

Differentiated Instruction

Kagan Structures

If Kagan Structures are a vehicle through which a teacher can differentiate in the classroom, what would that look like? How is it possible to challenge high achieving students and simultaneously support lower achieving students? These are valid questions, and perhaps the best way to illustrate this is by examining differentiation at work in Kagan Structures. Highlighted below are three Kagan Structures which demonstrate how it is possible to meet the needs of diverse learners concurrently. Keep in mind these are provided as examples only; every Kagan Structure provides opportunities to differentiate. In fact, during the course of training, teachers are presented with multiple ideas on differentiation for numerous structures. However, for brevity's sake, three structures have been selected for this article. These illustrations reveal how it is not only possible but simple to differentiate classroom instruction. For each structure included, the following information will be shared: (A) Structure Overview; (B) Content Examples; and (C) Differentiation Possibilities.

1. Timed Pair Share

A. Structure Overview

Partners take timed turns responding to the teacher's question. After hearing their partner share, students share a positive response.

B. Content Examples

Timed Pair Share is an excellent structure for asking students to respond to open-ended questions. In an elementary science classroom, for example, a teacher could ask, "If you were an astronaut, what part of space would you explore? Why?" A secondary social studies teacher could ask, "What do you believe is the greatest crisis facing our society today? Why?"

C. Differentiation Possibilities

While this structure ensures that students have equal turns and time, it does not guarantee that responses are equal in terms of depth and breadth. It is possible for lower achieving students to provide a response at a level consistent with their understanding of the topic; simultaneously, higher achieving students can be challenged to respond with in-depth, introspective observations. With the same question, teachers can elicit a range of different responses that engage all learners at the appropriate level of difficulty.



2. Quiz-Quiz-Trade

A. Structure Overview

Students each have a card with a quiz question. They pair up with a classmate and do a two-way quiz. After quizzing each other, they thank each other, trade cards, and find a new partner to quiz.

B. Content Examples

Quiz-Quiz-Trade is a superb structure for reviewing facts and information. In an elementary literacy classroom, students can use this structure to practice spelling words. A high school science teacher could have students recall parts of the skeletal system or practice vocabulary terms.



C. Differentiation Possibilities

While there has been a de-emphasis on memorisation in recent years, there is still important information students need to recall. Since repetition is critical for the semantic memory system, Quiz-Quiz-Trade is an effective way to ensure all students receive the necessary rehearsal for recall. Too often in traditional settings, lower achieving students get very few opportunities to practice recalling information. This structure provides ample practice time coupled with a valuable support system. Struggling learners receive immediate correction, feedback, and praise, which better enables them to memorise key information. This structure also helps higher achieving students progress toward becoming more of an autonomous learner; they are provided opportunities to have a positive impact on classmates' success. Furthermore, they are able to practice social skills that will help them in leadership roles in the future (e.g., working with others, patience, tolerance). With the same structure, a teacher can support struggling learners and stretch higher achievers.

3. RallyCoach

A. Structure Overview

Students work in pairs to help each other master the content. One partner works out the problem or performs the procedure while the other watches, listens, coaches, and praises. Students switch roles for each problem.

B. Content Examples

RallyCoach is a structure that assists children with procedural learning activities (i.e., learning steps, processes, and sequences). In an elementary literacy classroom, students could use RallyCoach to practice correcting errors in writing conventions. In a secondary mathematics classroom, students could work on solving complex equations.

C. Differentiation Possibilities

As is the case with the semantic memory system, repetition is necessary for the procedural memory system. Much of what we teach children falls into this domain. Lower achieving students need repeated practice with correction, feedback, and praise, all of which they get with this structure. Additionally, because this structure has a think aloud component, lower achieving students receive the benefit of listening to the thinking of higher achieving students. As a result, lower achieving students are supported in their learning whether they are doing a problem or serving as a coach. Higher achieving students also get the repetition they need; we should never presume that higher achieving students do not need support in the initial stages of learning. However, also enhanced in this structure are a variety of thinking skills. When higher achieving students are functioning as a coach, they must problem solve, analyse, brainstorm, and apply what they know to help a peer understand the content; furthermore, they are simultaneously receiving practice with social and communication skills.



Differentiating Curriculum

When it comes to differentiation, Hattie (2009, p.159) contended, “It is less the content of curricula that is important than the strategies teachers use to implement the curriculum.” This has been the assertion from the onset of this paper; however, as noted earlier, there may still be times when differentiation of curriculum is warranted in order to meet students’ diverse learning needs.



Experts in the field of cooperative learning espouse the importance of heterogeneous teams in the classroom. Nevertheless, there may be times when homogeneous grouping of students is beneficial. As such, putting lower achieving students together on occasion to address learning needs is entirely appropriate; teaming higher achieving students occasionally in order to stretch and enrich their thinking is also fitting. Because Kagan Structures are content free and repeatable, they can be used in heterogeneous and homogeneous settings. As such, when used with lower achieving students, the structures ensure all students get the necessary repetition they need in order to retain knowledge and acquire skill sets. Likewise, when used with higher achieving students, Kagan Structures make certain all students are fully engaged in challenging activities.

Consider, for example, how students could be paired in RallyCoach. Two lower achieving students could be paired and provided with a worksheet containing problems they have not yet mastered. Giving them extra practice better ensures they will grasp the content to be learned. Simultaneously, two higher achieving students could be paired to work on enrichment activities or accelerated problems. Both sets of students would be doing RallyCoach concurrently; however, each pair would be addressing curricular content appropriate for their skill sets or levels of understanding.

It should be noted that ability grouping as noted above should be used sparingly. The research on ability grouping is clear. “The results show that tracking has minimal effects on learning outcomes and profound negative equity effects... The overall effects for the three major ability levels across the studies were $d = 0.14$ for high-tracked, $d = -0.03$ for middle-tracked, and $d = 0.09$ for low-tracked students—no one profits” (Hattie, p. 90). In the meta-analyses rank order Hattie compiled, ability grouping ranked 121 out of 138 interventions, and the average effect size was a dismal $d = 0.12$ (Hattie, p. 300). This effect size coincides with “...what students could probably achieve if there was not schooling” (Hattie, p. 20).

Given this research, one should exercise great caution in clustering students according to ability on a frequent, consistent basis. Rather, if students have been placed in the general education setting who are

advanced over their peers by multiple years, educators would do well to consider acceleration rather than differentiation or enrichment as an intervention strategy to challenge these high achievers. According to Hattie's (2009, p. 99) findings, "...the most effective for influencing the outcomes of gifted students was acceleration ($d = 0.84$)."

Final Thoughts

Differentiation should not be an event (i.e., a place or time of the week when differentiation occurs). Too often we send students (both high and low achieving students) to special programs and locations to address their atypical learning challenges. Such an approach to differentiation does not satisfy students' deepest longings. Rather, what higher achieving children need is to be challenged daily in every class; what lower achieving children need is a system of support that is interspersed throughout the day. Unfortunately, being able to make this happen can overwhelm teachers, and excuses can surface for why differentiation does not occur regularly in the general classroom setting.

- I can't differentiate instruction because I have to cover the standards for everyone.
- I can't differentiate instruction because I'm already too busy and have absolutely no extra time for planning.
- I can't differentiate instruction because I teach too many students.
- I can't differentiate instruction because I have only one textbook.
- I can't differentiate instruction because my classroom is too small.
(Tomlinson & Imbeau, 2010, p. 137).

Reasons such as these emerge because we have not trained and empowered teachers with simple, proven instructional practices. Kagan Structures are teacher friendly strategies in which differentiation is embedded. It is possible to simultaneously challenge some students and support others in the same setting. The key to doing so lies in instruction. "With Kagan Structures we don't change *what* we teach; we change *how* we teach. We change instruction, not curriculum" (Kagan, 2013, p. 29). True differentiation primarily takes place through instruction (Tomlinson & McTighe, 2006).

Kagan Structures are powerful instructional strategies. Consider the metaphor offered by Dr. Spencer Kagan regarding the robustness of this intervention. "When I think about Kagan Structures, the image that comes to mind is a lever. When a lever is properly placed, with little effort, we can lift a very heavy load" (Kagan, 2013, p. 4). Structures radically and positively impact teaching and learning. They are simple enough for teachers to use daily, and they simultaneously achieve multiple positive outcomes—improve academic achievement, develop thinking skills, reduce discipline problems, enhance communication skills, foster positive self-esteem, close achievement gaps, and differentiate instruction. Put succinctly, "With these simple instructional strategies, we have the power to create a better world" (Kagan, 2013, p. 81).

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