Program Transformation: Working Smarter (Not Harder) Toward Meeting the AMTE Standards for Partnerships and Equity

Introduction and Relevance to AMTE Members

In 2017, the Association of Mathematics Teacher Educators (AMTE) set forth a comprehensive and aspirational set of standards for teacher preparation programs. More recently, the education field has begun grappling on a larger scale with issues of equity and how to better prepare teachers (Darling-Hammond, 2020). Additionally, the top two 2020-2024 AMTE priorities are to provide resources and strategies for both (1) "the recruitment, retention, and diversification of the mathematics teacher pipeline", and (2) "the recruitment, retention, and diversification of the mathematics teacher educator pipeline" (AMTE, 2019, p. 1). Further, AMTE's position statement (2022) supports and recognizes AMTE's continued commitment to promote diversity, equity, and inclusion in mathematics teacher preparation programs. It is through program transformation toward AMTE's *Standards for Preparing Teachers of Mathematics* (2017) that retention and recruitment of teacher candidates can bring about a diversification of future teachers and teacher educators.

Thus, a number of mathematics teacher educators have been working to transform their teacher preparation programs to better align their programs' goals, structures, and outcomes with the AMTE Standards (e.g., Authors, 2020). Significant program improvement requires effective leadership and vision (Elrod et al., 2023), along with one of the most precious resources in education: time. Further, teacher preparation programs at the tertiary level require effective partnerships with K-12 districts, particularly to enact and sustain improvement efforts (e.g., Farrell et al., 2021). Although every program has unique contextual factors, those seeking to make transformational changes can accelerate their efforts by working collectively as part of networked improvement communities (NICs; Bryk et al., 2015). This proposed session will provide examples of communities working on program transformation toward AMTE's Standards (2017) and long-term goals (2019) with attention focused on how change leaders align the work of transformation with other job expectations.

Goals for the Session

We have two major goals for this session: (1) Discuss with attendees how the work of program transformation can be connected to job responsibilities and recognition; (2) Consider effective ways to bring advocacy and navigating politics into the work of program transformation, both for advocating for oneself as mathematics teacher educators and for equity-oriented program goals. Program improvement work takes time; we will share our research on what has worked for others so far, as well as engage session attendees' related to successes and challenges they have experienced. .

Connections to Research

Our initiative responds to the challenge of improving mathematics secondary teacher education in equitable ways, from the ground up, using NICs (Authors et al., 2020; Bryk et al., 2015). A NIC design allows for testing diverse approaches by examining cycles of planning, doing, studying, and acting (Bryk et al., 2015). Hence NICs form a framework for studying leadership in improving mathematics secondary teacher education, because it allows for sensitivity to different contexts while also providing a coherent framework.

To study leadership around institutional transformation for equity, we conducted a purposive sample of 23 focus group and individual interviews in Spring 2023 from 11 NICs.

These interviews involved faculty, administrators, and K-12 partners. In interviews, institution team members reflected on efforts to recruit and retain a more diverse population of teachers, as well as the barriers and successes they have encountered. We analyzed interviews for effective local variations in collaborative structures, and the leadership supports that enable secondary mathematics teacher preparation transformation efforts. To do so, we coded interviews for reports of change leader moves (Elrod et al., 2023) and NIC processes (Bryk et al., 2015). In our coding, three prominent moves were: engaging in advocacy and navigating politics; preparing for long-term success; and using a lens of diversity, equity, and inclusion to situate work. We use our analysis of these moves and how they influenced the trajectory of teams to inform this session. In particular, the advocacy and policy findings relate to how mathematics teacher educators navigated the work of program transformation with respect to their local expectations and responsibilities to gain support for their work.

Connections to Practice

AMTE members are necessarily involved in aligning their programs with the AMTE standards (2017), but this takes time. It can be difficult to prioritize time spent on transformation efforts unless that time is recognized and rewarded. Such recognition or expectations are unique to local contexts, but the NIC structure allows others to learn from and adapt what has worked in some contexts to their local contexts. AMTE members who do not yet have supportive structures may be interested in learning from each other via discussion, to lead to better local transformation efforts, potentially associated with structural and policy changes.

Structure of the Session and Participant Engagement

We will open the session with a brief overview of our work and research on leading NICs in program transformation efforts (**5 minutes)**. We will then move into an interactive discussion with small groups. This discussion will open with small groups doing brief introductions and discussing two prompts (**8 minutes)**: What is your primary role with respect to mathematics teacher preparation? How well does your local teacher preparation program align with the 2017 AMTE Standards?

We will then facilitate 30 minutes in which attendees are divided into 3 groups of 3-5 attendees (or a multiple of 3 groups). Each group will be asked to respond on chart paper to one of the following prompts. Groups will have **10 minutes** to respond to their assigned prompt before rotating the paper to the next group. The second group will have **10 minutes** to either add or pose questions to the initial response. Papers will rotate one final time, with the last group adding thoughts and preparing to share out ideas **(10 minutes)**.

- To what extent does program transformation to align with AMTE Standards fall under your "normal" job responsibilities? What kind of recognition or credit, if any, do you get for your program transformation work?
- One key to aligning a mathematics teacher preparation program with the AMTE Standards is to establish and sustain productive and co-equitable partnerships between higher education institutions and K-12 districts. What kind of recognition or credit, if any, do you get for the time and effort you put into establishing and sustaining productive partnerships related to improving mathematics teacher preparation?
- What are some policy structures that you have or want that could better support program transformation efforts?

In the remaining **17 minutes** of the session, groups will share ideas from their final paper as we facilitate discussion and make connections to our research. We will engage attendees in considering next steps in program transformation with a closing reflection: 3 ideas learned

during the session, 2 ideas attendees plan to share with others, and 1 action item to be taken up in the next week.

References

Association of Mathematics Teacher Educators. (2017). *Standards for preparing teachers of mathematics*. Retrieved from http://amte.net/standards

Association of Mathematics Teacher Educators. (2019). *AMTE 2020-2024 Long-term Goals*. Retrieved from https://amte.net/sites/amte.net/files/AMTE%202020-24%20Long%20Term%20Goals.pdf

Association of Mathematics Teacher Educators. (2022). AMTE Statement on equitable and inclusive mathematics teaching and learning. Retrieved from https://amte.net/sites/amte.net/files/AMTE%20Statement%20April%202022.pdf

Authors. (2020).

Bryk, A. S., Gomez, L., Grunow, A., & LeMahieu, P. (2015). *Learning to improve: How America's schools can get better at getting better.* Harvard Education Publishing.

Darling-Hammond, L. (2020) Accountability in teacher education. *Action in Teacher Education, 42*(1), 60-71. https://doi.org/10.1080/01626620.2019.1704464

Elrod, S., Kezar, A., & González, A. J. (2023). *Change leadership toolkit: A guide for advancing systemic change in higher education*. Pullias Center for Higher Education, University of Southern California. Retrieved from https://pullias.usc.edu/change-leadership-toolkit/

Farrell, C. C., Penuel, W. R., Coburn, C., Daniel, J., & Steup, L. (2021). *Research-practice partnerships in education: The state of the field.* William T. Grant Foundation. Retrieved from https://files.eric.ed.gov/fulltext/ED615899.pdf