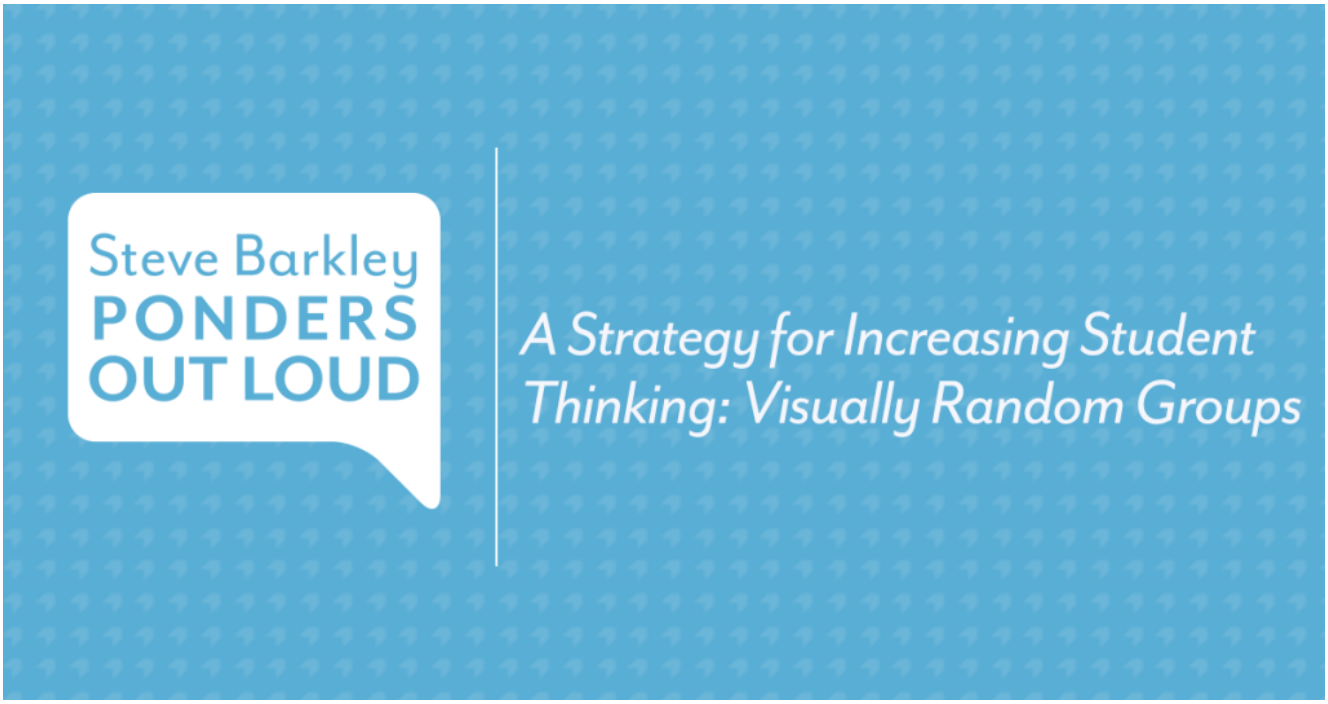
Podcast – A Strategy for Increasing Student Thinking: Visually Random Groups



Classrooms with less monologue and more dialogue are key to increasing student thinking and student learning. Peter Liljedahl recommends teachers using a strategy that publicly, randomly groups students.

The students visually seeing the groups form is an important element. When having these random groups work at easy erase vertical boards, engagement and thinking increases. Students seeing each other's work and the teacher seeing and hearing student thinking around the room all add opportunities for increased engagement in problem solving.

Mindshift: *How to Get Kids Thinking Instead of Mimicking in Math Class*

Find Laura Wheeler's blog here and read her article here.

Subscribe to the Steve Barkley Ponders Out Loud podcast on iTunes or visit BarkleyPD.com to find new episodes!

Podcast Transcript:

[00:00:00.000] – Steve [Intro]

Hello, and welcome to the Teacher Edition of Steve Barkley Ponders Out Loud. Teaching is a complex and rewarding journey, and I'm always eager to explore the many ways teachers engage students in their learning. This podcast is dedicated to supporting you, the teacher, as you inspire and guide your students. Thanks for joining me. I'm excited you're here.

[00:00:29.940] – Steve

A Strategy For Increasing Student Thinking: Visually Random Groups. "We need to ensure that classrooms are filled with dialog and not a monolog." That statement appears in the book, "Grades K-12 Rebound," by Douglas Fischer, Nancy Fray, Dominique Smith, and John Hattie. They describe the research-supported impact on students' learning when students have opportunities to talk with each other using academic language. When students have some ideas and are able to discuss those ideas with others, noticing relationships and making connections, learning can accelerate. Teachers listening as students think aloud can then coach with additional information or alternative strategies. I've explored a strategy for increasing student dialog called Visibly Random groups, or VRG, found in the work of Peter Liljedahl. He describes that sometimes teachers form the groups that students are to work in based on reasons around management or differentiation of abilities or skills. Other times, teachers allow students to form their own grouping groups. Visually random groups removes any effort to be strategic in how groups are set. Instead, teachers use a strategy that publicly, randomly, groups students. It could be matching cards or numbers, pieces of a picture, or a tech app that ensures randomness. Liljedahl asked teachers in his study to make

group work ubiquitous and to have new groups assigned randomly every day.

[00:02:35.670] – Steve

Lessons usually began with the generation of random groups for that day. Listen in on this conversation about Visually Random groups from QED Mindshift podcast titled, “How to Get Kids Thinking Instead of Mimicking in Math Class.”

[00:02:57.540] – QED Mindshift Podcast

In Stacey Dernan’s classroom, groups are selected using popsicle sticks with students’ names written on them. A student draws the names.

[00:03:06.580] – QED Mindshift Podcast

All right, go ahead. Jack, Vanessa, Nick, Luke, Alina, and Akira.

[00:03:14.200] – QED Mindshift Podcast

This way of thinking groups is called visibly random groups. It’s one of the key practices of thinking classrooms.

[00:03:21.920] – QED Mindshift Podcast

Cara, let’s break that phrase down. Random groups means that students don’t pick their best friends to work with. It also also means teachers don’t group students based on perceived ability.

[00:03:34.540] – QED Mindshift Podcast

In Peter’s research, he found that when teachers pick the groups or allow students to choose who to work with, the majority of students go into the groups expecting to play a certain role, and that role is usually passive.

[00:03:49.210] – QED Mindshift Podcast

But when groups are randomly assigned and change every day,

students don’t get locked into roles. Different perspectives get shared, and more students offer their ideas for problem solving.

[00:04:01.630] – QED Mindshift Podcast

As for the visibly part of visibly random groups, that means that students actually see the groups being selected. It turns out that unless it happens in front of them, students don’t believe the groups are truly random.

[00:04:17.880] – Steve

Peter Liljedahl’s findings from visually random groups align with what most teachers would desire as they look to increase students’ voice and thinking in learning, what some of us call students doing more of the heavy lifting in learning. Here’s his findings. Students become agreeable to work in any group they’re placed in. After a while, VRG becomes accepted as the way we do things in this class. The fact that students know the grouping as random and only last for a single class period probably encourages their acceptance. Secondly, he found that there’s an elimination of social barriers within the classroom. A familiarity with classmates arises as students have repeated short experiences with each other from day to day. Third, mobility of knowledge between students increases. As the frequency of VRG grows and teachers increase the challenge of task provided, collaboration with discussion, debate, sharing, and demonstration of ideas increases. A teacher can combine groups with differing ideas in order to extend a debate. Lastly, students become more enthusiastic about mathematics classes. It appears that combining visually random groups with increasingly challenging tasks generates students’ engagement that positively impacts learning. Interviewing students after just six weeks of a teacher’s use of VRG, Liljedahl gathered these comments: “The beginning of class is like an adventure where you find out who you’re working with.”

[00:06:29.720] – Steve

“You really have to think and collaborate in this class.” “It’s hard work, but I’m never bored.” “This class is more dynamic.” Teacher and blogger, Laura Wheeler, shares that the conversation she hears between students while problem solving are far richer with visually random groups than she previously had experienced. And she believes it also contributes to a positive culture of collaboration and sharing in her classroom. Wheeler’s blog also included her recommendations for using vertical, nonpermanent surfaces. Students are usually standing at whiteboards. In other words, she has the visually random groups standing at whiteboards around the room. She shares that working vertically, especially with easy erase whiteboards, gets students out of their seats, which seems to activate their thinking. It also allows students to see the work of other groups, which gives them ideas of things to try or perhaps what not to try. And it allows the teacher to see the work of each group at a quick glance, which promotes feedback feedback and questions to expand the student’s thinking. In a blog on EdUtopia titled, “The Student-Centered Math Class,” Willer explores the instructional power of combining challenging learning tasks with visibly random groups and vertical nonpermanent surfaces.

[00:08:22.540] – Steve

She concludes with a call to action that those of you who are working as coaches coaches might use to encourage teachers. Here’s her call: “My favorite thing about these strategies is that they can be easily implemented in any classroom. Pick a great problem, greet each student at the door with a random playing card, and get groups solving at whiteboards, chalkboards, and windows that are already available in your classroom. You’ll be amazed at the rich discussions you’ll hear and the deep thinking your students will share.” You’ll find links to Wheeler’s articles in the lead-in to this podcast, as well as the link to the podcast from Mindshift.

I’ve always found small groups for shared conversations to be effective in generating learner engagement in my classroom and in my teacher workshops. I often randomly move folks among groups when I’m working in a longer learning setting. I’ll say something like number off one, two, and three, and then all the three is move to the next group to your right. I’ve had the opportunity to observe in classrooms where teachers are using visibly random groups with vertical whiteboards, and I’ve personally witnessed a rather high engagement, as well as has increased teacher interaction with students because she’s gained the insights from watching and hearing their processing.

[00:10:12.250] – Steve

Consider experimenting with such models. If you’ve been using them already, I’d love to hear your findings. You can always reach me at barclaypd. Com. Thanks for listening.

[00:10:29.640] – Steve [Outro]

Thanks for listening, folks. I’d love to hear what you’re pondering. You can find me on Twitter or LinkedIn at Steve Barkley, or send me your questions and find my videos and blogs at barkleypd.com.