

Special issue: Innovative Teaching Personal Essays

Small Group Brainstorming

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I began teaching at my university as a visiting professor 14 years ago. My first semester on campus, I was assigned three courses to teach in the Department of Communication Sciences and Disorders. One proved to be a bit of a challenge for me on a number of levels. This more troublesome course, *Preschool Language Disorders*, was scheduled as one of several (dreaded) three-hour, once-a-week, evening courses for graduate students in my speech-language pathology program. On top of these scheduling concerns, I was no expert in the topic area for this course, having spent the bulk of my clinical career working with older children. Thus, I struggled to conceptualize HOW to teach this complex subject effectively to my students while faced with tired students who had put in a full day of class and clinic prior to our class meetings.

Despite these worries, I designed the best course experience I could envision for my students. Looking back, what I actually created that first semester was a course that imparted a lot of useful information, but did so in an ineffective manner via the use of over-laden PowerPoint slides and a fierce commitment to lecturing from assigned readings. However, across several semesters teaching *Preschool Language Disorders* in this manner, I became dissatisfied with what I observed in both my students and in myself. Students passively took notes while I actively lectured. Students memorized what was emphasized as important material, but lacked active engagement in class with me, with each other, and with the subject matter. I wondered

how deeply they were thinking about course content and whether memorizing content actually led to true understanding and/or learning. In short, I realized that any lack of engagement with the course or its content wasn't truly the students' fault. They were doing what I asked of them – and they were doing it well. Rather, it was clear that I needed to adapt my approach to teaching this material to encourage the engagement and interaction I viewed as lacking.

While not always kind, self-reflection is a valuable avenue for improvement. Knowing I had work to do, I attended workshops and spoke one-on-one with faculty developers at my university's teaching and learning center. Through these experiences, I learned about better practices in teaching and learning that I could apply directly to my classroom praxis. The Center's director at that time was particularly influential in my thinking. One of the best pieces of advice he offered (that I still operationalize today) was that in every class meeting, no matter the length of the class or the content for the session, there should be three different types of interactions evident in the classroom: instructor to students, students to students, and students to instructor. Around this same time, I became interested in evidence-based educational practices and sought out sources to better understand what research reported about effective pedagogies. In my search, I came across (and read) a book titled *How Learning Works: 7 Research-Based Principles for Smart Teaching* (Ambrose, Bridges, DiPietro, Lovett, & Norman, 2010), which emphasized that the manner in which students organize knowledge influences how they learn and how they apply what they've learned. Considered together, these ideas -- that different types of interactions in the classroom were critical and that how students organized information influenced learning -- acted as a huge "a-ha" moment for me as a teacher.

In response to this realization, I developed a start-of-the class practice that I coined "small group brainstorming" (SGB). Simply explained, I initiated a process at the start of the

following semester where I began each Preschool Language Disorders class meeting with students arranged in self-selected groups of three to four students. They were given several SGB questions (printed on a worksheet) topical to the content of that day's class to consider and address with their groupmates. These questions required students to think deeply about their assigned readings, to describe and define key terms or ideas in their own words, and/or make connections between theory and practice in speech-language pathology. In short, students interacted to organize their knowledge, in line with desired outcomes described above. As all SGB questions focused on the most important takeaways for a particular class, these questions became the outline for that class's lecture, application activities, and/or whole class discussions. Approximately 20-30 minutes were allocated in each class meeting for SGB. A sample question from an SGB exercise is presented below from a class meeting where interpretation of standardized tests was being discussed:

*There are MANY different types of scores reported for standardized language assessments. Define/explain the following in your own words and **CIRCLE** the scores that your readings suggest are appropriate to formally report:*

- *raw score*
- *standard score*
- *percentile ranking*
- *age equivalent score*
- *grade equivalent score*

Students would routinely augment their group SGB as class unfolded, correcting errors or adding depth to the information they initially provided throughout the evening. Students submitted their SGB worksheets to earn a small number of participation points each week.

I cannot lie; the design and implementation of SGB was very labor intensive for me. That said, I was so dissatisfied with my previous approach to teaching this class, the time and effort were more than worth it. During times when students were engaged in SGB, I'd walk around the classroom and listen to their conversations, noting that students were engaged in really good, deep discussions about course content. Sometimes as I listened, I'd correct erroneous assumptions or contributions. More often, students would ask me over to their group's work area to inquire about extensions of material they were reading and discussing to access knowledge and advice topical to their own clinical work, research endeavors, or personal curiosities. When reviewing SGB worksheets after class each week, I noticed that students (knowing that I'd provide individual feedback to their work) would ask me specific questions to seek additional information or context (e.g., "Dr. Friberg, when you said x in class, it made me think about y. How would that work in real life?"). Truly, the work of my students drove each course, which I found illuminating and completely satisfying. Students came to class having completed assigned tasks and readings, knowing they'd have SGB work waiting for them. Little preparatory lecture was needed any longer. Our SGB discussions took us beyond "covering content" to a place where we could focus on deeper applications of content to real life clinical practice. These outcomes were exactly what I was seeking as a positive change in this course. Student engagement rose as did the quality of interpersonal interactions across the course.

Anecdotal feedback from my students was overwhelmingly positive, both in informal conversations and in end-of-semester course evaluations. Students reported that they felt more

comfortable participating in whole group discussions after reviewing and calibrating on important topics with their peers. Students also reported being more diligent in completing assigned readings prior to class, knowing that they'd have to apply the information right away as class began. From my perspective, I noticed that students seemed more able to retain and synthesize the information that was part of SGB across the semester to integrate topics and ideas important to future clinical practice.

Overall, the genesis for SGB was the realization that what was happening in my Preschool Language Disorders course was not ideal for me as a teacher or for my students as learners. That knowledge led me to seek out help from campus experts in teaching and learning, which broadened my pedagogical horizons and gave me permission to move forward into the scary landscape of teaching in a different way than I was taught as a student! Lots of work in crafting SGB, refining its implementation, and observing outcomes of its use over several semesters followed. Quite honestly, I knew the first time that I used SGB that my students responded well to it. The buzz of excited conversations and engaged sharing was my first clue. The really amazing whole class discussion that followed was the second. That said, I had to wonder whether SGB had “staying power” to continue as an effective pedagogy. Over time, I realized that because SGB changed in content and format each week, it did, in fact, continue to be something that my students responded to with enthusiasm and depth. Had they not reacted in this manner, SGB would have likely been shelved in favor of a different approach.

Positive outcomes from the implementation and use of SGB have remained consistent across semesters and have provided a rationale for sustaining and expanding the use of this pedagogy. I tweak my SGB questions constantly in response to new science, changed readings, or adapted foci in terms of course content. The first semester I developed SGB, I used it with

solely my Preschool Language Disorders course. Today, I used SGB in every class that I teach, though I do modify this approach to align with situational and contextual needs. For instance, if I have a class that is 50 minutes long, I may only have one SGB question. Or, I might use SGB every few classes rather than for each class meeting. If I'm teaching an online class, SGB questions might be part of weekly discussion boards. The one constant that hasn't changed is the integration of peer-to-peer interaction to start the SGB, which merges to teacher-student interaction to flesh topics out and organize information for mastery. That notion represents the core of SGB that, at least for me and for my students, has been an effective way of establishing a class routine that yields a variety of positive outcomes.

References

Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M. C., & Norman, M. K. (2010). *How learning works: 7 research-based principles for smart teaching*. San Francisco: Jossey-Bass.