

NACTA Educational Issues and Teaching Improvement Committee Annual Report 2019-2020

May 18, 2020

- Developed rubric to assist with the NACTA workshop abstract review and selection process. It is the recommendation of the committee to continue its use for future conference workshop selections.
- Received and reviewed 12 workshop abstracts with Dr. John Campbell, host coordinator at New Mexico State University. Dr. Campbell and I utilized the rubric to select 8 workshops for the NACTA conference.
 - Six presenters requested their workshop be deferred until 2021, one presenter requested to present their workshop virtually, and one presenter neglected to reply to an email indicating their preference.
 - The EITI committee requests that the six deferred workshops be delivered during the 2021 NACTA conference.
- The EITI committee selected Dr. Elaine Turner as the Blue Ribbon presenter for the 2020 NACTA conference. Dr. Turner elected to defer her presentation until 2021.
- Seventy-two applications were received for the NACTA conference travel grant award. Although 10 applicants were identified by the committee for funding, the awardees were neither notified nor given an award disbursement. It is the recommendation of the EITI committee to not defer travel grant awards until 2021.
- Efforts to develop a student subcommittee were postponed until NACTA's restructuring was complete. Following approval of NACTA's restructuring in 2020, the EITI committee supports establishment of a student subcommittee.
- The EITI committee co-chair left her academic position in spring 2020 and will be unable to fulfill the role as chair beginning in June 2020. A current search is underway to identify and select a replacement co-chair. As former chair of the EITI, I will be happy and willing to assist the new chair during this transition.

Appendix A

NACTA Education Issues and Teaching Improvement (EITI) Workshop Selection Rubric

Points	5	4	3	2	1
Interactivity & planned hands-on activities	Excellent	Above Average	Average	Below Average	Poor
Broad impact & likelihood for high attendance	Excellent	Above Average	Average	Below Average	Poor
Multi-institutional or diverse team	Excellent	Above Average	Average	Below Average	Poor
Supports conference theme	Excellent	Above Average	Average	Below Average	Poor
Highlights host institution and/or local resources	Excellent	Above Average	Average	Below Average	Poor
Sponsored by a NACTA committee	--	--	Yes	--	--

Appendix B

NACTA Education Issues and Teaching Improvement (EITI) 2020 Workshop Submissions

Workshop #	Workshop Title
1*	A National Collaborative for Research on Food, Energy, and Water Education
2*	Qualitative research boot camp: How to design, implement, and analyze data to successfully conduct SoTL research
3*	Data Mining and Mapping Using Excel 2013 and Later
4*	Great Expectations: Designing Rubrics to Clarify Student Expectations
5	Not selected
6*	Experiential Learning for all Classrooms
7	Not selected
8*	Integrating Employability Skills into the Classroom, Laboratory and Beyond
9*	Comfortability with Uncomfortable Spaces: Creating Spaces for Critical Transformative Dialogues
10	Not selected
11*	Integrating the Sustainable Development Goals (SDGs) into the agricultural classroom
12	Not selected

* Selected for 2020 NACTA conference. Workshops not selected were omitted from this report.

WORKSHOP SUBMISSION #1

Did not indicate if they wished to defer until 2021 or present virtually

A National Collaborative for Research on Food, Energy, and Water Education

Cory Forbes*, University of Nebraska-Lincoln

Hannah Scherer, Virginia Tech University

Nicole Sintov, The Ohio State University

Hui-Hui Wang, Purdue University

Land Grant institutions must take a leading role in preparing all global citizens for the food, energy, and water (FEW) challenges of today and tomorrow. The Food-Energy-Water-Nexus concept has emerged as a unique opportunity to pursue a sustained, systemic, and interdisciplinary education and outreach initiative, including program evaluation and education research, focused on FEW issues. This effort spans a wide array of contexts, including K-12 and postsecondary classrooms, informal and non-formal learning environments, and in public spaces. In this session, we present the *National Collaborative for Research on Food, Energy, and Water Education* ([NC-FEW](#); <http://ncfew.org>), a new **transdisciplinary community of educators and education researchers** engaged in **FEW-Nexus-focused educational programming and research/evaluation**. Over the next 5 years, this [Research Coordination Network](#) (RCN; ECR-EHR Core Research [#1856040](#)), in conjunction with a Multistate Research Committee (NC1207), will engage a diverse array of educators and education researchers with STEM and FANH backgrounds by affording a novel and innovative space for discourse, networking, and collaboration-building around FEW-Nexus-focused education and education research/evaluation. In this session, we discuss novel theoretical and analytical perspectives the FEW-Nexus concept affords by emphasizing coupled human-natural systems as core elements of postsecondary teaching and learning within the FEW-Nexus. It will provide an opportunity for conference participants to identify shared needs, priorities, and goals of NACTA and NC-FEW communities, explore and map research themes and grand challenges onto those of the broader community, and learn about both relevant theoretical perspectives and education research methods.

WORKSHOP SUBMISSION #2

Deferred to present in 2021

Coordinator: Brian J. Pearson, Ph.D., Assistant Professor and Chair of the NACTA Educational Issues and Teaching Improvement (EITI) committee, Department of Environmental Horticulture, University of Florida, bpearson@ufl.edu

Workshop Title: Qualitative research boot camp: How to design, implement, and analyze data to successfully conduct SoTL research

NACTA members: Nathan W. Conner and T. Grady Roberts,

NACTA committee: Educational Issues and Teaching Improvement (EITI)

Abstract: Scholarship of Teaching and Learning (SoTL) utilizes quantitative, qualitative, and mixed-methods research approaches to collect evidence-based data to document teaching and learning impacts and to advance instructional effectiveness. However, most faculty in agriculture and natural resources are primarily trained in quantitative data analysis techniques, which may not be best suited for many SoTL projects. This impedes their ability to use qualitative research techniques to address a research question and therefore limits the impacts of their SoTL research. The goal of this workshop is to provide participants who traditionally have not been trained to conduct qualitative research with an opportunity to practice using qualitative research techniques. By the end of the workshop, participants will have gained experience developing their own research question, 2) developing an interview protocol, 3) conducting an interview, and 4) analyzing data that was collected from the interview. Each of the objectives above will be met through the facilitation of interactive learning opportunities that will take place in small groups. Teaching and learning related research ideas selected by participants could include: innovations in teaching, engagement of learners, attitudes towards student learning, approaches to instructional design and dissemination for traditional and non-traditional students, and more. Introducing and training agriculture and natural resources faculty to conduct SOTL research directly support NACTA's mission of improving teaching and learning through the context of agriculture because the participants will be able to take their new knowledge and skills to conduct qualitative SOTL research at their respective institutions, thus improving teaching and learning.

Speakers:

- Nathan W. Conner, Ph.D., Associate Professor, Agricultural Leadership, Education & Communication, University of Nebraska-Lincoln, nconner2@unl.edu
- T. Grady Roberts, Ph.D., Professor, Agricultural Education and Communication, University of Florida, groberts@ufl.edu

WORKSHOP SUBMISSION #3

Deferred to present in 2021

NACTA WORKSHOP TITLE: Data Mining and Mapping Using Excel® 2013 and Later

COORDINATOR – Dr. Phil Hamilton, Assistant Professor, Cameron University, Oklahoma

NACTA MEMBERS –

Ms. Jennifer L. Clark, Senior Lecturer, University of Florida

Dr. Misti Sharp, Lecturer, University of Florida

ABSTRACT –

At the 2019 NACTA Conference in Idaho, participants expressed interest in learning more about teaching students how to use Microsoft Excel® to create maps from U.S.D.A. and U.S. Census public databases. This workshop is a follow-up to that presentation with a guided “hands-on” application for this method of instruction. The experiential workshop will demonstrate how to download data resources and convert the data into maps at county, state, regional, and world levels. Although use of the mapping tool is the primary focus of this workshop, the application of the teaching technique is transferrable into many other agricultural educational settings involving quantitative critical thinking. Workshop participants will become familiar with a variety of agricultural data sources, use their personal computer to download a data set of interest, and generate maps following the presenters’ instructions. The session will culminate with each participant creating a map using data from a geographic location of personal interest. Hands-on assistance will be available throughout the session. Helpful tips for using this pedagogical tool will be shared. Participants will be able to use the techniques applied in this workshop to deliver active learning assignments related to agricultural data applications.

**Note, the Excel mapping feature is available on Microsoft Excel® 2013 and later versions.*

SPEAKERS –

Dr. Phil Hamilton, Assistant Professor, Cameron University, OK, phamilton@cameron.edu

Ms. Jennifer L. Clark, Senior Lecturer, University of Florida, tspartin@ufl.edu

Dr. Misti Sharp, Lecturer, University of Florida, mistisharp@ufl.edu

WORKSHOP SUBMISSION #4

Deferred to present in 2021

Great Expectations: Designing Rubrics to Clarify Student Expectations

Becky Haddad, Oregon State University*

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*Workshop, Innovative Teaching Approaches Presentation, Poster

Increasingly, students are demanding greater clarity from their instructors regarding the expectations of course assignments. Without additional work in grading for instructors, well-designed rubrics facilitate the delivery of expectations and feedback to provide greater clarity for students while reducing the grading load of the instructor. By focusing rubrics on providing insight related to understanding and meaning, rubrics move from a check sheet of competencies to a means of enhancing course communication. They become tools that define quality and clarify expectations for students, while focusing teaching and promoting descriptive feedback from instructors (Chappuis, Stiggins, Chappuis, & Arter, 2012). This type of rubric not only promotes student assessment and goal-setting, but also guides instructor consistency in grading and provides data to focus student interventions (Chappuis et al., 2012).

Rubrics should allow students to self-assess their ability to create high-quality work rather than identify the means by which to secure a desirable grade. This focus is transferable across content areas, course formats, and delivery methods. Without limiting creative feedback, rubric type, content, structure, and evaluation can contribute to enhancing both teacher practice and student work. In working with rubrics, we aim to share collaborative strategies for team teaching, best practice for course design and enhancement, and rubric alignment with assignments. We also recognize and look to share challenges in developing rubrics, as a means to prevent confusion in development to maximize instructor autonomy while enhancing transparency around expectations.

WORKSHOP SUBMISSION #6

Deferred to present in 2021

Workshop Coordinator: Cheryl Wachenheim, North Dakota State University,
cheryl.wachenheim@ndsu.edu, 701-231-7452

Workshop Title: Experiential Learning for all Classrooms

Presenter: Cheryl Wachenheim

The aim of this workshop is for participants to have the opportunity to try out active learning techniques designed for large classes and discuss and collectively overcome constraints to doing so. Research confirms the learning advantages associated with students being actively engaged, but those wishing to adopt active learning techniques may encounter constraints to doing so; for example, classrooms designed for passive learning and large class sizes. This workshop will demonstrate there are active learning techniques suitable for any class or classroom. Participants will learn three to four experiential techniques designed to engage students in the learning and teaching process. Each will be followed by a short discussion of the nuances of adopting a like technique in classrooms with particular constraints as identified by participants (e.g., physical classroom design; distracted learners).

Specific activities include learning:

- Goal setting and planning using the exercise of planning a bank robbery (agribusiness).
- Mathematical applications by estimating plant growth rate mathematically from curves (agronomy, horticulture)
- Applications of animal behavior research by designing an animal handling system (animal sciences)
- The role of feedback in communications through no-sight drawing exercises (agricultural communications)

Exercises will range from all-inclusive (e.g., planning) to working in small groups and pairs (communication).

WORKSHOP SUBMISSION #8

Elected to present in 2020

Workshop Coordinator: Wendy Fink, Association of Public and Land-grant Universities, wfink@aplu.org, 202-478-6021

Workshop Title: Integrating Employability Skills into the Classroom, Laboratory and Beyond

Presenters – Cynda Clary, Oklahoma State University, cynda.clary@okstate.edu We are still figuring out exactly who the speakers would be, but we (the administrators of academic programs of colleges of agriculture) commit to finding outstanding presenters for this workshop.

Utilizing data from its 2018 Employability Skills survey (which we hope to publish in NACTA very soon), the Academic Programs Section of the Association of Public and Land-grant Universities proposes to hold a workshop focused on integrating employability skills into food, agriculture, and natural resources curriculum. Receiving responses from approximately 11,500 employers, alumni, students, and faculty, the survey identified eleven critical growth skills new graduates are less prepared for according to all stakeholders. The skills are grouped under four main categories: communication, decision-making, professionalism, and leadership. Further, qualitative research revealed that some skills, such as conflict in the workplace, can be taught in the classroom, whereas other skills, such as dealing with persistence, ambiguity, and change may require both classroom and extracurricular activities to reach students. We would structure the workshop to feature multiple speakers with experience in integrating such skills. We plan for a very interactive workshop between attendees and presenters. Participants will be able to access a series of webinars, slide sets, report, executive summaries, and one pagers for application and translation in their home institutions.

WORKSHOP SUBMISSION #9

Preferred to defer until 2021. May consider presenting virtually in 2020

Title: Comfortability with Uncomfortable Spaces: Creating Spaces for Critical Transformative Dialogues

Presenter Information:

Dr. Cecilia E. Suarez

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Jarred A. Shellhouse

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Diversity in students and perspective has been a growing focus in agricultural education. As agriculture is becoming more diverse and in need of a culturally inclusive workforce, it is important for educators to provide learning opportunities for undergraduate students, preparing to enter the workforce, that help to raise overall cultural awareness and foster better attitudes toward different cultures. However, the topic of diversity can be an uncomfortable discussion causing students to stay silent rather than engaging in dialogue. This session will focus on creating an open space conducive to critical conversations by not only recognizing the lack of comfort, but learning how to navigate and embrace it so students can have an impactful learning experience. In the ever-changing and global society, it is imperative that educators provide equitable learning environments that give students tools to direct contention and learning into rich dialogue and impactful engagement.

Interactive in design, this professional development workshop will provide hands-on best practices for building community and increasing trust within an intercultural classroom. The foundation of trust is imperative for critical dialogue which can enhance learning, identity development, and intercultural communication among students. As such, attendees will learn various classroom practices that can be easily adapted and applied to lessons and curriculum, regardless of focus area. Practices include but are not limited to: 1) Culturally relevant teaching and material, 2) building trust within a group, and 3) open communication via dialogue. Presenters will also briefly introduce theory that supports this praxis.

WORKSHOP SUBMISSION #11

Deferred to present in 2021

Integrating the *Sustainable Development Goals* (SDGs) into the agricultural classroom

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The Ohio State University

Educators constantly face the challenge of bringing to the classroom activities that arouse in students the interest of participating in debates on important issues as they learn and identify opportunities to contribute to the mitigation or elimination of these problems. This workshop aims to increase teachers' awareness of the key role that creativity plays in agricultural education and international development by providing creative and practical teaching tools and ideas. The content of this workshop is in the theoretical framework of the *Sustainable Development Goals* (SDGs). In September 2015, the United Nations adopted 17 goals on different social, environmental and economic issues, which are expected to be achieved in 2030. The accomplishment of these goals requires everybody active participation from home, job or communities. Helping students connect their skills and knowledge in the search for solutions is part of our work as educators and contributes to one of the NACTA objectives to provide a space for professional growth for agricultural professionals. During the workshop, two faculty members and two graduate students will share tangible activities and examples of the integration of SDGs in different agricultural curriculum themes. The discussion will include what are the objectives in which we can contribute better and how we can develop our students' interest in them. We can all contribute to the achievement of SDGs; we will help you discover how to do it.