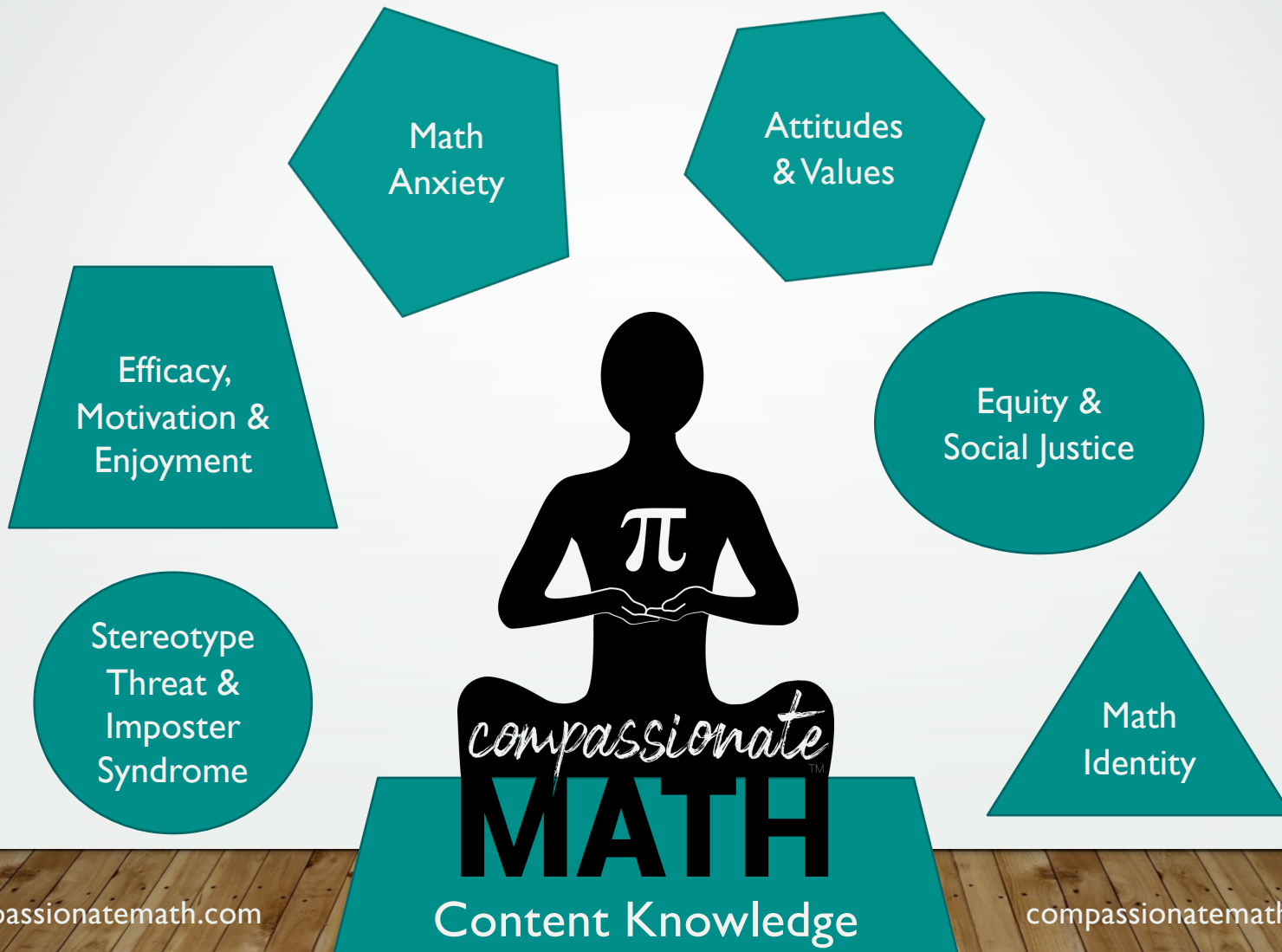


EQUITY IN INQUIRY: POWER DYNAMICS IN THE IBL MATH CLASS

GEILLAN ALY, PhD

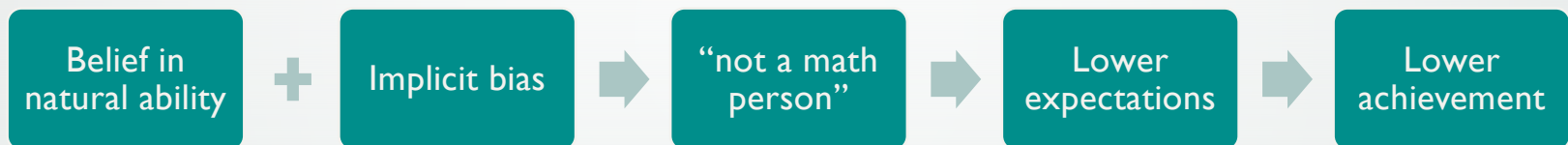
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WHERE ISN'T THERE EQUITY?

- We don't have an achievement gap in mathematics; we have an opportunity gap.
- Mathematical success is traditionally tied to ability not effort.



SURELY IBL IS DIFFERENT?

- IBL is the great equalizer in mathematics classes... or is it?
- The IBL class is not removed from our society, rooted in White supremacy and patriarchy.
- Researchers are recognizing that IBL classes also require equity to be consciously considered (Johnson, E., Andrews-Larson, C., Keene, K., Melhuish, K., Keller, R., Fortune, N., 2020; King, 2018).

CONSCIOUSLY BRING EQUITY INTO IBL

- Reflect on your own implicit biases.
- Democratize class discussions.
- Center equity through norms.
- Attend to status: A key role for the instructor.

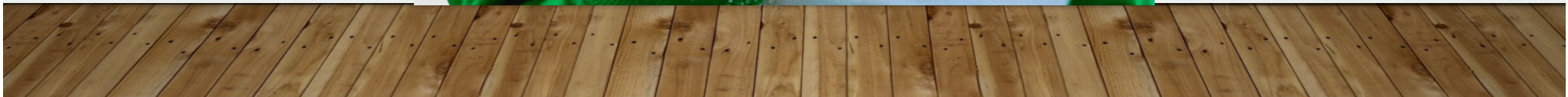
DESIGNING FOR EQUITY

- Many IBL instructors design or modify existing activities for use in classes.
- How do you ensure equitable participation?

DESIGNING

- Many IBL instr
- How do you e

ses.



ROLES MAKE GROUPS FUNCTIONAL & ACCOUNTABLE

- **Leader / Facilitator:**

- Makes sure group reads and understands directions before starting the task.
- Keeps group together.
- Ensures all ideas are heard.
- Ensures task is completed on time.

- **Resource Manager:**

- Collects materials for the task.
- Organizes Cleanup
- Makes sure all questions are group questions.
- The only person who can call the instructor over.

- **Recorder / Reporter:**

- Makes sure work is organized and complete.
- Encourages group members to make relationships among ideas clear, highlights disagreements.
- Makes sure everyone is able to present work.
- Delivers final product., ensures everyone has data.

- **Skeptic / Moderator / Includer:**

- Makes sure norms are upheld, attend to conflicts.
- Encourages participation.
- Makes sure everyone is fulfilling their role.
- Is the first person to begin sharing with the group.

Cohen, E. G., & Lotan, R. A. (2014). *Designing groupwork: strategies for the heterogeneous classroom third edition*. Teachers College Press.

Featherstone, H., Crespo, S., Jilk, L. M., Oslund, J. A., Parks, A. N., & Wood, M. B. (2011). *Smarter together! Collaboration and equity in the elementary math classroom*. Reston, VA: National Council of Teachers of Mathematics.

SHARED BOARD WORK

- Working in a group at a white board has been shown to increase student outcomes significantly (Liljedahl, 2016).
- Provide only ONE marker to students.
 - The writer cannot write their own thoughts. Must pass the marker.
 - Everyone should hold the marker for some minimal length of time (timed signal).
- Power in the activity sits in **knowledge shared** and **writing**.

DISTRIBUTE POWER IN ACTIVITIES

- Ensure all students gain at least minimal access to task and chance to deepen engagement with mathematical content / ideas.
- Provides students with opportunities to demonstrate, and be valued for their intellectual contributions.
- Models cooperative learning and social environments.
- Strengthens mathematical affect, classroom community.
- Frees instructor up to attending to larger equity issues (microaggression, dominance, etc.).

THANK YOU!



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ANXIETY

