A well-prepared beginning secondary mathematics teacher embraces the goal of academic success for each and every student, and also understands how social, historical, and institutional contexts affect teaching and learning (Association of Mathematics Teacher Educators [AMTE], 2017). As the members of the MTE-Partnership consider the preparation of future secondary mathematics teachers, we must respond to these challenges to produce knowledgeable and committed advocates for each and every child.

**Problem Addressed and General Approach**

The Equity and Social Justice Working Group (ESJWG) was formed to support each Research Action Cluster (RAC) as well as the MTE-Partnership as a whole in order to achieve the aims identified in each of the driver diagrams. Specifically, the aim of the ESJWG is to attend to both the equity-driven dispositions of future secondary mathematics teachers as well as ensure they are well equipped to implement equitable teaching practices. This aim has two foci, for the future secondary mathematics teachers to see themselves as advocates, and for them to have the tools to achieve that goal. Along with this aim statement, a first draft of a complete driver diagram for the ESJWG was completed in early 2018; see Figure 1. The driver diagram identifies the primary drivers necessary to advance the aim as well as the secondary drivers, which serve to describe the system components that we hypothesize will activate the primary drivers. Finally, the change ideas for the ESJWG, as listed in the driver diagram, are initial thoughts on processes to be tested relative to the associated primary and secondary drivers through Plan-Do-Study-Act (PDSA) Cycles.

![Figure 1. ESJWG driver diagram.](image-url)
With the first draft of the driver diagram (i.e., theory of change) established, ESJWG also sought to refine its role within the MTE-Partnership. It was recognized that the ESJWG buttresses the five current primary drivers in the driver diagram of the MTE-Partnership: transforming programs, creating a vision, improving clinical preparation, increasing content knowledge, and improving recruitment and retention. Furthermore, equity and social justice issues are underlying values in all elements of the preparation of future secondary mathematics teachers. Thus, equity and social justice stands apart as a secondary driver distinct from the other RACs. With these dual roles in mind, this refined understanding of the role of the ESJWG led to a revision of the MTE-Partnership driver diagram, shown in Figure 2. Added are the gray U-shaped figures expressing the roles of equity and social justice in each of the other primary drivers, as well as the ESJWG added as a secondary driver.

![Figure 2. MTE-Partnership driver diagram after ratification of the ESJWG.](image)

With the aim identified, and drivers established, the ESJWG subsequently initiated liaison structures with the other RACs and launched a small number of PDSA research cycles during the 2018–19 academic year. Two of these research projects are especially worth noting, as they seem to have gained some ongoing interest. One subgroup of the ESJWG seeks to identify resources that could support teacher educators attending to equity within their practices. In particular, how these might be catalogued in such a way to make them accessible for interested mathematics teacher educators. A second subgroup began to consider how we might measure our aim, specifically...
the equity-directed dispositions. They began to explore the EQUIP tool developed by Reinholz and Shah (2018),
which will be piloted with future secondary mathematics teachers. A final, significant project of the 2018–19
academic year was to contribute a chapter to the forthcoming MTE-Partnership monograph (Martin, Lawler,
Lischka, & Smith, 2019). The chapter highlights the development of the group’s driver diagram, and identifies
factors that impact the extent teacher educators, future secondary mathematics teachers, and in-service teachers
attend to equity within their instructional practices.

**Accomplished During 2019 Conference**

The 2019 Conference had social justice and equity emphasized in a number of different ways. The theme
for the conference (“The MTE-Partnership: Transformation. Equity. Leadership.”) included an explicit emphasis on
equity. Moreover, equity and social justice were mentioned in six different presentation titles, and seven different
presentations were facilitated by members of the ESJWG on the program. Furthermore, keynote speaker Etta
Hollins explicitly addressed issues of equity and social justice in regard to program transformation and evaluation.
Similarly, Kathryn Chval’s keynote address discussed the notion of disruption and what it means in terms of
education and program transformation. Based on the presentations and conversations among members of the
various RACs, it is clear that issues of equity and social justice are permeating through the entire partnership in
different ways and are being viewed as of central importance to the MTE-Partnership. There was also a program
transformation discussion session prompted by MTE-Partnership membership input, which considered how issues
of equity and social justice are integral parts of the various mathematics teacher educators’ local program
transformation efforts. Therefore, we are now reflecting on how the ESJWG can support and interact with teams
and their goals to attend to equity and social justice in their program transformation efforts.

The ESJWG also discussed the liaison structure because most members of the working group are also
members of RACs and serve as liaisons to the RACs they work within. We also have liaisons who are not active
members in the ESJWG, yet these individuals have volunteered to serve as liaisons between the RACs they are
active members within and the ESJWG by occasionally joining monthly meetings calls and communicating between
the group and their RACs. Thus, we have two different types of liaisons, which we are still working on clearly
defining and differentiating in terms of their specific roles. The emphasis on considering program transformation
within teams also increased, which means future consideration needs to be placed on how the ESJWG might liaise
with both RACs and institutional teams.

Additionally, we considered the structure of communication between the RACs and the ESJWG.
Particularly, during a discussion session held at the conference, members of the Mathematics of Doing,
Understanding, Learning, and Educating for Secondary Schools (MODULE(S²)) RAC suggested having some formal
structures in place. MODULE(S²) wondered when would be the best time to contact the ESJWG and through what
means. To make our interactions with other RACs more robust we are planning to have each RAC have their liaison
sign up for one of our monthly meetings and present issues they are facing and would like to obtain feedback on,
or to share their current scholarly efforts related to issues of equity and social justice. There was also discussion
related to possible PDSA Cycles and research projects that are collaborations between RACs and the ESJWG. For
example, members of the ESJWG can create a measure relative to the group’s overarching aim, which could be
refined and validated through work being done in the various RACs. The ESJWG can also collaborate with other
RACs to examine a phenomena from an equity and social justice stance.

During the 2019 MTE-Partnership Conference, the ESJWG invited liaisons to facilitate dialogue with their
RAC focusing on deficit ideologies (Aguirre et al., 2017) and courageous conversations (Boyd & Glazier, 2017). The
various RACs were asked to: reflect on the extent they addressed deficit ideologies; review their driver diagrams
and aim statement for the extent it focused on deficit ideologies; describe challenges that they may face during

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efforts to address deficit ideologies; discuss the extent their RACs facilitate and nurture courageous conversations; and explicate how ESJWG can help the RACs address challenges faced. All of the RACs provided feedback on the emergent themes of their discussions related to the prompts.

To address deficit ideologies, it was suggested that messaging campaigns ought to focus on reframing the narrative to promote inclusive and equitable practices in mathematics teaching and learning. The public discourses, resources, and other forms of communications utilized within school settings also should seek to acknowledge inequities and opportunity gaps that exist. Additionally, it was recommended that professional development training, which focuses on non-productive discourse and deficit language, can help individuals become aware of implicit bias, deficit ideologies, and strategies that can empower individuals to be change agents (Hernandez, Morales, & Shroyer, 2013; Martin, 2012; Priestley, Edwards, Priestley, & Miller, 2012; Riegle-Crumb & Humphries, 2012; Stein, Engle, Smith, & Hughes, 2015; White, Crespo, & Civil, 2016).

The extent to which RACs attend to deficit ideologies varied. In some RACs, the concept is not directly addressed, while, in other RACs, attending to deficit ideologies is embedded in the team’s PDSA Cycles. For instance, in the Clinical Experiences RAC, the team plans to examine the nature of clinical experiences with a lens of equity and will consider how equity is attended to in various mathematics teacher education programs. The Active Learning Mathematics RAC also noted that they considered gradual introductions of the ideas presented and the use of strategic hiring to help to advance change ideas at their institutions.

The RACs acknowledged that they are challenged to attend to deficit ideologies due to time constraints, and lack of professional development training for them and their colleagues, or resources that could be used. Therefore, the ESJWG can seek to provide training modules on deficit ideologies that can be used to educate individuals of means to facilitate messaging campaigns, as well as facilitate faculty learning opportunities that are time sensitive.

Moreover, to support courageous conversations, there is a need to engage in conversations with faculty and students. The conversations with faculty can focus on how the programs can support diverse candidates, and how to foster community partnerships that focus on addressing disparities. The conversations with students should focus on challenges various groups face, which may mirror the institutional climate and culture. It was also suggested that space should be created for students (i.e., future secondary mathematics teachers) to work with faculty to achieve various RACs goals and engage in courageous conversations. Furthermore, the networks formed within the RACs provide opportunities for various team members to navigate difficult circumstances. Nonetheless, the extent to which the various RACs attend to courageous conversations and deficit ideologies could be enhanced and could be a point of further focus by the ESJWG in liaising with RACs.

**Plans for the Coming Year**

At the 2019 Conference, the ESJWG charted the course for the upcoming year. One of the goals identified is to document all aspects of the PDSA Cycles and report lessons learned within the group. Particularly, members were asked to record two PDSA Cycles per semester and share at least one of those cycles with the group during the monthly online meetings. Another related goal is for members of the ESJWG to expand their research activities related to issues of equity and social justice, which may be independent of their RAC work. Additionally, for the upcoming year, the ESJWG will plan to develop a survey that documents secondary teacher preparation programs’ structures and their policies and practices that attend to equity and social justice. Surveying programs will help to get a general sense for how programs are structured, what role issues of equity and justice play in programs, and what proportion of programs incorporate issues of equity and justice. The survey instrument also can help to identify exemplary programs that seek to prepare future secondary mathematics teachers to support equitable learning opportunities, address social justice issues, and be agents of change. After identifying exemplary

programs, the ESJWG will subsequently and purposefully select programs to investigate how their programs were transformed, and the barriers the programs faced and how they overcame those barriers (or did not), in an effort to gather insights into program transformation. The information garnered could be translated to make similar transformations across the membership of the partnership.

**Opportunities for Engagement**

Membership in ESJWG is by individual, not by team, like in each of the RACs. There are two types of members in the ESJWG: those who are active, and those who serve as liaisons. The active members are fully invested in the research project defined in the ESJWG driver diagram. This includes supporting the development of PDSA Cycles, responding to inquiries from other RACs, and considering the structures for effective liaising with the RACs. There are also members of ESJWG who are exclusively liaisons to the RACs to which they belong. They serve primarily as a point of contact between ESJWG and their RAC. Occasionally they will bring a problem of practice to ESJWG, and occasionally ESJWG will do the same. Most of the active members also participate in other RACs, and in that way serve as liaisons as well.

The ESJWG meets monthly via an online video conference call for one hour. These meetings are attended by its active members. Liaisons are welcome as well; however, liaisons typically participate when there is a relevant agenda item.

During the upcoming academic year, 2019–20, the ESJWG monthly meetings will be structured to devote a significant portion to advancing a research agenda. Five of the meetings will be led by a liaison in order to examine the development or outcome of a PDSA Cycle from their RAC. The remaining meetings will have a similar focus on analyzing the design or result of a PDSA cycle, but for research conducted by active members of ESJWG rather than the other RACs.

All individuals in the MTE-Partnership are welcome to join the ESJWG at any time. Individual members are welcome because unlike RACs, ESJWG does not require team-based membership. ESJWG is a place to have focused conversations, specifically about advancing equity and justice issues in each of the RACs. If you are interested in this sort of role, we encourage you to become a liaison or an active member. Please contact Brian R. Lawler at brian.lawler@kennesaw.edu to express your interest and join.

**References**


