Developing a network of regional inquiry-based learning (IBL) communities: Preliminary findings & key learnings on a grassroots initiative

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Developing a Network of Regional Inquiry-Based Learning (IBL) Communities:

Now COMMIT:
COMmunities for Mathematics Inquiry in Teaching

Preliminary Findings & Key Learnings on a Grassroots Initiative
COMMIT: COMmunities for Mathematics Inquiry in Teaching

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1. COMMIT Infrastructure
Layers of the COMMIT Network

- COMMIT Network
- Regional Communities
- Individual Members
2. Year One Findings

How are individual members engaging? To what extent do they find value and in what activities?
Value Creation Framework

Year One
Annual Report
Network: Regional Communities: Surveyed Participants

82 percent of participants said that they expanded their IBL network with math faculty peers. An additional 7% of faculty stated they were “unsure” if they expanded their IBL network because they were already embedded in the network.

23%-32%-20%-25%

Not Familiar At All- Somewhat Familiar- Familiar- Very Familiar (e.g., helped lead an event)

Diversity of familiarity with inquiry and equity-oriented pedagogy prior to engaging with their community.
This network allows me to talk to people with the same interests, the same philosophy...Having people to talk to, that’s the biggest thing for me. I don’t have to feel like I’m the only one who is doing it. I have support. Others think it’s good and we exchange ideas to do better.”
 COMMIT Member Engagement

What topics are participants engaging with and talking about?
What are they finding worthwhile?
Participant Survey Results:

What are you learning?
- Basics of what active learning *is* and how it works
- Finding and adapting worthwhile math tasks
- Facilitating collaborative problem solving & utilizing student work
- Alternative ways to assess

Where is the value?
- Re-envisioning the mathematics classroom & culture (changing beliefs)
- Teaching mathematics using research based instructional strategies (e.g. 4 Pillars/MTPs)
- Engaging in the COMMIT network (support/resources)
Re-Envisioning Mathematics
Classrooms and Cultures

- Sources of mathematical knowledge/authority in the classroom
- Focus on the process vs. the product (strategies instead of answers)
- Collaboration instead of isolation
- Purpose and methods of assessment
"I learned…"

"…so much about how to take ‘textbook problems’ and make them more inquiry based. It became really clear to me how to do that."

"…[to] stay out of the students’ way, but guide when necessary."

"…How mathematicians forget how students see math problems."
Teaching Mathematics Using Research Based Instructional Strategies

- Setting Clear Mathematical Goals & Selecting Worthwhile Math Tasks
- Posing Open Ended Questions & Facilitating Discussion
- Fostering Collaborative Problem Solving
- Selecting & Sequencing Problem Presentations
- Promoting Productive Struggle

Eliciting evidence of student thinking

Smith, M., Steele, M., & Sherin, M.G. (2020). *The 5 practices in practice: Successfully orchestrating mathematical discussions in your high school classroom.*

Pivoting in a Pandemic

“[I]t was so helpful to learn about strategies for implementing IBL online. I left like in the winter I was learning in a vacuum. I know how I was teaching remotely, but couldn’t see what other people were doing.”
Finding Value in the Community during COVID-19

**Tools for Virtual Collaboration & Mathematical Modeling**
- Promoting virtual group work
- Providing access to student work in virtual spaces
- Increasing use of online engagement strategies

**Virtual Professional Development**
- Book clubs
- Webinars
- Zoom Lunch Clubs
- Virtual Workshops

**“Visiting” Active Learning Classrooms**
- No need to travel (removing barriers)
- Experiencing virtual active learning with students real time
Where do we go in Year 2?
Looking Ahead

Expanding with Intention

Toolkit

Diversity, Equity, Access & Inclusion
THANKS!

Any questions?

Find us at:

https://www.comathinquiry.org/

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