

FACULTY POSTER SESSION ABSTRACTS

POSTER #F1

"Justice-Centered Ambitious Science Teaching: A Look into Classrooms"

Presenters: April Luehmann, Molly Wilson, Adma Gama-Krummel, and Sarah Sarchet

Abstract:

The development and use of the empirically-supported and theoretically grounded Justice-centered ambitious Science Teaching (JuST) Framework (Luehmann et al., 2024; Luehmann et al., any day now) was the focus of a recent cross-site National Science Foundation grant (#2101217). During two years of the four-year project, professional learning communities of science educators in three states engaged in cycles of design-based research to design and refine classroom based practices that center justice. Together, the project team of teachers and scholars have authored a book of this work. We will share the research efforts that led to practices featured in this book as well as some of the justice-centering practices themselves.

POSTER #F2

"Profiles in Racial-Ethnic Identity, Patterns in Pain: A Latent Approach to Online Racial Trauma"

Presenters: Ziqin Li, Ye Ding, Amanda McLeroy, and Nestor Tulagan

Abstract:

This study explored how racial-ethnic identity (REI) dimensions (exploration, affirmation, and resolution) relate to daily racial trauma exposure among racially minoritized emerging adults. Using latent profile analysis (LPA) on data from 199 U.S. college students (ages 18–29), we identified three identity profiles: developing, diffused, and achieved. While group differences in trauma exposure were not statistically significant, regression analyses showed that exploration predicted greater trauma exposure, particularly in the developing identity group. Findings suggest that REI exploration may heighten sensitivity to racialized experiences in the absence of strong affirmation or resolution. These results underscore the need to consider identity profiles in understanding how youth experience racial trauma and inform interventions that support identity development alongside coping.



2026 WARNER RESEARCH DAYS

POSTER #F3

"Research and Practice in STEM Education: Development and Validation of the Northeast Noyce Research Framework"

Presenters: Simao Luis, Michael Daley, and Cathy Cerosaletti

Abstract:

The persistent shortage of qualified STEM teachers in high-need schools continues to influence educational equity and workforce readiness in the United States. While the Noyce Teacher Scholarship Program has strengthened teacher training, recruitment, and retention, less attention has been given to how research produced within Noyce initiatives is translated into practice. This study presents the development and validation of the Northeast Noyce STEM Education Research Framework, designed to bridge the gap between research and practice through stakeholder feedback and insights. Using a sequential mixed methods design, Phase 1 integrated survey responses (n = 182), conference workshop data, and crowdsourced stakeholder input to generate and refine key research domains. Phase 2 employed a follow-up survey (research importance: n = 49; teaching practice: n = 43) to assess practitioner perceptions of the framework relevance and alignment. Findings confirmed strong stakeholder agreement that all nine framework domains were highly important, with strong emphasis on early career teacher development, teacher recruitment and retention, professional learning, curriculum and instructional strategies, and technology and AI in education. The validated framework offers a regional, practitioner-informed guideline to inform future research, professional learning networks, and improvement efforts in STEM teacher education in high-needs schools.

POSTER #F4

"Interest-Driven Core Skill Building in the Age of AI"

Presenter: Yu Jung Han

Abstract:

The growing concern in education is that the overreliance on AI may take opportunities away for students to develop foundational core skills. This poster addresses such concern by suggesting core skill development through interest-driven practices: A three-year observation of Reddit discussions on creative writers' use of AI revealed exemplary practices that offer insights for learning in the age of AI, and this observation motivated an expanded focus on AI use of other interest-driven practices. This poster presents a synthesis of Reddit posts and recent literature (2023–2026) on AI use across three groups of interest-driven practices: creative writers, online gamers, and Korean pop (K-pop) fandom. A synthesis of sources from the three groups suggests that the themes emerging from these practices may serve as meaningful counterpoints to current concerns about AI among students. Taken together, these insights suggest that interest-driven AI practices may offer promising directions for supporting students' core skill development in the age of AI. The purpose of this poster is to (1) present the motivation and starting point of a study currently in development, (2) share the emerging themes from the synthesis, (3) gather feedback to refine the research direction, and (4) connect with potential collaborators interested in this topic.

