

Research Reinvigorated
The 51st Conference
Of the
Rocky Mountain Educational Research
Association



Hosted by



April 25, 2025

1:30 – 4:45 PM

RMERA Conference Schedule

Educational Research Presentations

Welcome

1:30 – 1:45 PM Baird Hall, room 121

Drs. Mary Millikin and James Ferrell,

Opening Remarks from Dr. Carla Thompson, past RMERA President

Break and Paper Presentations

Paper Presentations

Student Motivation

2:00 – 3:00 pm Baird Hall, room 133

20 minutes is allowed for each presentation

1. *AI-enhanced gamification in higher education: Impact on student motivation and retention, a systematic review.* Tom Gerard, Rogers State University

This systematic review examines the integration of artificial intelligence (AI) with gamified learning strategies in higher education, focusing on their combined impact on student motivation and retention. While traditional gamification approaches often rely on static game elements like points and badges, recent advancements in AI—particularly large language models (LLMs)—enable dynamic personalization, adaptive challenges, and immersive narrative experiences that address longstanding engagement limitations. The study analyzes peer-reviewed research from 2023-2025 to identify emerging patterns in AI-enhanced gamification design, including LLM-powered interactive storytelling, intelligent tutoring systems, and real-time feedback mechanisms. Methodological Approach Adhering to PRISMA guidelines, the review synthesizes empirical studies from Scopus, EbscoHost, ProQuest, and ERIC databases, evaluating pedagogical effectiveness across disciplines while assessing theoretical frameworks guiding implementation. Significance and Innovation This work addresses a critical gap in the existing literature by systematically investigating how LLMs transform gamified learning beyond superficial rewards, enabling: The findings aim to equip educators with evidence-based practices for implementing AI-enhanced gamification while providing researchers with a comprehensive taxonomy of current innovations and future research directions. By mapping the evolving landscape of intelligent gamification tools, this review contributes to the development of pedagogically robust, ethically grounded strategies for leveraging AI in higher education.

2. *The influence of gamification on student motivation and retention in higher education.* Tom Gerard, Rogers State University

The integration of artificial intelligence (AI) into educational gamification is reshaping the landscape of higher education by enhancing student engagement and learning outcomes. As higher education institutions strive to address declining student motivation and retention rates, AI-enhanced gamification presents a promising solution. This systematic review aims to explore the impact of AI-

enhanced gamification on student motivation and retention, providing evidence-based insights to guide educators and policymakers.

3. *Empowering students: Using reflective practice to improve pedagogy.* Lori O'Malley, Rogers State University

The purpose of this work is to explore available instructor rating systems in relation to improving classroom engagement and student performance. The majority of instructor ratings systems are done at the end of an academic term. Faster and more accurate results were necessary in order to salvage a poor first half of the semester. Finding none of these methods suitable for her intentions, the author utilized reflective practice to guide the redesign of a college course mid-semester. The action taken included the sharing of personal values, true care regarding student success, and validation of input given by students. Results are presented as favorable via increased test scores and class participation. A call for others to utilize similar methods in course development is made.

Educational Potpourri

2:00 – 3:00 PM

Baird Hall, room 129

20 minutes is allowed for each presentation

1. *Abstract citizen educator: The life of a retired educator and her drive to make a difference.* Donna Sharp, Rogers State University

This article draws from the power of the oral history tradition to narrate a retired educator's life. Oral history has the potential to activate language as the researcher speaks "with women as women." In this oral history, I explore the life of an award-winning, but unknown, American educator who inspired a love for books and literature in her students. I draw from feminine scholarship (e.g. Noddings and Gilligan), and biographical scholarship (Goodson), to analyze this teacher's story. In doing so, I emphasize the imperative of studying educators for understanding social justice, ethics of care, and a woman's voice. An educational oral history provides a rich opportunity to examine the story of an accomplished career teacher, an "everywoman" who touched thousands of student lives. The focus of this article is a daughter, sister, wife, mother, and educator who makes meaning from the unexpected events in her life. This article offers an understanding of a teacher's life in a period of widespread criticism of education. Her story is a counterpoint to detractors who condemn the state of teachers and public education in the United States.

2. *Mindfulness-based intervention on test-anxiety among college students.* Sara Moon-Seo, Rogers State University

College students may develop test anxiety from excessive worry, social pressure, fear of failure, and intense physiological arousal in the test-taking environment. Test anxiety can negatively influence college students' school adjustment and performance (Ortega-Donaire et al., 2023). Mindfulness-based interventions have been shown to positively influence college students' mental health by reducing anxiety, depression, and stress (Chiodelli et al., 2022). Purpose of the Study The researcher explores the definition of mindfulness and its current practices in daily life and the mental health field. The study introduces three main aspects: (1) the definitions of mindfulness and test anxiety; (2) essential elements of mindfulness; and (3) a proposal of Mindfulness-Based Test Anxiety Reduction Activity (MBTARA) to help students reduce test anxiety during exams. Methodology The researcher conducted a focused literature review using the criteria "Mindfulness-Based Breathing Exercise and Test anxiety," limited to full-text, peer-reviewed journal articles

published within the past ten years. The review was developed through the university library database and involved a systematic analysis of existing articles on the topic. The review process began in early March and concluded in early April. Based on this comprehensive review, the researcher proposed “Mindfulness-Based Test Anxiety Reduction Activity (MBTARA) to help college students who suffer from test anxiety during exams. Finding Mindfulness-based breathing exercises are accessible and can be easily practiced using self-guided instruction, either in person or via video. Research supports that mindfulness-based training and intervention programs increase mindfulness and decrease test anxiety among college students

3. *Improving phonics skills for first grade students with take-home decodable book tags.*
Renee Cowan, Northeastern State University

The Science of Reading emphasizes the importance of explicit and systematic phonics instruction in supporting early literacy development. While phonics instruction in the classroom plays a pivotal role in helping students acquire foundational reading skills, additional supports may be necessary to ensure continued progress. This study investigates the effectiveness of Take-Home Decodable Book Bags, designed to reinforce phonics skills learned in the classroom, through parent involvement at home. Eighteen customized book bags, each focused on specific phonics skills such as CVC and CVCe patterns, were created and distributed to first-grade students at a suburban, Oklahoma elementary school. The bags contain 4-7 decodable books and 3-4 student activities, carefully curated based on current research in the Science of Reading and best practices in phonics instruction. These resources were designed to provide parents with clear guidance on how to support their child's literacy development at home. The research aims to assess how the use of these Take-Home Decodable Book Bags impacts students' phonics skills, as perceived by both teachers and parents. This study explores whether such at-home supports contribute to improved phonics proficiency, thereby enhancing early reading outcomes for first-grade students.

Break and Poster Presentations

Teaching Demonstrations 3:15 – 4:45 Baird Hall, room 129

30 minutes is allowed for teaching demonstrations

1. *Unsung heroes: Exploring the impact of ordinary people on history.* David Bath, Rogers State University

For my freshman history class, I ask my students to talk to one of their family members (who is not famous) and then talk about how people who are similar to that person have influenced American history as a group.

2. *From completion to collaboration: Strengthening principal-teacher relationships in early childhood settings.* Kimberly Phillips & Barbara Jones, Northeastern State University

Relationships contribute significantly to the overall school culture and are a key factor in promoting retention among teachers. Principals should actively foster a supportive and inclusive community that prioritizes positive interactions among teachers and staff through a relational foundation. Stop by this presentation to learn strategies that will get you from compliance to collaboration in your administrative role. “When teachers and administrators are aligned in purpose, the possibilities for children expand.” – Unknown

3. *Using a focus group process in grounded theory to enrich a class.* Dr. Michelle Taylor and Dr. Mary Millikin

As faculty prepare to teach a new course or an often-taught course, they review student evaluations, observations gathered throughout the semester, and discussions with colleagues; however, some questions may still remain. What were the thorniest concepts for students to learn? Do newer influences such as AI impact the achievement of student learning outcomes? What can faculty do to vitalize and reinvigorate the class experience? One less common yet energizing process for course improvement is the use of focus groups. A session for each course of interest can enrich and augment feedback from standard student evaluations of instruction. Students who recently completed the course of interest should be invited to attend and asked to RSVP.

A session starts with a specific question informed by the course description and course outcomes. The process begins with the instructor-facilitator clearly identifying the question: *What were the thorniest challenges in achieving the course outcomes?* During the session, the instructor facilitates the identification of student challenges, frequency, actions/knowledge that students used to navigate challenges while taking the course, what the faculty or university could do to help, and what worked well. Results are captured in a structured yet inviting way. Students are encouraged to talk about their course experiences without judgment, and they often elaborate on others' comments. Results are summarized in an objective, highly meaningful way that are easily assimilated. Results can and should be shared with other faculty teaching this course, including adjunct faculty which engenders a culture of camaraderie.

Poster Presentations

Baird Hall Walkway

1. *Family matters: Resilience in an adult population.* Rachel Dick, Samara Hamby, Laruen Harshfield, Taya Holmes, Jamelle King and Dr. Mary Millikin; Rogers State University

The capacity of the family system to successfully navigate life's challenges and adversities is fundamental to the development of healthy adults. Stressful events impact the family, and the functionality of this system has far-reaching effects. Family structure impacts dynamics, which is intertwined with developing capacity to address and rebound from disruptive life challenges. This study sought to investigate the impact of family dynamics on personal resilience. Adults with the resilience to pursue graduate school programs are not free from adverse childhood experiences. These adverse experiences are commonly defined as perceived traumatic events that occur prior to adulthood and can challenge emotional processing and decision making. Trauma can happen to any person at any age; however, there is little research regarding its effects in the relationships of graduate students. This study is designed to offer research experience to counselors-in-training in a graduate Community Counseling program course (CC5473, Research in the Counseling Professions) and to ultimately contribute to the larger body of knowledge regarding the impact of childhood trauma on relationship commitment on graduate students.

2. *Adverse childhood experiences (ACE) impact on relationship commitment.* Madison Bradshaw, Kimberly Bump, Baron Buster, Brianna DeAngeles, Arissa Miller and Dr. Mary Millikin; Rogers State University

Adverse and traumatic experiences during childhood can impact relationship functionality in adult life (Sharifi & Rodani, 2023; Witting, 2018). Actor and partner effects include negative couple communication, diminished calmness in one's self, and relationship instability. Even witnessing physical attacks by parents can affect children in terms of emotional behavioral, social, and physical disturbances that continue into adulthood and their own relationships. Adults with the resilience to pursue graduate school programs are not free from adverse childhood experiences. These adverse experiences are commonly defined as perceived traumatic events that occur prior to adulthood and can challenge emotional processing and decision making. Trauma can happen to any person at any age; however, there is little research regarding its effects in the relationships of graduate students. This study is designed to offer research experience to counselors-in-training in a graduate Community Counseling program course (CC5473, Research in the Counseling Professions) and to ultimately contribute to the larger body of knowledge regarding the impact of childhood trauma on relationship commitment on graduate students.

3. *Range of motion exercises in the ICU setting.* Eric Ragan & Cole Beets; Rogers State University

Range of Motion Exercises in the ICU setting Muscle atrophy is a common secondary issue that afflicts patients who are admitted to an intensive care unit due to either prolonged immobilization or muscle disuse. A simple solution is the incorporation of range of motion exercises performed by staff members. Our poster aims to address how an institution could implement these range of motion exercises into their units to promote better patient outcomes.

4. *The effects of ice hockey on mental and physical health.* Eric Ragan & Cole Beets; Rogers State University

In this research proposal, the researcher will explore studies on ice hockey players' mental and physical health. The researcher will introduce the purpose of her study, the methodology, data collection and analysis. Ice hockey is known worldwide, growing in popularity among both men and women. The sport combines aerobic and anaerobic parts, offering a full-body workout. It does have risks due to physical contact and mental health research show that benefits of playing are mixed. This study aims to bridge the gap between the researcher and players by using the Photovoice method. Approximately 10-15 players from an adult recreational hockey league in the southwestern United States will be asked to voluntarily participate. Participants, age 18 and up, will take photographs related to their mental and physical health. These photographs will guide follow-up interview discussions about their experiences and motivations for playing ice hockey. Data gathered via interviews will be recorded and transcribed for accuracy. Analysis will focus on identifying themes that highlight ice hockey's impact on overall health. This research has been designed to provide a unique perspective on how playing ice hockey affects both mental and physical health. The Photovoice approach offers a deeper understanding by allowing players' voices to be heard and their experiences to be brought to life.

5. *College student perceptions on the use of artificial intelligence.* Shy Garrett & Dr. Sara Moon-Seo; Rogers State University

Students use AI for various tasks, from generating ideas to assisting with homework assignments. Ethical considerations regarding the use of AI as a tool have been discussed among students and instructors (Sedlbauer et al., 2024). In this study, the researchers explored college students' perceptions of using Artificial Intelligence (AI) through an extensive literature review. Method: The researchers conducted an extensive literature review using the search criteria "AI use in Higher

Education,” limited to full-text, peer-reviewed journal articles involving college and universities published within one year. The review was developed through the university library database, systematically analyzing relevant articles on the topic. Between March 11 and March 31, 2025. The search yielded between 46 to 48 articles. Based on this comprehensive review, the researchers selected and analyzed 31 articles that specifically focused on college students’ perspectives on AI. Findings: Three main themes emerged from “College Students’ Perceptions on the Use of AI in Higher Education”: (1) benefits, (2) negative concerns, and (3) future suggestions. First, Artificial Intelligence (AI) supports inclusive and diverse learning environments by offering accessible and advanced technologies. Second, there are concerns about academic integrity, as students can easily cheat or copy answers using AI-powered tools. Third, as AI is internationally used in areas such as education, business, science, or medical fields, it is crucial to establish clear guidelines and academic policies for its use in higher education.

6. *5th year academy mentoring and support for pre-service and novice teachers.* Jolly Meadows & Helen Douglass; University of Tulsa

In this poster session, we will share an innovative model addressing needs of pre-service and novice teachers. We will share the preliminary organization and partial data from the second year of the academy. 5th Year Academy is a gathering to provide support and community for pre-service and novice teachers. It also serves to highlight the opportunities for personal and professional growth in the profession. In addition, it provides a space to examine the narratives around the education profession and ways to craft a personal and professional counter narrative. It is a growing, changing gathering based on participant feedback.

7. *Cohort mentoring and support in undergraduate STEM education.* Hellen Douglass; University of Tulsa

Students in the STEM Education Research Incubator have the opportunity to develop skills as a novice researcher in their chosen STEM Education Research interests. These interests cover a wide variety of inquiry, not only teaching and pedagogy. In joining the mentoring research group, students will have the benefit of other students’ insights, critiques and experiences as they not only conduct their research but participate in group mentoring workshops in research topics and practices. A faculty mentor will guide the process and the delivery of the research education modules. Students will learn about forming questions, research methods, frameworks, literature reviews, ethics and the writing process. This process provides a different pathway to developing undergraduate researchers. Instead of a student having to find a faculty member with a current study that interests the student, the student themselves will develop their topics with the faculty member as a guide. This moves the process from more faculty centered, to more student centered, while also centering explicitly learning about and using research skills. This model, which is in its early stages, will be developed as a case study to share an alternative approach to preparing undergraduate research students.

8. *Childhood experiences and adult parenting style.* Shannon Fair, Amina Saleh, Mariah Nadeau, Emily Manners and Dr. Mary Millikin; Rogers State University

Parenting is a labor of love. The outcomes of strong parenting include healthy adults, families, communities, and society-at-large. However, parents who have experienced adversity in their own childhood have a more difficult pathway. This research study investigates the relationship between early childhood experiences and parenting style as an adult. Adverse childhood experiences (ACEs) are traumatic events that occur prior to adulthood and can challenge emotional processing and

decision making. This study investigates the relationship between ACEs and adult parenting style. Adverse Childhood Experiences (Feletti, et al, 1998) are operationally defined as scores on the Adverse Childhood Experiences (ACE) scale. Adult Parenting Style is operationally defined as scores on the "What's Your Parenting Style?" questionnaire (Active Parenting Publishers, 2024).

9. *Childhood trauma and teacher retention: Course organization.* Brandy-Lea McCombs; Northeastern State University

Understanding childhood trauma is no longer an educational buzz word. It is now a necessary component of teacher education (Honsinger & Brown, 2019; Little & Maunder, 2021) and a proactive strategy to support teacher retention (Arthur & Bradley, 2023; Bultman, 2022; Sanchez, 2020). But exactly how do we organize a course that explains childhood trauma, empowers future teachers with effective strategies, while at the same time support the personal needs of teacher candidates in connection with teacher retention? This poster is prepared for teacher educators and education leaders who want to go beyond simply providing strategies but empowering teachers to understand the why behind behavior. Furthermore, this poster supports teacher retention through current resiliency and grit research. By explaining the developmental changes which occur as a result of chaos and trauma (Forbes, 2012; Perry, 2007), connect to potential behaviors seen in the classroom (Forbes, 2012; Sorrels, 2015), then provide teacher candidates strategies to use in the classroom (Gwinn, & Hellman, 2022; Sorrels, 2015; Souers & Hall, 2016), the teacher education course is organized in a way which empowers teacher candidates to navigate childhood trauma in their future classrooms. By using this approach to trauma responsive teaching, teacher candidates look beyond the behavior seen in the classroom, understand at a deeper level as to what is occurring in the students' development, and then apply strategies that are effective. Information is presented through poster format and provides interactive activities that are rooted in research and practice.

10. *Adverse Childhood Experiences (ACE) Impact on Relationship Commitment.* Shannon Fair, Mariah Nadeau, Emily Manners, and Amina Saleh, and Dr. Mary Millikin

Parenting is a labor of love. The outcomes of strong parenting include healthy adults, families, communities, and society-at-large. However, parents who have experienced adversity in their own childhood have a more difficult pathway. This research study investigates the relationship between early childhood experiences and parenting style as an adult. Adverse childhood experiences (ACEs) are traumatic events that occur prior to adulthood and can challenge emotional processing and decision making. This study investigates the relationship between ACEs and adult parenting style. Adverse Childhood Experiences (Feletti, et al, 1998) are operationally defined as scores on the Adverse Childhood Experiences (ACE) scale. Adult Parenting Style is operationally defined as scores on the "What's Your Parenting Style?" questionnaire (Active Parenting Publishers, 2024).

Humanities Symposiums

Baird Hall, room 125

Symposium #1: Ancient Poetry

1:30 – 2:30 PM

"The Questioning of Odysseus" -- Matthew Oberrieder; Rogers State University

Odysseus' arrival on the island of Scheria, home of the Phaiakians, initiates a series of questions about his identity. At the same time, Odysseus has questions of his own about the Phaiakians, including why they repeatedly ask him about his suffering experiences before arriving to their

island. Odysseus eventually declares his identity and proceeds to narrate the episodes of the Odyssey that are best known and most beloved by readers. Odysseus' initial reluctance to answer questions, and his subsequent emergence as self-narrator, however, should prompt questions in the reader about Odysseus' reliability in narrating the central episodes of the Odyssey. This presentation explores the interplay among these three sets of questions for understanding Homer's presentation of the drama.

"Vergil and the Poetics of the Question" -- Matthew Maynard; Regent Preparatory School

Vergil's prologue to the Aeneid ends with a question mark: "Can such anger grip the minds of the heavenly ones?" Dido's speech, after beginning with an assertion (Aeneas is a traitor), quickly devolves into a litany of questions. Aeneas' famous hesitation at the conclusion of the epic is punctuated by a question in the hero's final words to his enemy. These scenes and others show that the interrogative mode was a favorite device of this poet. Consideration of poetic questions offers a way into thinking about the relationship between author and audience, a relation that is fundamentally different in the case of Vergil as compared with the Homeric poems with which he is continually in dialogue.

Symposium #2: David Hume

2:45 – 4:00

"Moderation through Skepticism: Arguments for a Forgotten Virtue in the Essays of David Hume" -- Jeff Holman; Independent Scholar

David Hume is often remembered largely as a religious skeptic and bete-noire of divines and traditionalists. Relatively recent revivals of interest in Hume (by, for example, Richard Rorty and other "pragmatists") have conjoined a celebration of Hume's skepticism and anti-essentialism with radical or at least radically liberal politics. But Hume himself, while a thoroughgoing skeptic, argued for political and moral moderation. This discussion will explore the relationship between skepticism and moderation in Hume's essays, with a view to uncovering features of both positions, while also exploring why that relationship may appear less tenable in contemporary thinking.

"David Hume's Of the Standard of Taste" -- Michael McKeon; Rogers State University

Is beauty an objective property of objects? Or is the experience of beauty something entirely subjective as Scottish philosopher David Hume believed? As vexing a problem as this is, Hume thinks he's discovered five principles essential to all judgements of taste regardless of beauty's ontological status. In drafting them though, did Hume assume a particular understanding of art? If he did, are the five principles still relevant today? If not, would it be because Hume never would have accepted some forms of modern art? These and other questions shall be addressed in the paper.

"Agency, Authorship, and Honor in Calderón's *La dama duende*" -- Gioia Kerlin; Rogers State University

"Honor" as a theatrical convention was foundational to the 16th and 17th Century Spanish comedias. A man's honor was closely linked to how he was perceived socially: his relationship with his conscience, the external world, and his fate. But in the theatre a woman's honor often hinged on the uneasy interplay between her own sense of self, and her treatment as a woman and her limited social roles. In Calderón's *La dama duende*, Angela--a young, imaginative woman recently widowed--is depicted as an individual in her own right, although constrained by the roles that are available to her. I propose to discuss the protagonist and how she confronts herself, both

figuratively and literally, in the alacena--the glass cabinet her brothers station in front of her door that constrains Angela's movement. In this play, Angela employs a series of disguises and pretexts to write her own narrative about who she is and what she does as she moves through her cloistered, honor-bound existence as a widow in her brothers' home, into the reality she creates for herself. Angela's actions and words alternate between the expected and the novel; she moves between private and public, feminine and masculine spaces as author of her own experiences. Angela shows herself to be not so much a captive of Spanish theatre's honor code, but rather an active agent who fulfills her own needs.

Closing Remarks and Distinguished Paper Award
Baird Hall, room 121

4:15 – 4:30 PM

Conference Steering Committee

Jim Ferrell
Frank Grabowski
Christi Mackey
Mary Millikin
Matthew Oberrieder
Lori O'Malley
Eileen Richardson

