Workshops & Distance Science Expert network development. Brookings, SD.
- iLEARN (Immersive Learning Experiences & Rural Networking). (May 2017). Teacher Workshops & Distance Science Expert network development. Brookings, SD.
- Using Tablets & GPS Receivers to Map Crop Pests. (July 2014). REACCH Teacher Workshop. Pendleton, OR.
- Creating Maps with Google Earth and GPS Data Files. (July 2014). REACCH Teacher Workshop. Pendleton, OR.

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Modeling the Greenhouse Effect. (July 2013). REACCH Teacher Workshop. Moscow, ID. CO<sub>2</sub>, Respiration, & Seeds. (July 2013). REACCH Teacher Workshop. Moscow, ID. Soil Erosion Modeling. (July 2013). REACCH Teacher Workshop. Moscow, ID.

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#### **SCHOLARSHIP:**

## **Peer-Reviewed Publications**

### **Peer-Reviewed Journal Articles:**

White, P. T., Wolf, K., Johnson-Maynard, J.J. (2022). Changes in Teacher Attitudes Relating to Climate Science. *Natural Sciences Education*, 51(2), <a href="https://doi.org/10.102/nse2.20086">https://doi.org/10.102/nse2.20086</a>

- White, P. T., Nepal, M. P., Lemke, M., Browning, L. B., Miller, M. L., & Vestal, S. (2020). Perceptions and usages of online teaching resources by South Dakota science and agriculture teachers. *Proceedings of the South Dakota Academy of Science*, 99, 101-117.
- Falk, J. M., Gerwig, C., Shaul, K., **White, P. T.**, Baker, M. A. (2016). Perspectives on agricultural education at the University of Idaho. *NACTA Journal*, 60(2), 249-255. <a href="https://www.jstor.org/stable/nactajournal.60.2.249">https://www.jstor.org/stable/nactajournal.60.2.249</a>
- White, P.T., Wolf, K. J., Johnson-Maynard, J., Velez, J., & Eigenbrode, S. (2014). Secondary climate change education in the Pacific Northwest. *Natural Sciences Education*, 43(1), 85-93. <a href="https://doi.org/10.4195/nse2014.01.0001">https://doi.org/10.4195/nse2014.01.0001</a> (Acceptance Rate: 58%)

## **Peer-Reviewed Conference Presentations & Proceedings:**

- Saucier, P.R., Byrd, A.P. White, P.T., Anderson, R.G., & Leamon, C.L. (2021). Effects of a Professional Development Session on Career and Technical Education Teachers' Perceptions of the Importance to Teach Small Gas Engines. Association of Career and Technical Education Research, New Orleans, LA.
- Anderson, R.G., Saucier, P.R. Byrd, A.B., White, P.T., & Leamon, C.L. (2021). *Identifying the Tools and Equipment Available for Career and Technical Education Teachers to Teach Small Gas Engines Skills*. Association of Career and Technical Education Research Conference, New Orleans, LA.
- White, P.T., Anderson, R.G., Saucier, P.R., Byrd, A.P., & Leamon, C.L. (2021). *Perceptions of Curriculum Availability for Career and Technical Education Teachers to Teach Small Gas Engine Technology in Secondary Schools*. Association of Career and Technical Education Research, New Orleans, LA.
- Nepal, M.P., Browning, L.B., Miller, M.L. and **White, P.T.** (2020). <u>Teaching Modules for 7-12 Science Educators</u>. Annual Conference of Botanical Society of America, Virtual.
- Nepal M.P., Bott-Knutson, R., Mathew, F., Janaswamy, R., & White, P.T. (2019). *Mentoring Native American Students for Future Science and Agriculture Workforce through FAST-REEU*. Annual Conference of Botanical Society of America, Tucson, AZ.
- Nepal, M.P., Browning, L.B., Edwards, L., Miller, M.L., & White, P.T. (2018). Immersive Learning Experiences and Rural Networking at South Dakota State University (iLEARN@SDSTATE): A Professional Development Program for Science/Agriculture Teachers. Annual Conference of Botanical Society of America-Botany, Rochester MN.
- Hasselquist, L., Graves, N, A., White, P.T. (December 2018). CTE Teacher Retention: A Qualitative Study of Mid-Career and Veteran CTE Teachers. CTE Research and Professional Development Conference, Association for Career and Technical Education Research, San Antonio, TX.
- Nepal, M. P. (Lead), Browning, L. M., Miller, M. L., Edwards, L. M., White, P. T. (June 2018).

  Immersive Learning Experiences and Rural Networking at South Dakota State University
  (iLEARN@SDSTATE): A Professional Development Program for Science/Agriculture Teachers.

  Annual Conference of Botanical Society of America- Botany USDA, Rochester MN.
- Vestal, S. S., Browning, L. M., Miller, M. L., Nepal, M., White, P. T. (July 2017). *Using a Professional Learning Community to Retain STEM Teachers*. 2017 Noyce Summit—AAAS, Washington, DC.
- Vestal, S. S., Browning, L. M., Miller, M. L., Nepal, M., White, P. T. (July 2016). Factors that Influence Recruitment and Retention of STEM Teachers in Rural Areas. 2016 Noyce Summit—AAAS, Washington, DC.

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White, P.T., Wolf, K. J. (2016). Utilizing the concerns-based adoption model to assess STEM integration in agricultural mechanics in Idaho. *Proceedings of the American Association for Agricultural Education National Research Conference, Kansas City, MO*, 43, 469-482. (54.5% acceptance rate)

- White, P.T., Wolf, K. J., Falk, J. M. (2016). Introductory agricultural mechanics in Idaho: A census of the importance of instructional units and duration of instruction. *Proceedings of the American Association for Agricultural Education National Research Conference, Kansas City, MO*, 43, 592-608. (54.5% acceptance rate)
- White, P.T., Wolf, K. J., Falk, J.M. (2015, October). Introductory agricultural mechanics in Idaho: A census of the importance of instructional units and duration of instruction. 34th National Agricultural Mechanics Professional Development Blue Ribbon Research Conference, Louisville, KY. Outstanding Research Paper Award. (60% acceptance rate)
- White, P.T. & Wolf, K. (2014). Agricultural mechanics as agriscience: Secondary teacher perceptions in Idaho. *Proceedings of the American Association for Agricultural Education National Research Conference, Salt Lake City, UT, 41*, 3. (53% acceptance rate)
- White, P.T., Connors, J., & Wolf, K. (2014, May). The development of agricultural education in the Pacific Northwest. *Proceedings of the American Association for Agricultural Education National Research Conference, Salt Lake City, UT, 41*, 48. (53% acceptance rate)
- White, P.T., & Wolf, K. (2014). The effect of a three-day professional development on climate science on teacher attitudes towards teaching climate science in the classroom. *Proceedings of the American Association for Agricultural Education National Research Conference, Salt Lake City, UT*, 41, 4. (53% acceptance rate)
- Falk, J., White, P.T., Gerwig, C., Shaul, K. (2014). Perspectives on agricultural education at the University of Idaho. *Proceedings of the American Association for Agricultural Education National Research Conference, Salt Lake City, UT, 41*, 2. (53% acceptance rate)
- Falk, J., White, P.T., Gerwig, C., & Shaul, K. (2013, September). *Perspectives on agricultural education at the University of Idaho*. Paper presented at the Western Region Agricultural Education Research Conference, Lubbock, TX.
- Wolf, K., Velez, J., Johnson-Maynard, J., Eigenbrode, S., **White, P. T.**, Swan, B. G., & Blickenstaff, S. M. (2013). Elementary teacher's perceptions of agriculture and their integration of agricultural topics. *Proceedings of the 40th Annual National Agricultural Education Research Conference*, 40, 280-293. (43.5% acceptance rate)
- White, P. T., & Pals, D. A. (2004). The current status of supervised agricultural experience programs (SAE) in the Inland Pacific Northwest. *Proceeding of the 31st Annual National Agricultural Education Research Conference*, 31, 103-115.

## **Publications: Extension**

- Wang, T., Bly, A., Mueller, J., **White, P.T.**, & Kumar, S. (2019). Farm Practices that improve soil health: Integrated crop-livestock systems. SDSU iGROW Extension Publications. <a href="https://extension.sdstate.edu/farm-practices-improve-soil-health-integrated-crop-livestock-systems">https://extension.sdstate.edu/farm-practices-improve-soil-health-integrated-crop-livestock-systems</a>
- Wang, T., Bly, A., Mueller, J., **White, P.T.**, & Kumar, S. (2019). Farm practices that improve soil health: Crop rotations and no-till. SDSU iGROW Extension Publications. <a href="https://extension.sdstate.edu/farm-practices-improve-soil-health-crop-rotations-and-no-till">https://extension.sdstate.edu/farm-practices-improve-soil-health-crop-rotations-and-no-till</a>
- Wang, T., Bly, A., Mueller, J., **White, P.T.,** & Kumar, S. (2019). Farm practices that improve soil health: Cover crops and crop residues. SDSU iGROW Extension Publications. <a href="https://extension.sdstate.edu/farm-practices-improve-soil-health-cover-crops-and-crop-residues">https://extension.sdstate.edu/farm-practices-improve-soil-health-cover-crops-and-crop-residues</a>

### **Publications: Other**

White, P. T., Lemke, M., Nepal, M.P. (2018, October). *Analysis of Online Educational Resource Preferences of South Dakota Agricultural and Science Educators*. Round Table Paper presented

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- at the North-Central Region Research Conference of the American Association for Agricultural Education, Fargo, ND.
- Nepal, M., Andersen, E., Browning, L., Edwards, L., Miller, M., White, P.T. (July 2018), Immersive Learning Experiences and Rural Networking at South Dakota State University (iLEARN@SDSTATE): A Professional Development Program for Science/Agriculture Teachers. Abstract/Oral Paper Presented at the 2018 Conference of the Botanical Society of America, Rochester, MN.
- White, P.T., & Maynard, J. (2013, Winter). REACCH update: Looking to the future. Pacific Northwest Direct Seed Newsletter. http://directseed.org/files/5013/6880/ 6054/2013 Winter DSLink.pdf
- White, P.T., & Wolf, K. (2013, May). Teachers in the Inland Pacific Northwest and climate change. The outREACCH Newsletter.
- White, P.T. (2013, August). Tools for teaching climate related secondary science. The outREACCH Newsletter.

## **Major Advisor for Thesis Students**

- Lemke, Mercedes, Master's Thesis Committee Chair. (2022). Curriculum Development of Agricultural Educators in South Dakota.
- Champion, Kassandra, Master's Thesis Committee Chair. (2022). <u>Examining Culture in Rural High-</u> Poverty Schools.
- Aminah Hassoun, Master's Thesis Committee Chair. (2021). <u>School Gardening in America and a Survey</u> of South Dakota Schools.
- Schreurs, Jon, Master's Thesis Committee Chair. (2020). <u>Teachers' Perceptions of Experiential Learning in the 3-Circle Agricultural Education Model</u>.
- Casey Styvar, Master's Thesis Committee Chair. (2019). <u>Perceptions of Wyoming Agriculture Teachers</u> about the Importance of SAE's.
- Matthew Olsen, Master's Thesis Committee Chair. (2019) <u>Parents in Urbanized Areas and Their Perception of 4-H Youth Development Programs</u>.
- Matthew Tripp, Master's Thesis Committee Chair. (2018). <u>Effects of Standards-Based Grading on Students in Agricultural Education</u>.

#### **Presentations:**

### **Refereed Poster Presentations:**

- White, P.T., Anderson, R.G., Saucier, P.R., Byrd, A.P. (2021). Perceptions of Curriculum Availability for Career and Technical Education Teachers to Teach Small Gas Engine Technology in Secondary Schools [Poster presentation]. North-Central American Association for Agricultural Education Research Conference, Columbus, OH.
- Byrd, A.P, **White, P.T.**, Anderson, R.G., Saucier, P.R. (2020). *Effects of a Professional Development Session on Career and Technical Education Teachers' Knowledge to Teach Small Gas Engines* [Poster presentation]. National Agricultural Mechanics Professional Development Blue Ribbon Research Conference. Outstanding Research Poster.
- Byrd, A.P, **White, P.T.**, Anderson, R.G., Saucier, P.R. (2020). *Effects of a Professional Development Session on Career and Technical Education Teachers' Knowledge to Teach Small Gas Engines* [Poster presentation]. National Agricultural Mechanics Professional Development Blue Ribbon Research Conference. Outstanding Research Poster.
- Nepal, M.P., Bott-Knutson, R.C., Mathew, F., Janaswamy, S. and White, P.T. (2020). Enhancing College Experience of Native American Students [Poster Presentation]. Annual Conference of Botanical Society of America. July 27-31, Virtual
- Saucier, P.R., Byrd, A.P. **White, P.T.**, Anderson, R.G., & Leamon, C. (2020). *Identifying the Tools and Equipment Available for Career and Technical Education Teachers to Teach Small Gas Engines*

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- *Skills* [Poster presentation]. National Agricultural Mechanics Professional Development Blue Ribbon Research Conference, Virtual.
- Leamon, C. L., Saucier, P. R., Anderson, R., Byrd, A. P., & White, P. T. (2020). An evaluation of the Briggs and Stratton small gas engine technology workshop: A national focus on the professional development needs of career and technology teachers. Research Poster presented at the National Research Conference of the American Association for Agricultural Education, Virtual.
- White, P. T., Carter, A., Hasselquist, L., & Nepal, M.P. (2019, May). *Application of Cognitive Load Theory to Interactive Notebook Design*. Innovative Idea Poster presented at the National Research Conference of the American Association for Agricultural Education, DesMoines, IA.
- White, P.T., Elliott, K., Wolf, K., Velez, J., & Johnson-Maynard, J. (2012, October). *Communicating Current Climate Research through High School Science Curriculum*. Poster Presented at the Pacific Northwest Climate Science Conference, Boise, ID.
- Foreman, E.A., Smalley, S.W., Retallick, M.S., **White, P.T.** (2015, Oct.). Factors that Influence New Students' Decision to Attend Two Midwestern Land-Grant Universities. Poster Presented at the North Central American Association for Agricultural Educators Research Conference, Minneapolis, MN.

### **Invited Poster Presentations:**

- White, P.T., Wolf, K., Johnson-Maynard, J., Velez, J., & Eigenbrode, S. (2014). *Climate Change Education in Pacific Northwest Classrooms: Making it Real*. Poster presented at the REACCH Annual Meeting, March 4-8, 2014, Richland, WA.
- White, P.T., Wolf, K., Johnson-Maynard, J., Velez, J., & Eigenbrode, S. (2014). *Climate Change Education in Pacific Northwest Classrooms: Making it Real.* Poster presented at the NIFA Project Directors Annual Meeting, January 6-10, 2014, Gainesville, FL.
- White, P.T., Wolf, K., Johnson-Maynard, J., Velez, J., & Eigenbrode, S. (2013). *Secondary Climate Change Education in the Pacific Northwest*. Poster presented at the REACCH Annual Meeting, February 13-15, 2013, Portland, OR.
- White, P.T., Elliott, K., Wolf, K., Velez, J., & Johnson-Maynard, J. (2013). *Communicating Current Climate Research through High School Science Curriculum*. Poster presented at the REACCH Annual Meeting, February 13-15, 2013, Portland, OR.
- **White, P.T.** (2013). *Perceptions of Climate Change in Secondary Education in the Pacific Northwest.* Poster presented at the REACCH Annual Meeting, February 13-15, 2013, Portland, OR.

#### **Curriculum Materials Developed**

- **White, P.T.** (2020). Briggs & Stratton Small Gas Engine Lab Activities Video Series. https://youtube.com/playlist?list=PLAp9rV9XTrzeVMmzT5vjd1b4F6FbdhFXr
- Carter, A., **White**, **P.T.**, Hasselquist, L., Nepal, M.P. (2018). Interactive Parliamentary Procedure Notebook. FAST-REEU Teaching Resources. <a href="https://openprairie.sdstate.edu/tll\_cr/1/">https://openprairie.sdstate.edu/tll\_cr/1/</a>
- Burwitz, S, Roe, K.M., Nepal, M.P., Browning, L.B., Miller, M.L. & White, P.T. (2019). Recycling <u>Aluminum</u>. ILEARN Teaching Resources. 2(3):43-48. https://doi.org/10.13140/RG.2.2.36712.32002
- Colombe, S., J. McLaughlin, Nepal, M.P., Browning, L.B., Miller, M.L. & White, P.T. (2019). <u>Sustainable Agriculture Lesson for Middle School Classrooms</u>. ILEARN Teaching Resources. 2:34-37. https://doi.org/10.13140/RG.2.2.12804.78727
- Mueller, J. M., L. Edwards, Nepal, M.P., Browning, L.B., Miller, M.L. & White, P.T. (2019). Understanding Greenhouse Gases. ILEARN Teaching Resources.2:18-22. https://doi.org/10.13140/RG.2.2.34361.21600
- Hoover, A., Blaha, B., Englin, J., Nepal, M.P., Browning, L.B., Miller, M.L. & White, P.T. (2019).

  <u>Using a Case Study Approach to Teach Invasive Species and Climate Change</u>. ILEARN Teaching Resources. 2:10-7. <a href="https://doi.org/10.13140/RG.2.2.36281.42082">https://doi.org/10.13140/RG.2.2.36281.42082</a>

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Kruse, T., Forcier, L., M.P. Nepal, M.P., Browning, L.B., Miller, M.L. & White, P.T. (2019). Biome. ILEARN Teaching Resources 1:5-9. https://doi.org/10.13140/RG.2.2.20865.71520

- Colombe, S., Nepal, M.P., Browning, L.B., Miller, M.L. & White, P.T. (2018). <u>Three Sister Crops:</u>

  <u>Understanding American Indian Agricultural Practices of Corn, Beans and Squash.</u> ILEARN
  Teaching Resources. 1:1-4. DOI: 10.13140/RG.2.2.10696.16647
- White, P.T. (2018). Introduction to Integrated Crop-Livestock Systems. NIFA funded, Back to the Future: Enhancing Food Security and Farm Production with Integrated Crop-Livestock Production Systems Curricular Resources. https://openprairie.sdstate.edu/tll cr/2/
- White, P.T. (2015). Interdisciplinary Crop Science Secondary Curriculum. Curriculum Developer. NIFA funded, REACCH curriculum, a cooperative project by the University of Idaho, Washington State University, Oregon State University, and USDA-NRS. <a href="https://www.reacchpna.org/education/secondary-curriculum">https://www.reacchpna.org/education/secondary-curriculum</a>

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## **GRANTS:**

### Awarded:

Nepal, M., Browning, L., Chang, J., Little Elk, W., Janaswamy, S., Larson, J., Miller, M., Prate, M. & White, P.T. Toward 7Gen Food and Agriculture: Immersive Learning Experiences & Rural Networking (7Gen FnA: iLEARN), \$500,000 from USDA. 11/01/2021-10/31/2027.

- Vestal, S. S. (Principal), Browning, L. M. (Co-Principal), Miller, M. L. (Co-Principal), Nepal, M. (Co-Principal), White, P. T. (Co-Principal), "Rural Enhancement of Mathematics and Science Teachers (REMAST) Phase III," NSF, Federal, \$1,199,807.
- **White, P.T.** "Briggs and Stratton Field School." Sponsored by SDSU Ag Ed Club, \$1,949. Funded. (June 2019).
- Nepal, M. P., Bott, R. C., Janaswamy, S., Mathew, F. M., **White, P. T.**, "FAST-REEU (Future Agriculture and Science Taskforce—Research and Extension Experiences for Undergraduates) 2017-06651," Sponsored by USDA-NIFA, Federal, \$278,909.00. Funded. (February 5, 2018 February 4, 2022).
- Nepal, M. P. (Principal), **White, P. T.** (Co-Principal), Browning, L. M. (Co-Principal), Miller, M. L. (Co-Principal), Edwards, L. M. (Co-Principal), "Immersive Learning Experiences and Rural Networking (I-LEARN): A Professional Development Opportunity for Secondary Educators," Sponsored by USDA-NIFA, Federal, \$144,150.00. Funded. (January 1, 2016 December 31, 2019).
- Kumar, S. (Principal), Sehgal, S. K. (Co-Principal), Ali, S. (Co-Principal), Nleya, T. M. (Co-Principal), Wang, T. (Co-Principal), White, P. T. (Co-Principal), Sexton, P. J. (Co-Principal), Bly, A. G. (Co-Principal), "Back to the Future: Enhancing food security and farm production with integrated crop-livestock production systems," Sponsored by USDA, \$3,985,000.00. Funded. (March 1, 2016 February 29, 2020). PT White joined project in Feb 2018 to provide education & extension outreach component of project outcomes to South Dakota agricultural and science educators.
- Vestal, S. S. (Principal), Browning, L. M. (Co-Principal), Miller, M. L. (Co-Principal), Nepal, M. (Co-Principal), White, P. T. (Co-Principal), "Rural Enhancement of Mathematics and Science Teachers (REMAST) Phase II," Sponsored by NSF, Federal, \$794,577.00. Funded. (September 1, 2014 August 31, 2018). *PT White joined project in September 2015 to replace K. Bertolini*.
- Vestal, S. S. (Principal), Browning, L. M. (Co-Principal), Miller, M. L. (Co-Principal), Nepal, M. (Co-Principal), White, P. T. (Co-Principal), "Rural Enhancement of Mathematics and Science Teachers (REMAST) Phase III," NSF, Federal, \$1,199,807.

### **Submitted, Awaiting Feedback:**

## **Submitted, Not Funded:**

- Mathews, A. (Co-PD), Olfert, M. (Co-PD), Colby, S. (Co-PD), Kattelman, K. (Co-PD), Zhao, X., Waterland, N., Baumgarner, N., Bruggeman, S., Shelnutt, K., Thoron, A., **White, P.T.**, Farnsworth, D., & Daiz, J. (2019). Cultivating Change: Sustainable Agriculture and Food Systems for Health through an Integrated Innovation-Centered, Community-Based Approach. USDA-NIFA, Federal, \$1,121,387.
- Kumar, S. (Principal), Nleya, T. M. (Co-Principal), Clay, S. A. (Co-Principal), **White, P. T.** (Co-Principal), Bly (Co-Principal), Ringwall, K. (Co-Principal), Stone, J. (Co-Principal), Sieverding, H. (Co-Principal), "Impacts of diversifying organic crop rotations and integrating livestock on soil microbial activity, and carbon and nitrogen dynamics," Sponsored by USDA-NIFA, Federal, \$500,000.00.

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### **SERVICE:**

Committee Member. (2016–present). National FFA Conduct of Chapter Meetings Career Development Event.

Manuscript Reviewer. (2016). American Association for Agricultural Education National Research Conference, Kansas City, MO.

Committee Member. (Aug 2015-Present). Institute for STEM Education Enhancement

Judge. (2016, 2017). SMSU Scholarship Invitational FFA Parliamentary Procedure Career Development Event, Marshall, MN.

Judge. (Dec 6-7, 2015). South Dakota FFA Novice Conduct of Meetings Career Development Event, Pierre, SD.

Judge. (Oct 29, 2015). National FFA Parliamentary Procedure Career Development Event, Louisville, KY.

Judge. (Oct 27, 2015). SAEP National Novice Parliamentary Procedure Invitational, Louisville KY.

Research Poster Reviewer. (2015). National Blue Ribbon Agricultural Mechanics Research Conference, Louisville, KY.

Judge. (Oct 29, 2014). National FFA Agriscience Fair, Social Systems Area, Louisville, KY.

Judge. (Oct 26, 2014). SAEP National Novice Parliamentary Procedure Invitational, Louisville KY.

Research Poster Reviewer. (2014). AAAE Western Region Research Conference, Kona, HI.

Judge. (April 9-11, 2014) Idaho State FFA: Novice Parliamentary Procedure & Agriscience Fair.

Superintendent. (2012–2015) Idaho State FFA Agronomy Career Development Event.

Judge. (Oct 29, 2013). SAEP National Novice Parliamentary Procedure Invitational, Louisville KY.

Judge. (Oct 30, 2013). National FFA Agriscience Fair, Natural Resources Area, Louisville, KY.

Research Poster Judge. (2013). AAAE Western Region Research Conference, Lubbock, TX.

#### PROFESSIONAL AND SCHOLARLY ORGANIZATIONS:

American Association for Agricultural Education (AAAE)

Association for Career & Technical Education (ACTE)

National Association for Agricultural Education (NAAE)

National Association of Parliamentarians (NAP)

South Dakota Association for Agricultural Education (SDAAE)

South Dakota Association for Career & Technical Education (SDACTE)

South Dakota Science Teachers Association

#### **HONORS AND AWARDS:**

South Dakota Honorary State FFA Degree (2020)

University of Idaho College of Agricultural & Life Sciences Alumni Achievement Award (2011) Idaho Honorary State FFA Degree (2014)

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### **PROJECTS IN PROGRESS:**

- Agricultural Mechanics as Agriscience: Secondary Teacher Perceptions in Idaho. (Revising for resubmission to *Journal of Agricultural Education*, August 2015 Present).
- Current Status of STEM integration in South Dakota Agricultural Mechanics Courses. (Writing Results, August 2015 Present). White, P.T.
- Introductory agricultural mechanics in Idaho: A census of the importance of instructional units and duration of instruction. (Revising for re-submission to *Journal of Agricultural Education*, September 2016 Present).
- The development of agricultural education in the Pacific Northwest and Great Basin. (Revising for resubmission to *Journal of Agricultural Education*, August 2015 Present).
- Effects of Standards-Based Grading on Students in Agricultural Education. (Writing Results, 2019 Present). Tripp, M. & White, P.T.
- Urban parents' perceptions of 4-H: A case-study of non-participants. (Writing Results, 2019 Present). Olsen, M. & White, P.T.
- Teacher resilience: Investigating the long-term impact of the REMAST program on teacher resilience. (Writing Results, 2017 Present). Vestal, S. S., Browning, L. M., Miller, M. L., Nepal, M., White, P. T.
- National small gas engines technology professional development needs assessment. (Collecting longitudinal data and writing initial results). Saucier, R., Anderson, R., Byrd, P., White, P.T., & Leamon, C.
- Utilizing the concerns-based adoption model to assess STEM integration in agricultural mechanics in Idaho. White, P.T., Wolf, K. J. (2016).