

**Proceedings for the  
National Conference on  
Learner-Centered Teaching  
And  
M.E.N.T.O.R**

in collaboration with the

North Central Region of the  
American Association for Agricultural Education



**NCLCT in Coordination with  
Purdue University & Langston University**

**Conference Host:  
South Dakota State University  
Brookings, South Dakota**

## **Review Process for the NC LCT/M.E.N.T.O.R.**

This was the 8<sup>th</sup> National Conference on Learner-Centered and the 5<sup>th</sup> year the NCLCT was co-hosted in collaboration with the North Central Region of the American Association for Agricultural Education. On behalf of the NCLCT and NC-AAAE Conference Planning Team, we offer sincere gratitude to 12 colleagues, postdoc scholars, and graduate students who served as reviewers and evaluated this year's LCT/M.E.N.T.O.R abstract submissions. A total of 14 LCT abstracts were submitted. Based on quality rankings and time allotted in the conference schedule, 12 abstracts were selected for presentations and two abstracts were accepted as posters at the 2023 North Central AAAE Conference. With a focus on building collaborative partnerships among 1890 and 1862 Land-Grant Universities, majority of the LCT presentations were authored or co-authored by faculty from 1890 Historically Black Colleges and Universities. We extend our sincere appreciation for Dr. Orlenthea McGowan and her colleagues at Langston University for providing leadership and support through the 1890 Capacity Building Grant (NIFA 2016-06658), "Building Future Faculty and Leaders through Culturally Responsive Learner-Centered Teaching Partnerships." Sincere appreciation is extended to Gaea Hock of Kansas State University for her assistance in the online review process.

### **Abstract Reviewers for 2023 NC-AAAE LCT/M.E.N.T.O.R.**

<b>Name</b>	<b>Institution</b>
Aaron McKim	Michigan State University
Becky Haddad	University of Nebraska, Lincoln
John Ewing	Th Pennsylvania State University
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Hui-Hui Wang	Purdue University
Elsie Assan	Purdue University
Olivier Natzwan	Purdue University
Mariah Awan Jordan	Purdue University
Martha Ravola	Alcorn State University
Orlenthea McGowan	Langston University
Scott Smalley	Iowa State University

### **2023 NCAAAE LCT/M.E.N.T.O.R. Co-Chairs and Review Coordinators**

**Rama Radhakrishna, Purdue University**

**Orlenthea McGowan, Langston University**

**Concurrent LCT/ M.E.N.T.O.R. Presentation Session 1**  
**Wednesday, September 27**  
**4:00 p.m. to 5:00 p.m.**

**Room:** McCrory Classroom  
**Theme:** Innovations in Higher Education

<a href="#"><u>Flipped Immersive Pedagogy: Enhancing Engagement, Personalization, and Future Readiness through AI Driven Immersive Learning</u></a>	Martha Ravola, Babu George, Debashri Roy, Latasha Coleman
<a href="#"><u>Glocal Lessons: Think Global, Act Local</u></a>	Ken Fuelling, Leslie Fairchild, Sarah LaRose
<a href="#"><u>Inclusive Mentoring as an Innovative Strategy to Enhance Mentoring Capacity at Land-Grant Universities</u></a>	Olivier Ntaganzwa, Neil Knobloch, Rama Radhakrishna Levon Esters, <i>Penn State University</i>

**Room:** Great Hall  
**Theme:** Inclusive and Intentional Mentoring

<a href="#"><u>Mapping Innovative Approaches to Mentoring in a Multi-state M.E.N.T.O.R. Program</u></a>	Olivier Ntaganzwa, Neil Knobloch, Rama Radhakrishna
<a href="#"><u>Using Inclusive and Intentional Mentoring to Enhance Diversity, Strengthen Recruitment, and Increase Retention &amp; Graduation Rates in Food, Agriculture, Natural Resources and Human Sciences (FANH) Fields at the University of Arkansas at Pine Bluff</u></a>	Nina Lyon-Bennett
<a href="#"><u>Implementing Learner Centered Research Experiences for Undergraduate Students: A collaborative effort between a HSI and a HBCU</u></a>	Desmond Delk, Olivia Johnson

**Concurrent LCT/ M.E.N.T.O.R. Presentation Session 2**  
**Thursday, September 28**  
**10:15 a.m. to 10:55 a.m.**

**Room:** Dakota

**Theme:** Personal Agency of Teachers and Students

<a href="#">Donuts and Boundaries</a>	Aaron McKim, Becky Haddad, Tyson Sorensen, Haley Traini
<a href="#">Exploring Student Resilience: A Systems Perspective</a>	Catlin Goodwin

**Room:** Herold Crest

**Theme:** Culturally Relevant Teacher Education

<a href="#">Making Learning Relevant</a>	Elizabeth Anne Albright, Neil Knobloch, Michael Martin, Adrienne Robinson
<a href="#">Culturally Relevant Teacher Education: Strategies for Supporting Minority Students in a Post-Pandemic School Setting</a>	Angela Abney

**Room:** Pheasant

**Theme:** Authentic Community Connections

<a href="#">From Transactional to Transformational: A Toolkit Toward Authentic Community Connections</a>	Caitlin Luck, Catlin Goodwin
<a href="#">Integrating Practice-Based Strategies and Culturally Responsive Pedagogy through Service-Learning</a>	Hui-Hui Wang, Kimberly Davis, Orlenthea McGowan

**Posters (Poster Session is on Thursday, Sept. 28; set up at 4:00pm))**

<a href="#">Intervention &amp; Resilience: The use of Learner Centered Teaching</a>	Phillip Lewis, Orlenthea McGowan <i>Langston University</i>
<a href="#">Learner-Centered Teaching Through Experiential Learning: An Adaptive Approach</a>	LaTasha Coleman, <i>Alcorn State University</i> Emisha Maytubby, <i>Langston University</i> Marilyn Bailey, Janette Wheat <i>University of Arkansas at Pine Bluff</i> Martha Ravola, <i>Alcorn State University</i>

**Flipped Immersive Pedagogy: Enhancing Engagement, Personalization, and Future Readiness  
through AI Driven Immersive Learning**

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# **Flipped Immersive Pedagogy: Enhancing Engagement, Personalization, and Future Readiness through AI Driven Immersive Learning**

## **Introduction**

Flipped Immersive Pedagogy (FIP) integrates immersive experiences and AI into the flipped classroom model. The FIP is an innovative educational approach that the present authors propose. It combines elements of the flipped classroom model with immersive learning experiences driven by AI technology.

In this model, students gain foundational knowledge outside of class time by accessing AI-generated content and materials. The in-class time is then devoted to active, collaborative learning through immersive simulations, virtual reality, augmented reality, and other experiential activities. Students engage in critical thinking, problem-solving, and hands-on skill building within these immersive environments. After the immersive learning sessions, students reflect on their experiences and receive personalized feedback and analysis from AI assessment tools. While flipped learning is an important innovation in its own right, FIP takes it further by incorporating active immersive learning experiences during class time.

## **Theoretical Framework**

Digital transformation in higher education has reached a major inflection point with AI coming to the centerstage (George & Wooden, 2023). Experiential and constructionist learning theories highlight learning through active experience and knowledge construction (Kolb, 1984; Papert & Harel, 1991) and the value of these only increased with the added possibilities opened up by AI. FIP creates constructivist learning environments enabling students to collaboratively solve real-world problems through immersive simulations. AI tools support current benefits by providing personalized feedback for self-directed learning (Aguilar & George, 2021).

## **Purpose**

This study examines the potential for FIP to increase engagement, personalization, peer interaction, and preparation for future careers requiring technological fluency.

## **Methods**

This study utilizes a mixed methods approach to examine the impacts of FIP in classrooms versus traditional teaching methods. Quantitative data was gathered through pre- and post-tests to assess student learning outcomes and surveys to measure engagement, motivation, collaboration, and perceptions after experiencing the immersive approach. Qualitative data was collected through interviews, focus groups, and observations of in-class immersive learning sessions. The study sample consisted of two demographically matched classes, with one group receiving traditional instruction and the other participating in the FIP model over the same curriculum. The immersive class took pre- and post-assessments and surveys, provided interview and focus group feedback, and was observed during immersive learning activities. Their data was compared to the traditional class. Additionally, system data from the immersive technology and AI tools provided analytics on student interactions, knowledge gaps, skill development, and learning trajectories within the immersive environments. This combination of quantitative, qualitative, and system data allowed for triangulation to validate findings on the impacts of FIP on student engagement, peer collaboration, knowledge and skill gains, and technological readiness for the future workforce.

## Results

Early results show heightened engagement, peer learning, and real-world application. AI personalization and assessment enable tailored feedback and identified growth areas. Students gain technological agility vital for the future workforce.

## Conclusion

While requiring investment, FIP demonstrates potential for reimagining learning. Next steps include ongoing research, cross-disciplinary collaborations, and upskilling educators. This innovative fusion of immersive tech and AI could profoundly transform learning experiences.

It is recommended that institutions partner with developers to create customized immersive environments and AI algorithms aligned with learning objectives. Educators need professional development to effectively leverage these technologies. Program assessment should include student surveys and performance data to quantify impacts on engagement, collaboration, and career readiness.

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## **Glocal Lessons: Think Global, Act Local**

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## **Glocal Lessons: Think Global, Act Local**

### **Introduction & Need for Strategy**

Within school-based agricultural education (SBAE), there is a major lack of racial diversity within the educator population (Smith et al., 2022). This disparity can have significant consequences, since students have more educational success and future educational goals when their educators are culturally similar (Marsh, 2022). Many students from minority backgrounds have preconceived ideas about agriculture courses and SBAE, leading them to not want to attend agriculture classes or go into any type of agricultural career (Jayaratne, et al., 2019). Jayaratne et al. (2019) cited USDE (2016) that, "...in the 2011-2012 school year, only 18% of teachers were minorities while 49% of the students were minorities" (p. 3). With this divide, and with many SBAE programs not teaching a globally competent curriculum or culturally relevant practices, at least 49% of the students would then statistically be voided from explicit acknowledgment due to politicization of terms such as diversity, equity, and inclusion (DEI) (Wood et al., 2022).

Agriculture courses must show an accurate portrayal of how marginalized populations have contributed to the agricultural industry throughout our history. Even when the student population is homogenous, teaching about cultural diversity is critical and gives students awareness of how to navigate agriculture as a global industry (Byrd, 2016). When content accurately portrays contributions from diverse agriculturalists, it allows marginalized students to see themselves in agriculture, which then increases educational success (Byrd, 2016; Wangberg, 2006). A broader understanding of different opinions and beliefs can also lead to more well-rounded students (Markus & Rios, 2018). This learner-centered focus on providing accurate information can also address students who lose a sense of self (Markus & Rios, 2018). When teachers take into consideration all the above, students have been able to engage more critically with their own identities (Markus & Rios). Byrd (2016) recommended focusing on building relationships with students, including their cultural backgrounds, teaching about diversity even when the classroom is not culturally diverse, and acknowledging inequities while encouraging students to appreciate diversity as ways to cultivate an inclusive classroom culture.

### **Connection to the Literature**

Byrd (2016) stated that overall, if you are asking whether culturally relevant teaching is effective in the classroom, it "is a qualified yes" (p. 7). Byrd asserts that to truly connect with our diverse students, we need to better understand their cultures and lived experiences. Even in schools with homogeneous populations, it is important to be able to teach students about diverse cultures and ways of life because our country is increasing in diversity and those students will need to interact cross-culturally, which would include global competence (Kerckhoff & Cloud, 2020). However, Young (2010) discovered that actualizing these concepts is easier said than done. Due to systemic racism in public education and the lack of cultural and global competence in teachers, many are not prepared to face the social issues that may come up in discussions.

### **How It Works & Implementation of Strategy**

We determined a way to help agriculture teachers would be to develop lessons that address Agricultural, Food, and Natural Resources (AFNR) national standards and easily fit anywhere in the teacher's plans. Understanding the importance of global competence and culturally relevant teaching from reviewing the literature, these lessons teach global components while bringing a focus into the community; therefore, they are called glocal lessons. Glocal is taking global perspectives and awareness to local focus and action (Niemczyk, 2019). The lessons are divided into modules depending on the main domain of the standards and have been uploaded to various learning management systems including Canvas and Google Classroom. All lessons are written using the same template, so they are easy to follow. Some of the lesson

topics include what glocal means, careers in agriculture, the role of production systems, general agriculture safety, food insecurity and global goals, the World Food Prize, and an “Act Local” final project. These lessons are used to introduce glocal thinking into the content, rather than providing everything about that content that the educator would need for the entire semester. Although there are introductory lessons that must be at the beginning of the course if they are used, most lessons can be used where they best fit the overall scope and sequence of the class.

A learner-centered approach is interwoven into multiple aspects of these lessons. Critical pedagogies were used in the creation of the lessons, and a shift in power dynamics within the classroom is intentionally created to provide students with more autonomy in the learning process (Weimer, 2013; Blumberg, 2019). The cognitive connections within the lesson plans encourage educators to be more aware of the flow of content between the lessons and to reflect on how to create deeper connections within the following lessons. There are also suggestions in each lesson for how educators can best facilitate the learning of the class along with resources that can guide the educator’s learning. The assignments and activities that students engage in support deep learning of content that raises critical questions while assessing students holistically on the learning process throughout (Driscoll & Wood, 2023). Types of lessons and activities that are included are sharks and minnows, group roleplay, origami, student presentations, Dum Dums tasting, poster creation, and a simulated banquet.

### **Results to Date / Implications / Impact**

The glocal lessons that we have created have been previewed at the summer statewide workshop for the Indiana Association of Agricultural Educators and have been shared through the US Agricultural Educators email listserv as well as the Indiana Agricultural Educators (INAGED) listserv email. The lessons are available in multiple formats for teachers to access and add to their plans through Google Classroom, Canvas, Google Drive. The implications and impact of using these lessons will be an agricultural education that is more globally, historically, and ethically accurate while encouraging deeper and more involved learning from students.

### **Future Plans / Advice to Others**

Teachers implementing these lessons are asked to give feedback on what other areas within the curriculum could use more glocal lessons, and we can continue to add lessons as the need arises. Educators also have the opportunity to provide feedback on how a more learner-centered approach along with global competence has influenced their agriculture class as well as sharing what kind of challenges or pushback they have faced to further inform potential professional development opportunities.

### **Cost / Resources Needed**

The only cost for the development of the glocal lessons was the time spent creating, editing, and disseminating the lessons. The cost for the use of the lessons is free, except for any resources that schools may not already have, but are all optional and able to be modified per availability of funding.

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## **Inclusive Mentoring as an Innovative Strategy to Enhance Mentoring Capacity at Land-Grant Universities**

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## **Inclusive Mentoring as an Innovative Strategy to Enhance Mentoring Capacity at Land-Grant Universities**

### **Introduction/Need for Innovation or Idea**

In 2020, a multi-institutional mentoring project was created to implement inclusive and intentional mentoring programs in 1862 and 1890 land-grant universities (LGUs) (Esters & Knobloch, 2020). The purpose of the project was to empower faculty leadership teams (FLTs) in 11 LGUs to implement innovative campus-based inclusive and intentional mentoring programs to create a supportive culture that would increase the recruitment and retention of underrepresented minorities (URMs) in food, agricultural, natural resources, and human (FANH) majors. Mentoring is recognized as a catalyst for academic and professional success (Montgomery & Page, 2018). However, faculty mentors are often underprepared to work with URM students (Rodriguez et al., 2022). To address this need, we share lessons learned from some LGUs that implemented mentoring programs at their campuses, with the view to provide ideas for anyone interested in using mentoring to advance diversity, equity and inclusion in institutions of higher learning.

### **How it Works/Methodology/Program Phases/Steps**

At the beginning of the Spring Semester 2023, the MENTOR project team identified four LGUs who had implemented mentoring activities outlined in their mini-grant proposals. Second, the project director invited those LGUs to share abstracts they had presented at different conferences in 2021 and 2022, with focus on the outcomes they had achieved and the lessons they had learned during the implementation phase of their respective programs. Third, the authors reviewed the abstracts, extracted the main lessons learned, and categorized major findings using four themes: (1) student development, (2) faculty development, (3) course development, and (4) administrative support. The abstracts were coded using structural coding (i.e., four themes), followed by descriptive coding as second cycle coding (Saldaña, 2016).

### **Results to dates/implications**

Main findings from activities undertaken by the four LGUs are summarized in Table 1. Overall, results show that all the four LGUs focused their activities on student and faculty development, while three reached out to their respective university administrators to secure institutional buy-in to expand the mentoring activities to other departments and schools and to include mentoring activities as part of promotion and tenure requirements. The progress made thus far has helped the MENTOR Core Team to determine the extent to which mentoring practices and activities have been implemented and the responsible use of grant funds to advance the benefits of mentoring. Findings also serve as an indication of program sustainability, as they demonstrate the capacity for LGUs to pursue their activities beyond the funding period. This will help institutions who wish to start mentoring programs to accurately assess their progress, report lessons learned in a clear manner, and develop accountability through focused and responsible use of funds.

### **Future Plans/Advice to Others**

COVID19 interrupted the implementation of different mentoring programs. Some teams were able to flex and implement their programs, some have partially implemented and some need to re-initiate implementation plans. Webinars will be conducted to facilitate sharing of lessons learned among the different LGUs in the project. LGUs teams who have shared their findings will be provided resources to publish their results in an online repository. Additionally, LGUs teams will receive training on how to assess and/or analyze outcomes of the various mentoring programs, and how to disseminate lessons learned on

inclusive mentoring practices and generate scholarly outputs. Finally, the project leadership will facilitate a webinar on how campus teams can build administrative support to make the culture of mentoring an integral part of the academic culture.

Table 1. Main lesson learned from participant land-grant universities

University FLT	Major lessons learned	#1	#2	#3	#4
LGU 1 (OSU)	<ul style="list-style-type: none"> <li>Activity: Ran an 8-week co-learning program to enhance the capacity of faculty to mentor URMs and for URM PhD students to be better prepared to navigate academia</li> <li>Lesson learned 1: Co-curricular programming for faculty mentors and URM mentees results in candid conversations about academia and challenges in URM students' mentorship</li> <li>Lesson learned 2: Culturally responsive mentorship is an essential component of the recruitment and retention of URM students</li> </ul>	X	X		X
LGU 2 (MSU)	<ul style="list-style-type: none"> <li>Activity: Ran a peer mentoring program and prepared and developed two peer mentoring curricular products.</li> <li>Lesson learned: Peer mentoring is essential for student development</li> </ul>	X	X		X
LGU 3 (UK)	<ul style="list-style-type: none"> <li>Activity: Organized a 15-week leadership development program to provide students with three-layered mentorship from faculty, professionals, and peers</li> <li>Lesson learned: Receiving mentoring from different mentors (faculty, professionals, and peers), provides URMs students with the skills to engage underserved communities</li> </ul>	X	X	X	
LGU 4 (TSU)	<ul style="list-style-type: none"> <li>Activity: Recruited mentors and mentees to partake in integrative peer-to-peer mentoring activities</li> <li>Lesson learned 1: Mentorship builds a sense of gratification in URM students</li> <li>Lesson learned 2: It would be effective to introduce the mentoring program early as part of freshman orientation</li> </ul>	X	X		X

Note. # 1: Student development, #2: Faculty development, #3: Course development, and #4: Administrative support.

### Costs/Resources Needed

This project was funded by a NIFA Higher Education Challenge Grant, which provided each campus team with \$15,000 to implement mentoring programs on their campus. The no-cost extension (NCE) approved by the funding agency will help continue mentoring efforts. However, mentoring programs can be implemented on a nominal budget. The primary resources needed are human resources—one or two program advocates and organizers—to develop a plan, advertise for participants, conduct mentoring activities, and gather feedback on how the program is going.

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## **Mapping Innovative Approaches to Mentoring in a Multi-state M.E.N.T.O.R. Program**

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## **Mapping Innovative Approaches to Mentoring in a Multi-state M.E.N.T.O.R. Program**

### **Introduction/Need for Innovative Idea**

For college students, a mentor can influence student outcome (Lunsfold, 2012) and increase the probability of persistence in college (Hu & Ma, 2010). Experts have proposed intentional mentoring in higher education as an apt response to the pervasive underrepresentation of marginalized groups in Science, Technology, Engineering, Mathematics and Medical fields (National Academies, 2020). To be more effective, mentoring should be a personal and reciprocal relationship that not only helps mentees accomplish their goals, but also provides them with professional, career and psychological support (Shuler et al., 2021).

For the last three years, a multi-institutional mentoring project has been implemented at 11 land grant universities (LGUs). The project is an intentional collaboration of 1862 (Predominantly White Institutions [PWIs]) and 1890 (Historically Black Colleges and Universities [HBCUs]) land-grant universities to address the lack of diversity in food, agriculture, natural resources, and human (FANH) sciences. We conducted this study to highlight the innovative approaches used by some of those LGUs in implementing their mentoring programs, and the results they were able to achieve.

### **Implementation**

For each of the 11 LGUs in the project, a faculty leadership team (FLT) composed of faculty with a track record of mentoring minorities was established to manage and implement the project. Each LGU received a mini grant to start a mentoring program. Through webinars and expert presentations, the FLTs received training in starting and implementing a mentoring program. In addition to notes taken from webinars, we consulted progress reports submitted by six FLTs (three HBCUs and three PWIs) about their activities in the 2022-2023 academic year, and the different abstracts that were published and presented by FLTs about the project.

### **Results to Date**

Robust achievements were viewed through the prism of three objectives. Objective One was to assess what was done by FLTs to build a consortium that facilitates inclusive mentoring practices. We found that in that respect, FLTs met twice at conferences: Conference 1, where FLTs exchanged ideas on how to develop and implement innovative campus-based inclusive and intentional mentoring programs; and Conference 2, where topics pertaining to learner-centered teaching and mentoring were discussed, such as learner-centered strategies that address communication challenges in a multistate mentoring project (Hovey et al., 2022), and recommendations to increase diversity in agricultural sciences.

Objective Two was to assess the innovative ways used to empower FLTs to enable them to efficiently carry out their role. We found that FLTs participated in monthly virtual sessions called Professional Learning Community (PLC) webinars to discuss barriers at 1862s and 1890s land-grant institutions related to faculty development, student development, and mentoring, including low buy-in from administrators. In those PLC sessions, group discussions were held on project implementation, and guest speakers were invited to discuss program outreach, and how to secure institutional support to spread the culture of mentoring in different departments and colleges. As a result of those webinars, some FLTs started collaborations with Diversity, Equity, and Inclusion (DEI) committees within their departments to promote inclusive recruitment and retention. Notably, FLTs at HBCU-1 proposed that participation in mentoring programs as mentee and/or mentor be added as one of the requirements for some of the scholarships that the departments offer, with the view to develop an undergrad cohort of students interested in inclusive mentoring, networking, mentorship and leadership. Also, FLTs at HBCU-1 and HBCU-2 proposed that mentoring be one of activities included

in freshman orientation. Moreover, HBCU-1 spearheaded the founding of a graduate student mentoring association.

Objective 3 was to take measure of what was done by FLT's and project administration to disseminate the findings pertaining to best practices in mentoring. To that effect, we found that FLT's collected data to determine the needs in terms of mentorship at their institutions, and the data were published in abstracts. The findings from the abstracts indicate that feedback from FLT's was an effective tool to ensure implementation fidelity in their respective programs (Radhakrishna et al., 2022), and that effective institutional communication can facilitate mentoring relationships (Hovey et al., 2022). Different modules were developed by LGUs on how to plan and implement appropriate activities aimed at developing the culture of mentoring in institutions of higher learning. HBCU-3 organized a conference on mentoring to present its module. PWI-1 ran an 8-session program to enhance mentoring relationships among faculty (mentors) and doctoral students (mentees) in its College of Food, Agriculture, and Environmental Sciences (Rodriguez et al., 2022). PWI-2 organized a collegial, interactive workshop dedicated to collaborative learning and problem solving among students from diverse backgrounds. PWI-3 organized an experiential leadership program for mentoring underrepresented students in cultural, emotional, and social intelligence.

For the project to reach a wider audience, videos, pictures, and quotes on the experiences of mentees and strategies to develop mentoring programs were posted on Twitter. The general statistics show that those posts reached more than 8,000 visitors who viewed more than 27,000 pages.

### **Implications/Plans for the future/Advice to others**

Our findings show that a mentoring program can promote a culture of mentoring in institutions when it: (1) fosters collaboration among many institutions, (2) empowers program leaders, peer mentors and faculty with skills to mentor new URM students, and (3) shares the best practices in mentoring using publications, workshops, social media posts and a repository of resources.

Future plans include the organization of a consortium convening for the FLT's to discuss deliverables and outcomes from the implementation of the mini-grant programs. An in-person mentoring symposium on networking, mentorship and leadership will be held at LGU-1. Finally, the social media posts, the modules, and the mentoring abstracts will be posted on the MENTOR website and serve as basis for an electronic repository that is used to disseminate the best practices in URM mentorship to other institutions. Reports, handouts, ad materials and proceedings will also be part of the repository.

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**Using Inclusive and Intentional Mentoring to Enhance Diversity, Strengthen Recruitment, and Increase Retention & Graduation Rates in Food, Agriculture, Natural Resources, and Human Sciences (FANHS) Fields at the University of Arkansas at Pine Bluff**

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## **Using Inclusive and Intentional Mentoring to Enhance Diversity, Strengthen Recruitment, and Increase Retention & Graduation Rates in Food, Agriculture, Natural Resources, and Human Sciences (FANHS) Fields at the University of Arkansas at Pine Bluff**

This presentation discusses using an inclusive, culturally sensitive, and intentional peer-to-peer mentoring program for undergraduate students in the School of Agriculture, Fisheries, and Human Sciences (SAFHS) at the University of Arkansas at Pine Bluff (UAPB). The peer-to-peer mentoring program is a strategy and resource to support retention rates, a sense of belonging, and increased engagement for undergraduate students. Large-scale, structured mentorship programs are labor-intensive and require a wide range of expertise to be impactful. However, collaborating with Mentor Collective, a relationship-centered, expert-led mentoring program with scientifically backed technology, allows SAFHS to achieve high-quality, large-scale mentorship on our campus.

Individuals attending this session will learn about (1) the challenges of recruiting students of color into Ag and ag-related programs; (2) the importance of mentoring, particularly for URMs; (3) developing an inclusive, culturally sensitive peer-to-peer program; (4) challenges and roadblocks to implementing a peer-to-peer mentoring program; and (5) best practices for a successful, outcome producing, data-driven peer-to-peer mentoring program for URM students.

Given the population of students at UAPB, many of whom are first-generation African-American students, it is essential to ensure that the mentoring program is culturally responsive to understanding the sources and impact of bias on diverse upper-class trainees to improve the training environment for first-year students from underrepresented (UR) groups. Research shows that supportive educational environments during college are linked positively to retention and persistence rates for students of color (Palmer, Maramba & Dancy, 2011). More specifically, support of students of color includes role models of color, knowledge, and lesson sharing from advanced students of similar ethnic groups. According to Karl Binns, Jr., former president of Minority in Agriculture, Natural Resources, and Related Sciences (MANRRS), "Building a network among people of color in agriculture improves the experience students have while they're in the program and throughout their careers".

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**Implementing Learner Centered Research Experiences for Undergraduate Students: A  
Collaborative Effort Between a HSI and a HBCU**

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# **Implementing Learner Centered Research Experiences for Undergraduate Students: A Collaborative Effort Between a HSI and a HBCU**

## **Introduction**

Undergraduate students exposed to and engaging in research opportunities receive numerous benefits. Participation in research during college can positively impact GPAs, reduce the time to graduation, and initiate graduate education matriculation (Chamely-Wiik et al., 2023). Earlier engagement in research (e.g., sophomore year) has also been found to be a pathway to graduate education (Chamely-Wiik et al., 2023), while specific programming aimed to recruit diverse students into graduate programs can increase awareness of research and matriculation (Greer et al., 2021), and serve as the impetus of graduate school success (Price et al., 2017; Russell, 2020). Moreover, these efforts have been found to serve as a mechanism to diversify higher education faculty and researchers (Delk, 2022). Given these indubitable benefits, colleges and universities should work intentionally to expand learner-centered undergraduate research opportunities that are inclusive of traditionally underrepresented students (e.g., marginal GPAs, diverse racial backgrounds, first-generation).

## **Purpose**

This presentation aims to highlight the development, implementation, and production of an inter-institutional research lab designed to train diverse student researchers to investigate problems that impact college students at minority-serving institutions (MSIs).

## **Approach**

In 2021, Meta (formerly Facebook) released a call for proposals for investigators to address safety and community health. As such, two faculty members who served at MSIs collaborated to propose a research study to explore how social media influenced physical activity among young women of color (i.e., Black and Latina). Upon being awarded the grant, the decision was made to develop an inter-institutional learner-centered research lab to conduct the study. Students from one southcentral U.S. Historically Black University (HBCU) and from one southern U.S. Hispanic Serving Institution were recruited as student researchers. The student researchers were trained on a myriad of topics, including research ethics, the institutional review board process, survey creation, participant recruitment and engagement, participant onboarding, data collection and analysis, and abstract and presentation development and delivery.

## **Results and Discussion**

The research study began in the summer of 2022. Since its inception, 11 students were trained as researchers. Most student researchers were female ( $n = 8$ ), and sophomores or juniors ( $n = 7$ ). There was diversity among ethnic background (i.e., Black, Hispanic); familial education experience (e.g., first-generation); and academic major (e.g., physical education, global retailing). The differences among the student researchers created an interdisciplinary atmosphere that permeated all aspects of the project (e.g., participant recruitment and engagement). Although in its infancy of productivity, 5 presentations have been accepted for regional, state, and national conferences. Manuscripts are in progress.

This presentation will also review the process in implementing a research project that is learner-centered and learner-driven. Special attention will be given to student researcher recruitment, engagement, training, and support. Additionally, a video showcasing the voices of student researchers will be displayed to highlight the skills they acquired from participating in the research project. The video will also show how a



learner-centered research project helped to achieve the objectives of the call for proposals as the research participants expressed a positive change in their health behaviors.

### **Conclusion**

Exposure to research opportunities should be an integral part of undergraduate education across academic disciplines. Developing the next generation of diverse researchers can be achieved through intentional planning of projects that allow student researchers to engage in all aspects of an investigation. As suggested by Chamely-Wiik et al. (2023), providing these experiences to students as early as the first two years of college can foster a level of academic confidence that can potentially propel these students into graduate education and thus become independent scientists. Institutions such as HBCUs and HSIs are critically integral to contributing to the pipeline of future researchers.

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## **Donuts and Boundaries**

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## **Donuts and Boundaries**

### **Introduction and Connection to Literature**

Establishing boundaries is an often-recommended approach to supporting work-life balance (Houlfort & Bourdeau, 2016). Additionally, work-life balance has been identified as a critical component of being a successful educator (Sorensen & McKim, 2014; Sorensen et al., 2017; Sorensen et al., 2016). Unfortunately, literature suggests educational systems, including agricultural education, often preclude teachers from effectively establishing boundaries (Haddad et al., 2023). Thus, a critical need exists to develop and disseminate innovative resources to support educators at all levels in establishing boundaries. The proposed learner-centered teaching workshop will illustrate how we transformed “donut economics” (Raworth, 2017) to serve as an applicable tool for educators to establish boundaries in educational systems.

### **Donuts in Economics and Education**

Traditional thinking suggested unbounded expansion of growth domestic product (GDP) was the only salient economic outcome. Raworth (2017) argued this thinking was, however, flawed when considering the systematic impacts of unfettered economic expansion (e.g., environmental degradation). Thus, Raworth suggested societies establish a lower boundary of economic production in which basic human needs are met throughout society alongside an upper boundary illuminating economic production exceeding thresholds for environmental and social sustainability. Graphically, this makes a donut representing the range of economic production a society should operate within (i.e., between the lower and upper boundary).

We contend traditional thinking within educational systems operates like traditional thinking within economics. The things educators can do are all, typically, regarded as good for students and society; therefore, an unbounded expansion of tasks for educators often occurs. This ever-growing task list, and the associated strain, is untenable for teachers (Haddad et al., 2023). To combat this, we created a process for educators to identify their lower and upper boundaries of productivity within the work domain (e.g., lesson planning, grading, work hours, creativity).

Once created, the donut serves as a tool to communicate, evaluate, and reflect upon boundaries. Take, for example, a high school educator empowered with their donut. When interviewing for a job, they could utilize the donut to evaluate alignment of their boundaries and the norms of the school and position to which they have applied. As they begin working within the school, they could continually refine their donut with administration and community stakeholders agreeing to their lower and upper bounds. The teacher could regularly reflect upon their teaching, classroom, and educational program to ensure existence within the boundaries in times of success and times of self-doubt. Further, a donut co-constructed with administration and community stakeholders could be used to defend boundary-affirming decisions (e.g., saying “no” to an additional school committee or declining to facilitate an additional event).

Likewise, postsecondary faculty could co-construct a donut with administration, identifying the minimum and maximum boundaries for their productivity (e.g., classes, publications, committees) and utilize their co-constructed donut to defend boundary-affirming decisions.

### **Results to Date**

Workshop facilitators have created resources for educators to construct their donuts. Additionally, facilitators have implemented these resources with preservice educators in [STATE]. Participants in these sessions have expressed increased (a) understanding of boundaries and (b) confidence in their ability to communicate and operationalize boundaries.

## National Conference on Learner Centered Teaching Workshop Plan

The workshop will include three components. First, facilitators will introduce participants to the evolution of thinking from donut economics (Raworth, 2017) to donuts for educators. Second, participants will utilize established resources (see Figure 1) to construct their individual donut for work as postsecondary faculty, graduate students, or other professional identities.

Figure 1

*Table and Figure for Identifying and Representing Upper and Lower Boundaries*

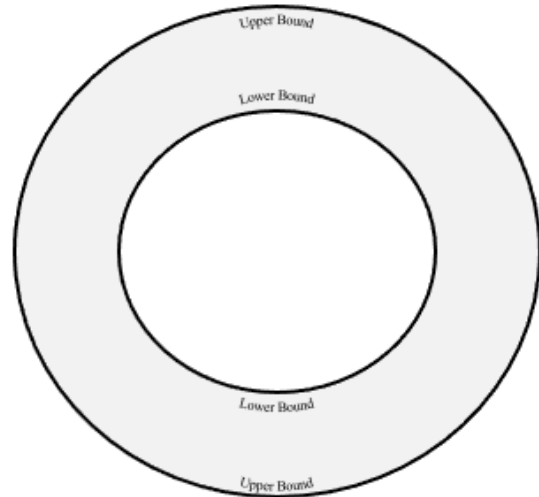
**Donut Table**

Domain & Topic	Lower Bound – at an absolute minimum, I require this.	“Sweet” Spot – in an ideal situation, this is what would exist.	Upper Bound – we need to back off when this occurs.

Third, participants will engage in a guided discussion regarding how to utilize their donut and how to empower others (e.g., students, high school teachers) create and utilize their donut.

### Conclusions

This workshop is designed to empower participants tool to aid in their development of boundaries to their work as learner-centered teachers. Additionally, workshop will empower participants to facilitate workshops with others, including colleagues, preservice teachers, practicing educators, community leaders, Extension agents, and others.



to

with a support this donut

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**Exploring Student Resilience: A Systems Perspective**

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## Exploring Student Resilience: A Systems Perspective

### Introduction & Need for Strategy

It is widely accepted that an individual's characteristics and development are influenced by social ecological factors such as the family unit, school environment, and broader community climate by which the person is surrounded (Bronfenbrenner, 1979, Luthar, 2006, Schoon, 2021). Educational research uses this systems-based approach when exploring the factors which promote and diminish resilience of individuals such as teachers (Gu & Day, 2013, Schussler, et al., 2018) and students (Henderson & Milstein, 2003, Williams & Bryan, 2013). Those who seem to navigate the change and achieve academic success or engage with education after experiencing adversity are known to have educational resilience (Henderson & Milstein, 2003, Williams & Bryan, 2013). Therefore, resilience, in the educational context, is often seen as a positive quality which individuals either possess or lack. However, research suggests that "resilience is not an all-or-nothing phenomenon" (Schoon, 2021, p. 340), rather a "process that extends over time and has to be continuously supported or facilitated" (Schoon, 2021, p. 347). The purpose of this work is to forward the current call for approaching resilience with a systems-based mindset (Brown, 2016, Ungar, 2021) and to share strategies and other factors to consider when applying a systems view of resilience when working with students.

### Connection to Literature & How it Works

The transition to post-secondary education signifies a potential turning point in one's life in which change is inherent. Such transitions test an individual's resilience, or their ability to adapt in the face of adversity (Schoon, 2021). During this time, educators have an opportunity to support students' resilience by building up qualities and skills required for navigating risk and change (Schoon, 2021). Educational research has identified many personal qualities supporting individual resilience, such as ability to self-regulate (Theron, 2021) and navigation of previous challenges (Thieman et al., 2014). Such qualities have direct impact on student resilience, but limit understanding based on the systems perspective. Additionally, these qualities are often controlled by the individual and are independent of those with whom the students engage. In their work on social-ecological resilience, Biggs et al. (2015) identified seven principles which build the resilience of systems (see Table 1). When applied to the educational context, these principles bring forth innovative ways to build student resilience and suggest ways in which actors surrounding the students (e.g., educators) may support resilience development.

The influence of educators on student resilience is magnified by their close relationship in the education system (Bronfenbrenner, 1979, Theron, 2021), however, the impact of the broader components of the education system must not be ignored (Schoon, 2021, Theron, 2021). Factors such as educational structures, school norms, and even national educational policy (Schoon, 2021, Theron, 2021) influence student resilience in direct or indirect ways. As such, educators should be aware of influences from broader systems and seek to actively promote student resilience or help to mitigate risk. Further, stakeholders who hold a level of power in the educational system, educators serving as department or program chairs or those serving on college or university committees should identify opportunities to enact changes (e.g., policy, norms, opportunities) which improve student agency and promote student resilience.

Table 1 *Social-ecological Resilience Principles and Examples in Education*

Principle	Description	Educational Example
Principle 1	Maintain diversity and redundancy	Give student choice for some assessment types

Principle 2	Manage connectivity	Deliberately foster relationship building in class activities
Principle 3	Manage slow variables and feedbacks	Encourage constructive feedback and address concerns
Principle 4	Foster complex adaptive systems thinking	Assess students' mental models of course concepts
Principle 5	Encourage learning	Place value on different ways of solving problems
Principle 6	Broaden participation	Engage students in active learning practices
Principle 7	Promote polycentric governance systems	Engage students in establishing class norms

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*Note.* Principles and descriptions retrieved from Biggs, et al. (2015).

### **Implications / Impact**

Theron (2021) highlights many examples from other studies of the relationship between a systems-based perspective of student resilience and positive student academic outcomes. However, the positive impact does not end with the students. In the complex and connected education system, educators both influence students and are influenced by them. This phenomenon, identified as co-regulation (Schoon, 2021), means that while educators work to support student resilience, they too may see positive benefits (Theron, 2021). However, just as with student resilience, teacher resilience relies on many other systemic factors (Theron, 2021). Regardless of the focal individual or system, adopting a systems perspective when addressing resilience provides a more wholistic understanding of influential factors and asserts that all stakeholders and components of the system may have a positive impact.

### **Future Plans / Advice to Others**

Foregrounding the resilience focus of this work is the necessity of complex adaptive systems thinking. As the wicked problems our world faces transcend artificial boundary lines, the need to understand the interconnected nature of social and ecological systems is abundantly clear. As such, I encourage educators to consider both the direct and indirect ways in which our student interactions, practice, & research changes students' lives and the world in which we live.

The focal system for this work was the student; I encourage others to apply a systems perspective when exploring the resilience of other individuals, components, and scales of the educational system. For example, how resilient are you to adversity in your area of study? How is the resilience of educators contributing to or detracting from changes in our profession? How resilient is the education system to adversity in the social system?



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## **Making Learning Relevant**

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## **Making Learning Relevant**

### **Introduction**

Student motivation is a critical issue across the different levels of education. Research indicates that when students attach meaning to knowledge they are more likely to retain new information (Bransford et al., 2000). It is vital that educators allow students to have ownership of their learning (Chan et al., 2014). This abstract discusses four different approaches to making learning relevant for students in four different contexts.

### **Need and Connection to Literature**

In a world filled with distractions, the need to be able to connect course content with student interest has become greater than ever (Filgona et al, 2020). Moreover, student demographics continue to become more diverse, and within that context, instructors benefit from an intentional approach to making learning relevant. Students want to see the greater purpose and societal good in what they are learning (Filgona et al, 2020). As such, culturally relevant learner-centered teaching can motivate and engage students to make meaningful connections (Ladson-Billings, 1995). Preservice teachers need to design authentic activities to productively engage students to learn and make real-world connections (Saeed & Zyngier, 2012). Teacher educators who model learning with and from preservice teachers has been termed pedagogic reciprocity (Zyngier, 2011), which can then be implemented with K-12 students.

Students who are engaged in the learning experience make stronger connections between content and practice. Active learning demands that students think at a higher level, which means they may become frustrated if they are accustomed to memorizing and recalling facts (Dolan & Collins, 2015). Authentic tasks where instructors and students are co-learning help students make relational and application connections between content and the world beyond the classroom (Saeed & Zyngier, 2012). Application connections can be cultural (e.g., family), community (e.g., local contexts), personal (e.g., identity), and careers (e.g., workplace settings). Several theories explain student relevance such as culturally relevant pedagogy (Ladson-Billings, 1995), critical pedagogy (Freire, 2003), situated expectancy value motivation (Eccles & Wigfield, 2020), and self-determination theory (Deci & Ryan, 2012). Culturally informed pedagogies are beneficial due to their emphasis on how culture influences and shapes students learning (Ladson-Billings, 2021; Gay, 2018).

### **Purpose, Implementation Strategy, and Results**

The purpose of this abstract is to discuss four different approaches to making learning relevant for students across four land-grant universities (two 1890 Historically Black Colleges and Universities and two 1862 Predominately White Universities).

Four examples are explained below and how instructors use different pedagogical approaches to make learning relevant by facilitating: (1) cultural connections; (2) contextual connections; (3) personal identity connections; and, (4) career development connections. Although each example makes multiple connections, we will highlight how specific examples make learning relevant for each of the four connections.

**Cultural Connection:** An educator must be willing to learn how to identify their own values and possible biases as well as learn what other groups value, and how to adapt the educational process to them. In short, they must become critically aware and adaptive (Freire, 2003; Ladson-Bilings, 1995). The critical awareness needed to connect culturally with diverse audiences should be viewed as both language utilized and actions taken. For example, educators discussing climate change need to be aware of the cultural values attached to words and content for their audience. Some audiences will be centered on economic efficiency and

entrepreneurship while some will be pulled toward environmental justice. The educator needs to research and reflect on how their intended audience frames topics in order to engage and not alienate learners.

**Contextual Connection:** Preservice educators develop integrated science, technology, engineering and mathematics (STEM) lessons using agriculture, food, and natural resources (AFNR) as a context. The lessons are purpose-driven because complex problems are solved using interdisciplinary learning. Problems relate to Food-Energy-Water Nexus and promote critical and/or systems thinking. Preservice educators developed planning skills to develop integrated lessons that promote learner-centered and integrated learning for PK-12 students. STEM learning is made relevant because PK-12 students make connections to their personal lives and families, communities, and potential careers.

**Reflective Learning:** As pre-service teachers prepare to enter the field, self-determination theory (Deci & Ryan, 2012) begins to take center stage. Each individual writes about their own experiences with education and their background and history (Krathwohl, 2010). As students develop an understanding of their personal heritage, they develop the self-efficacy needed to identify challenges and concerns within the classroom, as well as appropriate directions for their lesson plans. The outcomes of discussions include self-efficacy based on stronger connections between theoretical applications of pedagogy and their own personal education experiences.

**Teacher Development:** In the ever changing system of education, professional development is absolutely essential. However, it has become increasingly harder to work in development on top of the many responsibilities educators carry. Podcasts provide a flexible structure for those who need to broaden their knowledge but lack time. The format of many podcasts is in the form of a panel discussion or a conversation between several participants. This allows for more than one point of view on a topic, thereby widening the educator/scholar perspective on the topic (Lynch, 2019), as well as exposing educators to global education. It has the potential to develop educators into specialists in a variety of areas (classroom management, instructional design, etc.)

### **Implication and Advice to Others**

Working as a team and listening to voices outside of our institutions and fields can help teacher educators reflect critically on our practice and further develop pedagogical understandings across different institutional and disciplinary contexts. When we work with other professionals who help us to develop our critical thinking skills and abilities, we model learning from each other for our students. These examples can be used to enhance teacher development across different institutions and fields, and help preservice teachers be more intentional in helping their students make relevant connections.

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**Culturally Relevant Teacher Education: Strategies for Supporting Students of Color in a Post-Pandemic School Setting**

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# **Culturally Relevant Teacher Education: Strategies for Supporting Students of Color in a Post-Pandemic School Setting**

## **Introduction**

Public education is on the precipice of a cultural reckoning as our nation's schools are challenged with closing the achievement gap for children of color. The educational burden has persisted as educators grapple with narrowing the persistent achievement deprivation worsened by the pandemic. Students of color were greatly impacted by the exaggerated and pervasive school shutdown denoted as a national crisis. School districts are facing unprecedented need to build support for the social emotional needs of students of color. The study examines research studies and their findings to inform program administrators about successful recommendations for consideration for continuous improvement in culturally relevant teacher education programs.

## **Theoretical or Conceptual Framework**

In 2022, ElSayary, A., Mohebi, L., & Meda, L. conducted a quantitative study. The study examined the impingement of the interconnection between social/emotional, cognitive, and behavioral plight on developing preservice teachers. Further the study investigated how social/emotional engagement can infiltrate the acquisition with learning, about excitement, interest, and inspiration induced by motivation. The results showed a significant positivity between social/emotional, cognitive, and behavioral action. The research implies a strong correlation between cognitive and behavioral engagement when a teacher fosters a positive relationship that is a balance between both. Teachers need to be concerned with students' feelings of isolation (Loades et al., 2020).

Research suggests social emotional learning is dependent on teachers (Ferreira et al., 2020). Further, the premise of this study conducted by Ferreira et al. (2020) suggests schools and teachers need to expand beyond curriculum assessment to include seeing the personal growth of students. The sustainability approach examined in the study proposes the use of the sustainability model to help build students' emotional strength and resiliency, when faced with complex situations and challenges through prosocial behavior. According to the findings, since there is an expectation for teachers take the primary responsibility for implementing SEL (Social and Emotional Learning) (Social and Emotional Learning) (Social and Emotional Learning) (Social and Emotional Learning) and mental health at school, innovative programs are needed to equip preservice teachers with the skills needed for program success and teacher confidence.

## **Purpose**

There is a continued focus on university curricula for preparing preservice teachers for diversity in the classroom (Griffin, 2022). The Education Disposition Assessment (EDA) was used to measure the dispositions of preservice teachers

Palmer et al. (2021) suggests post-pandemic norms require educators to rethink expectation of quality teaching and learning. Palmer et al espoused teachers perceived themselves powerless in the communities they during the pandemic. Though they experienced a feeling of inadequacy, they were held accountable. The authors argue teachers need social emotional coping skills.

## **Methods or Approach**

For years preservice programs have collected data from surveys, reflection logs and measurement tools (Griffin, 2022). A review of the data would be an important program evaluation tool. Composed data would equip program administrators to refine teaching practices to include social emotional learning standards in preservice curricula. Moreover, a review of course literature, textbooks, and lesson planning to increase

cultural relevancy by including SEL curricula in teacher education programs. The use of the Sustainability model would be a significant reliability tool to guide data collection to inform data-driven decision making through continuous program improvement. The implementation of evaluating preservice curriculum and state standards would be critical to ensuring relevant textbooks are selected to support social emotional learning in methods courses in the teacher education program.

### **Findings/Results**

Implications to the ElSayary et al (2022) study showed further research is needed beyond early childhood. They highly recommend the research be repeated with in K-12 students, both male and female. The impact of examining culturally relevant research studies has informed of the necessity of social emotional training for preservice teachers. Further, pending the implementation of the review of curricula content and culturally relevant SEL training for preservice teachers.

### **Conclusions and Recommendations**

The foreseeable goal is to evaluate current program data and refine and design courses to help preservice teachers and strengthen their skillsets to foster positive relationships with students of color. Thereby creating transformative strategies for well-being of students. The rapid review conducted by Loades et al., (2020) suggests the effects of the pandemic call for the use of well-established strategies to build up the social emotional and mental health of children such as, building structure and promoting a sense of belonging and community for students. Further, the review results denote a need to address the pervasiveness of mental health challenges facing children and adolescents due to isolation during the pandemic. It is advisable for teacher education programs to incorporate SEL curriculum for pre-service teachers. Contextually for the greatest impact, there needs to be an inversion of education about culture and pedagogy to ensure the needs of students who are placed at risk due to race, culture and socioeconomic status are met. (Ladsen-Billings, 2021).

### **Cost/Resources Needed**

Textbook adoption and content related resources such as PowerPoints, videos, and other resources. More staff/faculty instructional support if needed.



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**From Transactional to Transformational: A Toolkit Toward Authentic Community Connections**

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# **From Transactional to Transformational: A Toolkit Toward Authentic Community Connections**

## **Introduction & Need for Strategy**

Connections between educational institutions and the communities they serve have existed for generations. Community serves as a strong resource for learning (Bauch, 2001, McKim, et al., 2019) and builder of student social capital (Bauch, 2001, Hastings, et al., 2011). However, the strength of the connections varies from shallow, unidirectional programs (Noel, 2011) to more robust, multidirectional relationships (Lemke, 2020, Takako, 2006). While benefit may come from any connections along the spectrum, we argue the greatest opportunities for transformational change for students, institutions, and communities lie in deep, authentic connections between schools and communities (Lemke, 2020, McKim, et al., 2019, Noel, 2011). Below, we outline the need for and advantages of authentic community connections as well as strategies identified in literature which can be used to support relationship building between schools and communities. Lastly, we describe a community engagement toolkit, created by one of the authors, which may serve as a valuable guide for beginning or refreshing meaningful community connections.

## **Connection to Literature**

Schools are situated in the fixed context of the community that envelops them. Simultaneously, the context of home and community overlaps and they become mutually dependent on each other (O'Connor et al., 2019). As such, educators must exhibit an attitude of intentionality and help engage students in issues, challenges, or experiences relevant to their own communities (McKim et al., 2019). These experiences also provide an applied context to address topics such as equity and inclusion, which, being often “stand-alone” can leave students struggling to engage with the curriculum and can invalidate the experiences of underrepresented groups (P. Warsaw, personal communication, May 2023). When meaningful community connections take place and appropriately address equity and inclusion, change can be enacted within our classrooms, particularly for underrepresented populations (Lemke, 2020). The transformational impact that community relationships can foster for students first takes place through educators who are willing to tap into the knowledge and abundance that their community has to offer (Germán, 2021).

## **How It Works & Implementation of Strategy**

Below, we have outlined a few strategies from a toolkit, created by one of the authors (Luck, 2023), which includes additional information and resources that educators can reference when working toward fostering authentic connections within their community. This resource offers educators suggestions on how to facilitate effective conversations and tips on incorporating community groups equitably into your curriculum. A link to the complete, free, online version of the toolkit is available in the references (Luck, 2023)

### **Phase 1: Identify Partnerships**

*Use an Asset-Based Perspective:* Often educators have difficulty orienting their course structure to meet an asset-based perspective that counteracts the negative narratives and connotations that typically envelop community experiences (Germán, 2021). Avoid identifying problems to solve in the community and rather identify opportunities to support the ongoing interventions.

*Engage in Your Community:* Identifying potentially successful partnerships requires active engagement in the community. Create a “resource map” and visit potential groups to “gain a real sense of the work conducted there, and... establish personal contacts with members of the organization” (Favela & Torres, 2014).

## **Phase 2: Establish Relationships**

*Immerse Yourself in the Organization:* Educators should remain flexible and avoid making transactional connections. Be willing to engage yourself into the community through activities, observational and conversational studies, and be visible to begin the process of establishing trust (Noel, 2011).

*Establish Shared Expectations:* Co-creation with the community group you are engaging with is essential for making the experience authentic and meaningful for all parties. Being explicit with the group leads to clear expectations and offers time for them to communicate their shared vision (Bauch, 2001, Larsen, 2016).

## **Phase 3: Maintain Connections**

*Reflect on Shared Vision:* Community connections in any capacity should be coupled with opportunities for reflection and debriefing that initiates deeper student learning and evaluation of big picture concepts (Konkola, et al., 2007). Additionally, educators and community partners should engage in reflection and open dialog to ensure goals and expectations are met.

*Respond to Feedback:* Relationships with community organizations are reciprocal in nature (Bauch, 2001). Therefore, educators participating in community-engaged work should be open and responsive to feedback as well as willing to provide constructive feedback of their own.

### **Implications**

The potential for school-community connections to have lasting impact for all stakeholders is substantial. However, transactional approaches can produce conflict or take advantage of community resources (Larsen, 2016). We assert authentic community connections, founded on trust and asset-based perspectives, will provide a context for transformational growth of students and communities alike (Hastings, et al., 2011, Lemke, 2020). Relationships take time to build, so educators may consider beginning work with community organizations in which they are already involved. Otherwise, educators should plan to take time to identify and engage with community groups that relate to the course context in an effort to establish mutual trust.

### **Future Plans**

The authors plan to share the toolkit widely with educators in Michigan to draw attention to the need for more transformational community connections. Additionally, the authors seek to provide resources educators can use as a starting point for establishing connections or as a guide for bolstering previous connections.

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## **Integrating Practice-Based Strategies and Culturally Responsive Pedagogy through Service-Learning**

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# **Integrating Practice-Based Strategies and Culturally Responsive Pedagogy through Service-Learning**

## **Introduction**

The U.S. education system has transformed to address the gap between theory and practice through reflection and practice-based strategies (Darling-Hammond, 2017). Service-learning is considered one of the learner-centered teaching pedagogies (Stephenson et al., 2013) that are widely used, and it helps students connect what they have learned to solve a real-world problem in their community (Felten & Clayton, 2011). Celio and her colleagues (2011) conducted a meta-analysis of 62 studies to explore the impact of service learning on students. They found a significant gain in five students' outcome areas: attitudes toward self, attitudes toward school and learning, civic engagement, social skills, and academic performance. An emphasis on Culturally Relevant Pedagogy (CRP) is critically important to address the changing demographic of increasing ethnic-minority students (Brown-Jeff & Cooper, 2011). Well-designed CRP educational programs help educators implement culturally responsive practices, such as attending to their biases while implementing evidence-based practices with students and families from diverse backgrounds (Ladson-Billings, 1994, 2001). By intentionally integrating CRP, service learning can ameliorate the effects of cultural discontinuity. This presentation aims to demonstrate different examples, from lower to higher levels, of how CRP can be integrated into service learning, focusing on home-community factors.

## **Conceptual Framework**

Service learning allows teacher educators to reinforce pedagogy through practical experience (Brown & Howard, 2005). Classrooms are growing more diverse in student populations (Darling-Hammond, 2017); service learning reinforces education's social context, including student-centered instruction, culturally responsive skills, and peer interactions (Brown & Howard, 2005). Villegas and Lucas (2002) expressed the need for teacher preparation programs to prioritize diversity by integrating coursework, learning experiences, and fieldwork strategies to develop culturally responsive educators. Culturally responsive practices incorporate aspects of a student's background and culture in the learning experience. Ultimately, the active application of these practices sets the foundation for educators to address educational disparities for diverse students and their families (Gay, 2002).

## **Approach**

### **Langston University and Purdue University: Sprinkling CRP into service-learning (lower integration)**

**Langston University:** In a learner-centered teaching reading course, students participated in a virtual service-learning readers theater project. The project's purpose was to utilize repeated readings as a way for students to find a deeper meaning of the text while making significant gains in expressive reading (Rasinski, 2012). This type of repeated reading “provides students with diverse learning needs an opportunity for authentic participation in rereading texts- in contrast to the traditional skill and drill approach of rereading text by teacher direction” (Garrett & Connor, 2010, p. 7). Today and historically, stories remain an engaging way to learn important moral lessons. The dramatic interaction and engagement cause readers to look more closely at the book text to visually interpret the meaning of the reading experience.

**Purdue University:** A high school teacher and a researcher co-developed and co-implemented a five-day ecology unit. The teacher wanted to connect the students with the local environment and learn science, technology, engineering, and mathematics (STEM) content. The unit began with exploring native and invasive species in the local landscape to create a field guide. Once the students were familiar with the species they may encounter and how to identify them, they surveyed using random sampling and calculated the density of native versus invasive species. The students then used the collected data to create a restoration plan to present to a local conservation office. The unit used a school backyard to engage students to learn STEM knowledge (e.g., plant science, taxonomy, and density) and serve the community to plan to clear up

invasive species. This example showed how a co-developed and co-implemented model by a teacher and a researcher, and utilized an active research method could support the teacher's in applying learner-centered instructional design, engage students to solve a local community, and develop students' sense of place.

### **University of Arkansas at Pine Bluff: Higher Integration of CRP into Service-Learning**

The School of Education (SOE) at a university in a southern state has transformed the preparation of teachers through Teach P.R.I.D.E., which focuses on Perseverance, Rapport, Integrity, Determination, and Equity. The SOE incorporated the "Teach PRIDE" Learning Tour. During the Teach PRIDE tour, faculty, staff, and teacher candidates participated in a day-long showcase outside the university's service area in a partnering school district. The learning tour aims to provide teacher candidates with practical experiences to promote understanding, appreciation, and the importance of teaching and learning that acknowledge and affirm student cultural, linguistic, and equity needs. Teacher candidates began the day by meeting with current administrators regarding district needs, teaching a mini-lesson related to character education, open dialogue with future educators, and a service-learning project based on the school's needs. Teacher candidates indicated that they valued the experiences and how they enhanced their knowledge of students and their perceptions of various cultures.

### **Findings**

A review of the experiences at all three institutions indicates that practice-based strategies and culturally responsive pedagogy through service learning can be used in the teaching and learning environment. Despite the various integration and instructional design levels, all learners benefited from the connections and higher level of engagement with individuals outside their culture and a perspective to promote equity in the classroom and community. These examples have illustrated how students indicated through self-reflections that the experiences were very beneficial in putting classroom theory to practice through authentic engagement, collaboration, and teamwork.

### **Conclusions and Recommendations**

An emphasis on culturally relevant pedagogy is critically essential. Well-designed programs prepare educators to implement culturally responsive practices, such as attending to their biases while implementing evidence-based practices with students and families from diverse backgrounds. Teachers' attitudes and perspectives of culturally diverse students can be detrimental and influence the quality of education already marginalized students receive. Teacher preparation programs must set precedence in education by addressing this correlation. Educators thinking of using practice-based strategies and culturally responsive pedagogy through service-learning approaches will greatly benefit from the experiences gained in the three university examples. These programs could be adapted by others. Please contact the authors for more information about the resources that are needed to implement the programs (e.g., curricula and materials).



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# **POSTER ABSTRACTS**

## **Intervention & Resilience: The use of Learner Centered Teaching**

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## **Intervention & Resilience: The use of Learner Centered Teaching**

### **Introduction**

Epidemiological studies found that 69% of 1,000 Americans will experience one traumatic event in life. LCT is a teaching paradigm that promotes active learning environments that support and improve the depth and scope of diverse student learning. Life history studies of epidemiological study found that 69% of a representative sample of 1,000 Americans have had experienced at least one extremely traumatic event during their lifetime (Kanel, 2017). A crisis presents danger and opportunity for personal growth, if during the crises one receives immediate help and practical support. Resilience is termed for the ability to “Bounce Back” after significant adversity. COVID-19 posed a crisis for us all, and as survivors, we persevered. Ultimately, we have learned to be resilient and to thrive despite the crisis of over 500,000 people dying from this deadly virus. As educators, we are expected to maintain will-power and offer reasonable accommodations to our students in crisis. Undoubtedly a student may experience life circumstances that may categorize them as being in a crisis. As service providers we want to help students to survive the crisis, be resilient, and thrive despite life’s emotional setbacks.

### **Conceptual Framework & Poster Presentation Elements**

Various examples of resiliency will illuminate the psychological and behavioral dynamics associated with a crisis. Case scenarios may help one to learn what to say to students, whether the crisis is developmental; related to trauma, post-traumatic stress disorder (PTSD), substance abuse or other factors. Attendees shall also learn how to define the causes of stress, and LCT /student-centered coping strategies can be used to combat various stressors. This poster presentation offers a guide to crisis intervention, while using an LCT model to teach resiliency. In addition, presenters will uncover the fundamentals of surviving situational and developmental crises, how they occur and how you can manage them using LCT strategies. As it relates to various traditional counseling models and as they relate to crisis intervention, this poster will illustrate how models of crisis intervention can be incorporated into the classroom (which can be used within an LCT setting with any student that may be experiencing a crisis).

### **Purpose - Introduction to Learner-Centered Teaching Strategies**

This poster presentation is designed to offer some insight on ways to use learner-centered teaching strategies to help students overcome adversity that they may face throughout their quest to conquer their academic endeavors. This presentation will introduce an understanding of a few theories and concepts of crisis intervention, proper approaches to resolve a crisis using safe and effective LCT approaches. The poster presentation will help attendees to better understand the holistic concept of stress and how it may impact your daily lives. The poster will display and shed light on a few clinical tools to help educators examine generational multi-cultural differences as it pertains to their education, perseverance, and diverse coping strategies and help Identify LCT Crisis Interventions which will help to promote positive outcomes to negative life experiences.

### **Incorporating Learner Centered Teaching as a Strategy to Resiliency**

There is a recognition that educators like mental health professionals must be prepared to be Resilient and to guide responsibly for those we serve, for the benefit of increased understanding between student/teacher and/or client/therapist, and to increase sensitivity to those diverse differences among them. In fact, it has been argued that educators and counselors have a moral obligation to be curious about the differences present in their respected settings. All communications are often inherently and unavoidably a multicultural experience. Therefore, LCT is the best approach to allowing students to guide the teacher of their path and experiences of surviving their crisis and resiliency. The development of multicultural teaching and

counseling began with attention to diverse services provided by the teacher or counselor from predominantly majority cultural power groups to many oppressed ethnic minority clients. Many students' first experiences of surviving a crisis may very well come from the way their culture or family handles those types of stressors. Therefore, multicultural competencies should be considered a user friendly LCT strategy to rapport building with students.

### **Approach & Assessment Strategies for Learner-Centered Teaching**

Various LCT instructional assessment methods are utilized to accomplish course objectives, which includes, but not limited to presentation, discussion, clinical feedback, and participant role-play. This poster presentation will display students' resiliency methods to life's challenges and review the positive and negative prospects of a person's ability to adapt to adversity. It is our intension to discuss factors that can help or hinder the recovery from adverse experiences. We also hope to shed light on the benefits of using a LCT crisis intervention, which will often enhance one's ability to cope and recover from adversity.

### **Presentation Strategies and Expected Outcomes**

The presentation is designed to introduce current student-centered Crisis Intervention theories, Resiliency, and a practical LCT model. It is designed to offer insight for faculty and other educators, to recognize if a student is having a mental health crisis and garner the skills to assist participants in obtaining general knowledge of crisis intervention training that can be applied to students that may be dealing with various forms of crisis and the sociocultural considerations that often comes along with varying crisis.

#### **Objectives:**

This innovative poster presentation will address and introduce strategies for LCT, implications for educators and professionals working to meet the diverse needs for students/consumers and provide solutions to adapt to the crisis and/or generational differences of today's learners.

- Define Learner Centered Teaching
- Share a few Instructional Designs for teaching using the LCT Model.
- Address the importance of educators having the ability to recognize and understand multi-cultural diverse ways to cope with a crisis.
- Examine generational multi-cultural differences as it pertains to their education, perseverance, and diverse coping strategies.
- Identify LCT Crisis Interventions which will help to promote positive outcomes to negative life experiences.

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## **Learner-Centered Teaching Through Experiential Learning: An Adaptive Approach**

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# **Learner-Centered Teaching Through Experiential Learning: An Adaptive Approach**

## **Introduction**

This collaborative presentation focuses on the importance of experiential learning, which is learning by doing and student support services through the Learner Center Teaching (LCT) approach. Learner-centered environments can implement multiple techniques to enhance students' experiences (Bishop, Caston, & King, 2014), and guide them with greater control of their learning. This poster highlights various LCT approaches from three different universities.

## **Theoretical or conceptual framework**

Undergraduate student motivation can vary across disciplines and often is contingent on the individual student, but it is key to engagement (Rizkallah & Seitz, 2017). Higher education faculty have the responsibility of finding novel ways to engage students to increase learning outcomes. Experiential learning has been shown to improve engagement and learning outcomes (Coker, Heiser, Taylor, & Book, 2017; Kolb & Kolb, 2018). The experiential learning cycle involves four main stages of concrete learning, reflective observation, abstract conceptualization, and active experimentation to provide a framework for educators to engage learners (Kolb & Kolb, 2018). The presentation will describe the various ways students have demonstrated the ability to experience, reflect, think, and act on their learning. The presentation will also discuss how the different colleges approach the depth and breadth of learning experiences. Breadth and depth of experiential experiences is key as it garners higher order thinking, strong relationships, effective writing skills, and community contributions (Coker et al., 2017).

## **Purpose**

The goal of this qualitative/quantitative presentation is to give testimony of ongoing LCT approaches, document the specific experiences and skills associated with mentoring undergraduate students, and to enhance their pre – professional outcomes through effective strategies, holistic approaches, and access to shadowing professionals in the field of Agriculture & Applied Sciences (i.e., Human Development & Family Sciences, Child Development, Early Childhood Education, and Food, Nutrition & Community Health Sciences majors).

## **Approach**

Faculty from three different institutions will use the experiential learning model to engage in discussing the similarities, differences, and benefits of the university's implementation of teaching styles, problem-solving, positive communication, service, critical thinking, and leadership by using the 4-step method of experiential learning style by David Kolb (Kolb & Kolb, 2017; 2018). The faculty will highlight the use of observation, application, and reflection of the experiential learning provided at their respective institutions.

## **Findings/Results**

Findings related to students' critical thinking, communication, leadership, diversity, and field competency will be shared.



### **Conclusions and Recommendations**

The experiential learning experiences shared by the different universities can be replicated and/or adapted at other institutions to increase student engagement and learning outcomes.

Experiential learning must be tailored to suit the needs of students and is ever evolving based on the current trends and changing career opportunities. Therefore, examining students' needs and unique characteristics will help create more result-oriented learning activities.

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