

Kagan Structures Simply Put

Dr. Spencer Kagan

The following article is a very simple introduction to the Kagan approach.

What are Kagan Structures?

Structures are simple, step-by-step instructional strategies. Most Kagan Structures are designed to increase student engagement and cooperation. For example, a simple Kagan Structure is a RallyRobin. Rather than calling on one student at a time, the teacher has all students interacting at once by saying, “Turn to your partner and do a RallyRobin.” During a RallyRobin, students repeatedly take turns, giving one answer each turn to create an oral list. Each student in the class gives several answers. For longer responses, the teacher might use a different structure, a Timed Pair Share. In a Timed Pair Share, each student in turn shares for a predetermined time, perhaps only a minute each.



The miracle of structures is that in the same amount of time that the teacher could call on and respond to two or three students in the class, each giving one answer, the teacher can have every student give several answers. In the traditional, call-on-one-at-a-time approach to instruction, it would take about an hour to have each student speak for a minute because the teacher asks the question, the student responds, and then the teacher responds to the answer, giving either a correction or praise. Further, because it tends to be the same students responding all the time, many students seldom participate, or even not at all. In the traditional approach, we end up calling most on those who least need the practice, and least on those who most need the practice. In contrast, with the structures, because all the students are responding at once, it takes only two minutes to give each student a minute of active engagement time, and it is not just the high achievers responding — everyone responds. Engagement goes up, as does joy in learning and achievement scores.



‘Structures’ have been in development since 1968. Over the years, we have developed over 200 structures. Some are designed to engage and develop specific types of thinking, others to engage and develop specific social skills, others to develop different intelligences, others to align instruction with principles derived from brain science, and yet others to foster mastery of different types of academic content. We have even developed discipline structures to guide teachers as they interact with disruptive students so they can create win-win discipline solutions!

What subjects can you use Kagan Structures with? What Key Stages can you use the structures with?

The structures are content free, and are used successfully with students of all ages (all Year Groups, all Key Stages), and with all content.

How do the Kagan Structures address differentiation?

In many of the structures, we can differentiate the level, and even the type of learning so student pairs can work at the appropriate level of difficulty. For example, during RallyCoach each pair can be working on either different content or different levels of difficulty of the same content.

How do Kagan Structures align with multiple intelligences and brain science?

There are many structures. Some are designed to engage the different ways students are smart; some are actually designed to engage different parts of the brain. Active brain imaging demonstrates that the brains of students are more engaged when working with each other than when working alone. This partly explains the greater gains obtained when we use the interactive structures.



What are the basic principles of Kagan Cooperative Learning? Why do we need basic principles?

The basic principles of good cooperative learning are that:

- 1) The learning task promotes teamwork and students experience themselves as being on the same side;
- 2) Each student is held accountable for their individual contribution;
- 3) Students participate about equally; and
- 4) Many students are engaged at once.

These simple principles ensure students will cooperate, that each will make an independent contribution, and that all students participate about equally and participate a great deal. They are important because if we leave them out, students can hide — they can take a free ride allowing others to do the work. In the traditional classroom, participation is voluntary. Many students, for whatever reasons, simply do not participate. When the principles are in place, all students become intensely engaged.

What is the recommended process for establishing teams? How does this affect gifted students? How does this affect struggling learners?

Teams are set up with a mix of ability levels to maximise peer tutoring and positive modelling. We recommend teams of four, with a high, high-middle, low-middle, and low achieving student on each team. That maximises the potential for tutoring and positive modelling, and the team of four breaks nicely into two pairs, to maximise participation. In two minutes of interaction, each student can verbalise their answers for a minute if they are in pairs, but for only 30 seconds if they are in teams. That is why we have designed so many of our structures to include pair work — it doubles the amount of active participation. Both the gifted and the struggling students achieve more during cooperative learning than when working only alone. When we use the structures, gifted students continue to achieve at a high level academically, but acquire social skills and character virtues they would not acquire if they worked only alone. Struggling learners receive the benefits of peer encouragement, support, and coaching as well as immediate feedback. When working alone, they can practice wrong. When working with others, they have immediate correction opportunities. It is the lowest achieving students who show the most dramatic gains when we institute cooperative learning. The great thing is that those gains are not purchased at the expense of the high achieving students — all students benefit.

What about assessment and grading?

Authentic assessment improves dramatically when we use cooperative learning. Why? In the traditional class, the teacher calls on volunteers, usually the high achievers. So the teacher obtains a biased sample of the class. A student may answer correctly, but the teacher does not find out most of the class would not have known the answer had they verbalised their thinking. In contrast, during cooperative learning structures, all students are responding and the teacher listens in. The teacher hears the thinking of the low-achieving and middle-achieving students, not just the high achievers. This gives the teacher an unbiased sample of the class.

With regard to grading, that is done in many ways, including tests, quizzes, essays, performances, and portfolios. In our approach to cooperative learning, students are individually graded on their individual performance. In good cooperative learning, students do not receive a grade based on the performance of their teammates.

Is this approach an extra workload for teachers? What are the benefits to teachers?

It is extra work to learn the structures, but once teachers know the structures, teaching is easier. The traditional teacher does most of the talking and is the hardest working person in the class. Structures reverse that. The teacher still provides instruction, but then sets students to work in teams so students do the talking and the work. Using the structures becomes automatic and teaching becomes more of a joy because students are so much more engaged and eager to learn.

What are the benefits to students?

The primary benefits of cooperative learning, documented by about a thousand **research studies**, include increased academic achievement, improved social skills and social relations, improved thinking skills, reduced discipline problems, acquisition of leadership and employability skills, improved self-esteem,

liking for school and content, and a reduction of the gap between high and low achieving students — not by bringing the high achievers down, but by bringing the low achievers up.

What are the benefits to schools?

There is pressure on schools to have students achieve more and to reduce the achievement gap. Structures do both those things. There are other benefits such as reduced discipline problems. But the biggest benefit is that schools accomplish their true mission. Because structures deliver thinking skills, social skills, and character virtues, schools better prepare students for success both on the job and in life.