

NSF Localizing HQIM Conference Summary

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Overview of Conference

On February 6-7, 2025, the Lawrence Hall of Science hosted a conference funded by a National Science Foundation grant "Promoting Equity Through Localization and High-Quality Instructional Materials: Bringing Together Practitioners, Researchers, and Designers [DRL#2413236]. The project sought to bring together a diverse and representative group of contributors from across the educational landscape to address the following Conference questions:

- What does localizing mean, in the context of HQIMs, and what are the perceived benefits of localization as a strategy for increasing equitable learning across a variety of community and K-12 contexts?
- What are current approaches to localizing instruction, in the context of HQIMs?
- What is needed to better support efforts for localized, scalable, high quality instructional materials?

We sought and received applications from individuals with varied roles and expertise, including teachers and instructional leaders, school and district administrators, educational researchers,

and instructional materials designers. An important aspect of our selection process was ensuring diversity, equity, and inclusion among participants. We aimed to the best of our ability to include individuals who represent different career stages and levels of experience, come from various geographic regions (including urban, suburban, and rural areas), reflect diverse racial, ethnic, and cultural backgrounds, and perspectives from underrepresented communities in education. The project also maintained an national advisory board who assisted in the recruitment and selection of the in-person conference participants.

Prior to the conference, participants were asked to complete a pre-conference questionnaire on current efforts underway and reflections on how the field is defining key aspects of the project, such as localization. During the conference, individuals and teams working at the nexus of equity-driven teaching and learning, localization for learners, and high-quality instructional materials, presented on successes, strategies, and challenges among their efforts. Participants also gathered in eleven "working groups" to discuss and identify emerging areas of focus for the field to both leverage current field strategies and advance solutions to mitigate challenges.

Analysis and Takeaways

The Lawrence team conducted an analysis of the Conference artifacts including the Pre-work Questionnaire; the Research Presentation slides; the Working Group notes; the Working Group Recommendations and Actions Posters; and the End of Conference Survey. Across these sources eight main themes were identified. We describe each theme, including representative quotes from conference artifacts.

1. Equity and justice need to be explicit in definitions and approaches to localization.

"How do we ensure that equity is in it from the ground up? So it's not reinforcing existing power structures?"—Working Group 2/3 Notes "Some of the language surrounding the concept of localization will be flagged as 'woke' in my state and as such will thwart any opportunity for reasonable dialogue"—Conference Pre-work Questionnaire

One Working Group (Group 4/5) worked on improving the working definition of localization to explicitly incorporate the five Equity Frames from the National Academy Report on Equity. Many participants noted the need for a critical perspective on localization and the need to disrupt notions of who does science and how. Participants also noted a risk that even if well intentioned, localization efforts could reinforce stereotypes and center the dominant culture. Finally, participants noted that given the current political climate, pursuing localization may present certain challenges. However, they also suggested that localization could serve as a politically viable approach to advancing equity-related goals.

2. Consideration of equity must also take into account who is doing localization, how, and for what purposes.

"Those who write and create curriculum hold power, and with that, often identities that are not shared with local communities..."—Conference Pre-work Questionnaire "Sometimes local folks don't get a seat at the table because they are the ones getting studied."—Working Group 2/3 Notes

A number of challenges were raised about how to incorporate needed perspectives and expertise in localization efforts. It was noted that both teachers and instructional materials developers may not share identities with the local communities. The need for incorporation of Indigenous epistemology was noted, as was the importance of, and challenges of, meaningful collaboration with families and communities.

3. Localization is more than geography.

"It's so easy to believe that what this means is the goal is SOMETHING CLOSE BY."—Working Group 6b Notes "We don't limit or essentialize what students are interested in based on where they live"—Conference Pre-work Questionnaire

Across sources many participants noted the idea that localization should be defined more broadly than inclusion of geographically local phenomena; some participants even described this as a revelation they experienced during the conference. For example, one participant noted that students from immigrant groups might have connections to other geographic locations; participants also discussed cultural relevance, identity, community, and other dimensions of 'locality' like shared temporal experiences (such as wildfires). Participants also noted the importance of providing students with "windows" to allow students to expand their experiences of the world.

4. The relative importance and benefits of localization remain an open question.

"Local does not always mean more engaging to the students. And it doesn't always result in rigorous learning"—Conference Pre-work Questionnaire

"We need to back up to what is localization, and we need that to answer why it's important."—Working Group 4-5 Notes

"I'm wondering if localization is a little narrow."—Working Group 11 Notes

While many of the conference attendees shared a perspective that localization is a valuable goal, there remain questions about what the hypothesized effect of localization is, and whether efforts are achieving that effect. Some participants noted that we still need to answer the question of why localization is important, to what end we are localizing, and how we would measure and define success.

5. Efforts to localize can be in tension with the design of high quality instructional materials.

"NGSS-built curricula are particularly difficult to adapt and modify ...it's all so interconnected.. [It's a] tapestry, if you unravel one thread..."—Working Group 6a Notes "If we replace a unit phenomena, do we... make the instruction less rigorous or less NGSS aligned?—Conference Pre-work Questionnaire "If you customize too much you lose the storyline and coherence"—Working Group 7 Notes "[Need for] designing instructional materials from the inception intended for localization and then supporting teachers/districts to localize them. This approach in theory should be easier ... since the materials are designed with adaptation in mind."—Working Group 6a Notes

Many participants noted the inherent challenge in localizing instructional materials that were designed to be coherent and follow a storyline model. The heuristic "don't change the anchor phenomenon" was echoed by multiple participants who have had experience working with teachers to localize HQIM. Some ideas have begun to emerge about approaches for designing instructional materials that are more supportive for effective localization, and there was discussion that HQIM designers could do a better job of making visible points of customization (including opportunities for localization beyond the anchoring phenomenon) with guidance and principles to support customization and localization.

6. Localization efforts can/should involve all levels of the educational system.

"Districts and states can have important advocacy, networking, and legitimizing roles to reduce some of the "lift" for teachers — not doing the hard work for them, but making it less controversial or risky for them to do it"—End of Conference Survey.

The conference design intentionally brought together participants from many parts of the education system, including state level supervisors, district leaders, building

administrators, and teachers, as well as researchers and non-profit organizations. A number of participants noted in their End of Conference Survey that they had expanded their ideas of the roles these different levels of the system could play, and had new ideas about how localization efforts can and should consider the role of all levels of the educational system and partners external to official systems. One Working Group (WG 8, Partnerships and Community) drafted a map of what partnerships for localization could look like across classrooms, schools, districts and state level actors.

7. Support for teachers is important, and the burden of localization should not be placed solely on teachers.

"One of the major challenges of placing the burden of localization on teachers and their communities is the significant time and effort required to adapt instructional materials, especially when high-quality curriculum development typically takes years"—Conference Pre-work Questionnaire "Barring a serious investment in ongoing teacher professional learning and support, localization will continue to be a hit and miss affair. Hit and miss is not a scaling or an equity building strategy"—Conference Pre-work Questionnaire "[Localization is] possible if done in an appropriate context and supported with curriculum-based professional learning to build teacher capacity to do it well"—End of Conference Survey.

"[We could] build a progression for teachers with respect to implementation, including localization/customization as they get further along"—Working Group 7 Notes

Participants expressed concern about placing the burden of localization on teachers, noting the significant demands of classroom teaching, the expertise needed, and the limited time (and resources) teachers have. However, successful models of supporting teachers in localization work were also discussed. Participants emphasized the importance of support for collaboration and the value of doing this work as part of a professional learning community. Participants also noted that these experiences could be valuable professional growth for teachers, support for their pedagogical design capacity, and that localizing instruction could provide an avenue for teachers' creativity and prove empowering.

8. The field needs examples and counterexamples, vignettes, and case studies to further establish existence proofs and a range of models.

"Are there vignettes? How do we use examples and some good models to illuminate the various ways localization can happen?"—Working Group 2/3 Notes

"We will need to rethink the way we use the power of storytelling to share great examples and models of localization efforts that illuminate what is possible and inspire and unlock possibilities for others"—Conference Pre-work Questionnaire "[We need] examples of successes and failures (non-examples)"—Working Group 6a Notes "It's also worth it to have BAD examples of localization -- traps you can fall into!"—Working Group 6b Notes

Across many different conversations, the value of identifying and sharing examples, counter-examples, vignettes, and stories was raised. Many examples and models were shared during the conference and the idea of creating a repository for such resources was discussed.

Suggested Citation:

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