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In the USA and in small but increasing numbers of UK classrooms, teaching and learning is taking quite a different approach. Students are not seated in rows, they are not asked to be quiet, to keep their eyes on their work – just the opposite. For proponents of alternative teaching styles, Kagan has become one of the most revolutionary learning strategies. Whether you're familiar with Kagan structures or interested in learning more about alternative teaching techniques. In this article, the first of a 3-part series, we consider the uses and benefits of implementing kagan structures in your classroom, particularly in relation to boosting student engagement and learning. The Kagan structure, sometimes referred to as cooperative learning, commonly involves the teacher setting up the classroom structure into pods (small teams of four) that are tasked with a group task and asked to work collaboratively to reach their learning goal. While each student is responsible for their own learning, they are also responsible for supporting and helping to enhance the learning of their team mates if they are to complete the task. Kagan learning is built upon group collaboration – working together, interacting with each other and exploring the curriculum in ways that differ from traditional teaching methods. Whether you're familiar with the Kagan (cooperative) approach or have seen this type of classroom structure in practice, the first impression that most will draw is the level of student engagement required in the learning process. Through the use of intensive collaboration, students have to work together regardless of their ethnicity, sex, religion or ability – working as a unit to complete the task objective. Yet while the Kagan structure is built on the concept of group work and group achievement, it is non-competitive. One of the main disparities between this approach and traditional individualised approaches to teaching and learning is its ability to create a completely new classroom environment. The Kagan approach places students side by side rather than assigning them isolated works or positioning them against each other. By changing the physical structure of the room and delivering group cohesiveness, the principal aim is to radically change the dynamics of the educational experience and subsequently the educational outcomes as well. Dr Spencer Kagan, a professor of psychology at the University of California, is one of the founding fathers behind Kagan structures, publishing well-read works on strategies behind successful cooperative learning, multiple intelligences, character development and cognitive abilities. Dr Kagan has become renown in the education sector for his contribution to the innovation of alternative teaching practices and actively trains thousands of academics each year in his Kagan methodology of teaching. For the school: easily integrated into the classroom with minimal CPD required complements other teaching methodologies such as flipped learning complements the use of digital technologies - with the use of curriculum-specific e-learning resources, the teacher spends less time lecturing and more time facilitating group collaboration and offering face-to-face support For the learner: accelerated academic achievement - based on decades of controlled educational research, results have consistently shown accelerated academic achievement, particularly in minority and low-achieving students. development of thinking skills improved relations between students of different cultural, social and economic backgrounds enhanced social skills and social relations increased appreciation for the purposes of teaching and learning (metacognition) In an interview, Dr Kagan points to the wealth of data that demonstrate the 'tremendous effect simple Kagan structures have on transforming the way teachers teach and the way students learn'. Teachers who have introduced Kagan learning often remark on the impact it has on increasing participation, engagement as well as the effect it has on delivering real results in terms of academic achievement. However, the attraction of these techniques has become particularly poignant in recent years as greater demands are being placed on school-leavers to attain more advanced, softer skills. For Kagan proponents, this approach creates an environment that fosters interpersonal development. The act of communicating freely with peers significantly improves students' people skills as they work together and appreciate the value in positive communication and team working. Introduction In the realm of education, there is a continuous search for effective teaching techniques that can boost student engagement and learning outcomes. Kagan Strategies, developed by Dr. Spencer Kagan, have gained prominence in the world of educational psychology due to their collaborative learning approach designed to maximize student involvement. In this article, we will delve into what Kagan Strategies are, their key components and principles, and how they can be effectively implemented in the classroom. What Are Kagan Strategies? Kagan Strategies are a collection of instructional methods based on the principles of cooperative learning. These strategies aim to create an interactive and inclusive classroom environment where students work together in teams to achieve common goals. Kagan's approach is grounded in the belief that collaboration fosters improved academic performance, self-esteem, and interpersonal skills development. Key Components and Principles of Kagan Strategies Kagan Strategies encompass several essential components: 1. Structured Teamwork: Teachers assign students to diverse teams with a mix of abilities, backgrounds, and strengths. Each team member has a specific role and is responsible for contributing to the collective success of the group. 2. Positive Interdependence: Students are encouraged to rely on one another as they jointly tackle challenges. The success of each individual translates into success for the entire group. 3. Individual Accountability: Each team member is held accountable for their own performance and contribution to the group's efforts. 4. Equal Participation: All students participate actively and equitably in discussions, problem-solving activities, and decision-making processes initiated during group work sessions. 5. Simultaneous Interaction: Ensuring multiple students engage at once maximizes active learning opportunities and enhances student-to-student communication. Implementing Kagan Strategies in the Classroom To effectively implement Kagan Strategies in your classroom: Establish ground rules, roles, and expectations that encourage cooperative behavior within student teams and foster a supportive classroom environment. Use a mix of Kagan Structures—such as Think-Pair-Share, RallyCoach, or Jigsaw—to facilitate peer interaction, targeted skill development, and diverse opportunities for student engagement. Monitor team dynamics and provide constructive feedback to students individually and collectively to promote continuous improvement. Assess the outcomes of Kagan Strategies against set goals in terms of students' academic performance, social skills development, and overall enjoyment of the learning process. Conclusion Kagan Strategies, when implemented effectively, can transform your classroom into an engaging, collaborative space that promotes student learning on multiple levels. By fostering positive interdependence and individual accountability, these strategies lead to greater teamwork abilities, increased self-esteem, and enhanced learning outcomes for all students. With careful planning and thorough execution, Kagan Strategies can become an invaluable tool in your educational repertoire. Kagan Cooperative Learning strategies are a set of structured group activities designed to promote cooperative learning and active student participation. These strategies focus on collaboration, interdependence, and positive group dynamics. Here are 35 Kagan cooperative learning strategies that can be used in classrooms to enhance student engagement and learning outcomes:Students think individually, then pair up to discuss their thoughts, and share with the class.Students take turns sharing their ideas or answers in a group, ensuring everyone contributes.Each group member is responsible for learning and teaching a portion of the material to others.Students are numbered in groups, and the teacher asks a question; one student from each group answers based on their shared discussion.Small groups collaborate to write a story, article, or essay.Think-Pair-Share with a TwistInstead of sharing with the whole class, students share with a new partner after each round.Students work in teams to answer quiz questions, reinforcing cooperative learning and team support.Students quiz each other on flashcards, then trade cards to quiz another student.Students sit in a circle and pass a question or topic around for each person to add to the discussion.Students work in teams, pairs, and then individually on the same task to reinforce learning.In pairs, students take turns quickly answering or explaining concepts.One student explains a concept or problem to a partner, who coaches them through it, switching roles after each question.Students pair up, share their thoughts, and then compare with other pairs to see different perspectives.One group forms an inner circle and other forms an outer circle. Students in both circles discuss and rotate every few minutes.After working in teams, students complete a task on their own and then share their findings with the class.Students have a set amount of time to share their ideas with a partner before switching.Partners are given numbers, and when the teacher calls out a number, those students discuss the question or task.Students work in teams to research and present different sides of a debate.Groups create a shared poster or placemat with everyone contributing their ideas.Students move to different corners of the room to indicate their opinion or response to a question.Students arrange themselves in a specific order, such as by height or age, while discussing concepts.A mix of group, pair, and individual work where students engage with the material in multiple ways.Team Pair Solo ReflectionAfter working in teams and pairs, students reflect on the learning experience individually.Students interact with others to find someone who matches a specific statement or characteristic.Students work in teams to answer questions and mark spaces on a grid, trying to get three in a row.Similar to speed dating, students rotate around the room quickly discussing topics or solving problems.Students write ideas or answers on sticky notes and place them on a shared wall or board for discussion.Students take on different roles to act out a scenario or concept.Pairs of students alternate between two tasks, each supporting the other's learning process.Students exchange ideas or feedback in a structured, timed manner with partners.Different students read different sections of a text and then share their insights with the group.Partners collaborate on writing a story or solving a problem together.Students draw a word or concept for their partner to guess, promoting active participation.Groups work on a large chart or poster to develop ideas collaboratively.Students share ideas with different partners in quick, timed sessions.These strategies promote active student engagement, teamwork, and improved learning outcomes through structured group interactions.Kagan Cooperative Learning Strategies offer a variety of benefits that go beyond just academic performance, helping students grow both socially and intellectually. Here's how these strategies make a difference:Enhancing Critical Thinking and Problem-Solving SkillsKagan strategies push students to think critically and solve problems together. By collaborating and discussing different perspectives, students learn to analyze information more deeply, ask thoughtful questions, and come up with creative solutions. This kind of thinking helps them not only in their current studies but also in real-life situations where problem-solving is key.Improving Classroom Relationships and TeamworkThese strategies foster a sense of teamwork and community in the classroom. As students work together, they learn how to communicate better, respect each other's ideas, and support their peers. This collaboration helps build trust and stronger relationships between students, creating a positive and inclusive classroom environment. When students feel comfortable working together, it leads to better engagement and a more supportive learning experience.Supporting Language Acquisition for ESL LearnersKagan strategies are especially helpful for ESL learners, offering plenty of opportunities for them to practice speaking and listening in a natural, low-pressure way. Working with peers allows them to practice language in real conversations, boosting their confidence and improving their language skills. Through these interactive activities, ESL students can quickly apply new vocabulary, reinforce grammar, and become more comfortable using the language in everyday situations.In short, Kagan Cooperative Learning Strategies are not only effective in enhancing academic skills but also play a key role in building social connections, improving critical thinking, and supporting language growth, making them a great way to create an engaging and inclusive classroom.Kagan Cooperative Learning Strategies can make a huge difference in the ESL classroom by boosting engagement and giving students the chance to practice their language skills in a fun and interactive way. Here are some ways these strategies can be used in ESL classroom: For Vocabulary Practice or Grammar DiscussionsThis is a great way for students to really process new words or grammar. After introducing a new term or grammar point, I would ask students to first think about how they might use it, then pair up with a classmate to discuss, and finally share their thoughts with the class. This gives everyone a chance to practice in a comfortable environment, encouraging conversation and reinforcing the new language. For Comprehension Questions:After a listening or reading activity, this strategy helps students stay engaged with the material. I would divide the class into groups, give each student a number, and have them discuss comprehension questions as a team. When I call out a number, that student shares their group's answer with the class. This method makes sure everyone participates and that students collaborate to understand the content better. For Peer Review of Essays or Projects:This strategy is perfect for getting students to reflect on each other's work. After completing an essay or project, students can move around the room, reviewing each other's work and leaving feedback. Not only does this help students practice their writing and language skills, but it also encourages them to think critically about language use and structure, while learning from their peers. Experienced teachers know that there is no "one size fits all" when it comes to teaching their students. Each student is unique, with different learning styles, strengths, and weaknesses. They also know how important a positive classroom community is to boost self-esteem, enhance learning, and promote risk taking. Kagan strategies can help educators build a caring and kind environment to help all types of learners thrive. Overview of Kagan Strategies Source: kaganonline.com Kagan is a scientific research-based program focused on student engagement. Back in 1968, Dr. Spencer Kagan began researching child behavior and realized he could create cooperative and competitive learning for children by placing them in different types of situations. He became a leader in the cooperative learning movement. Today, he continues to dedicate his life to creating positive learning environments for students of all grade levels and abilities. Benefits of Using Kagan Strategies in the Classroom Source: kaganonline.com Kagan actively engages all students, unlike traditional teaching structures. With traditional teaching, students sit at their desks listening to the teacher and are called on one at a time. Students compete to shine and have a chance to speak. At the same time, shy and lower-achieving students avoid participating instead of trying to engage in class. With the Kagan method, all students face each other and have a chance to share. All students are engaged simultaneously within just a minute or two. Students develop self-esteem, social skills, leadership skills, and communication skills. They become teammates while learning the curriculum, bouncing ideas off one another. When students work in teams, they work together instead of competing against each other. This camaraderie is similar to the positive benefits sports teams build. Cooperative learning leads to academic and social gains since every student has an equal turn. Behavior improves while disruptions disappear. Kagan Classbuilding and Teambuilding Structures Dr. Kagan and his team have developed approximately 200 different Kagan structures. His book Kagan Cooperative Learning is his all-time top-seller and the book that started it all. From there, he and his team have branched out with numerous books specific to grade levels or particular strategies, smart cards containing numerous strategies in an easy-access foldable, and more. While it would be impossible to cover all of the strategies in one article, here are a few examples of the most popular Kagan classbuilding and teambuilding structures to incorporate in the classroom. Apply these strategies to any subject area. Examples of Kagan Classbuilding Structures Classbuilding Structures involve activities where the whole class engages with one another. Some of my favorite Classbuilding Structures are: Find Someone Who Students circulate around the room, finding classmates who can answer questions on their teacher-created Find Someone Who form. Students must find a different classmate for each question, which leads to communication with everyone in the class. Line-Ups Students line up in a specified order, requiring communication and cooperation. The topics can be personal, such as lining up in birth date order. Other ideas include providing each student with a card with an event from a story or history and having students line up sequentially. Mix-Pair-Share Students mix around the room to music or just the beat of their own drum. When the music stops or the teacher calls "pair," students pair up with the classmate closest to them. The teacher then gives the class a topic to discuss with their partner. This can be repeated multiple times with the same or different questions, making sure students pair up with a different classmate each round. Corners Students choose one of four designated corners of the room and interact about a topic with other students in their corner. Each corner has a different answer to a question, opinion to a topic, etc. Examples of Kagan Teambuilding Structures With Teambuilding Structures, students are first grouped into small teams, usually composed of four students. If your students already sit at tables or desks put together to form small groups, your teams are already in place. Some of my favorite Teambuilding Structures are as follows: RoundRobin Anyone familiar with Kagan Structures knows this one, and it is a trendsetter. After placing students in teams, each student shares something with his or her teammates. RoundRobin may involve a single turn each or multiple turns. Everyone takes turns listening to each teammate, and everyone shares. Fan-n-Pick Group students into teams of four, in which each student has a different role, which rotates each round. Students answer questions from a deck of index cards, with questions relating to a subject area. The student roles are: Student 1 fans the cards; student 2 picks and reads a card; student 3 answers the question; and student 4 paraphrases and praises the answer. Team Charades This is just like the game we all know and love from our own childhood. First, students pick a card. Next, they act out whatever is on the card, without revealing it to the team or saying a word. This is a great way to strengthen kinesthetic intelligence. Placemat Consensus Create a Placemat (worksheet) with spaces for each student to write, with a Consensus space in the middle. If using a circle shape, first make a small circle in the middle of the circle. Next, draw spokes separating the outer circle into four spaces. After each teammate writes in his or her space, teammates take turns elaborating on their own ideas. If the team as a whole decides an answer is important, they write it in the Consensus space. Feedback From Fellow Teachers Here's what other teachers who use Kagan strategies regularly in their classrooms told me: "I can see students' self-esteem and achievement improve when using Kagan strategies. Kagan strategies are great to motivate and keep students involved." —Maria Smith, elementary school teacher "Kagan is an extremely effective way of allowing students to express knowledge in different ways, giving all students a chance to succeed using different learning styles. It's also a good informal assessment tool for teachers to understand where students may need reinforcement in different subjects." —Samantha Tannenbaum, elementary school teacher "Kagan strategies make learning more fun for all. They can easily be applied to so many different topics. I love how the entire class becomes engaged simultaneously." —Sara Harris, high school teacher More Resources for Kagan Strategies Read more about specific research studies, theory, and rationale here. Watch this video for a five-minute overview of the Kagan rationale and methodology. What are some Kagan strategies you've tried in your classroom? Share your thoughts in the WeAreTeachers HELPLINE on Facebook. Plus, for more articles like this, sign up for our newsletters. By Nancy Barile, Award-Winning Teacher, M.A.Ed Witness more "lightbulb moments" with your students through the Kagan Cooperative Method. Kagan cooperative learning is built on a single tenet: engagement. When students are engaged and motivated, "learning sticks." In a Kagan classroom, all students must be engaged and accountable. There are, however, an overwhelming number of Kagan structures, and if you can't afford to attend expensive workshops, implementation may be difficult. Full Participation Is the Driving Force At first glance, this cooperative learning technique seems like traditional group work, but there's a major difference: It's impossible to hide in a Kagan classroom because each student must "participate frequently and approximately equally." Traditional teaching can lead to an ever-widening gap between high and low achievers, and the Kagan method aims to close that gap. This model assumes that most teachers utilize direct instruction and then turn to the class for a question-and-answer portion. Usually, a few students answer the questions while the majority of the class remains disengaged. Kagan cooperative learning ensures that every student is actively involved. Research on Kagan cooperative learning supports findings of "improved academic achievement, improved ethnic and race relationships, improved social skills and social relations, and increased liking for self, others, and school." Since these are goals for most schools, I thought it was worth exploring. Structure Is the Kagan Foundation Student interaction is at the core of the Kagan method, but it's not unstructured. Teachers are expected to implement Kagan Structures, which, according to the company website, are "instructional strategies designed to promote cooperation and communication in the classroom, boost students' confidence, and retain their interest in classroom interaction." Teachers aren't expected to stick with one Structure for learning; they can pick and choose the activities that will engage the different learning styles in their class. For example: Rally Coach is a Structure that requires students to pair up and take turns answering questions. To evoke longer responses, a teacher could use Timed Pair Share, where each student shares for a predetermined amount of time. To practice vocabulary, a teacher might implement Match Mine, where students sit behind barriers and one partner (the "sender") places items in arrangement. The other student (the "receiver") attempts to match their partner's arrangement, using only the sender's verbal instructions. The Realities of Using the Kagan Method I wanted to know what real teachers had to say. Amazon reviews of the Kagan books are overwhelmingly positive: "Fantastic ideas! Very useful in today's classroom!" one reviewer wrote. Complaints centered around redundant ideas or the need for face-to-face implementation training. After looking into it more thoroughly, I came up with these takeaways for any teacher interested in this method. Implementing Kagan Structures would require a great deal of training and practice; there are more than 200 Kagan Structures! I believe it would make the most impact if it were utilized throughout a district so students could have time to practice the techniques, and their skills would expand as they progress from grade to grade. It seems much better suited for grades K-8. In fact, the website—done in pink, blue, and yellow, with little cartoon characters—seems to cater to an elementary school audience. The book of Structures also boasts childish drawings and some rather elementary assignments that older students may find juvenile. The Kagan approach provides an array of techniques and Structures, but considering that teachers are overburdened with new initiatives and programs as it is, having enough time to learn, prepare, and implement them could be an issue. Most teachers already use cooperative learning in some way. I spoke with a few who said they learned most of these techniques in undergraduate and graduate school because engaging student-centered learning is a necessity these days. Even so, Kagan has value because it provides scripts that might make facilitating cooperative learning easier for educators, especially new teachers. There is a dizzying array of Kagan workshops offered around the country, and they're expensive. A one-day summer workshop in Fresno, California, for example, costs $219; a four-day workshop in the same location costs $749. School districts can also host workshops, and the price is only available upon request. However, after doing a bit of research, I found that it can be upwards of $35,000, so unless your school district has a great deal of money, this option is likely too costly. I remain intrigued by the Kagan cooperative learning method. Since my district could never afford the steep training prices, I plan on purchasing the Structures book whenever I have an extra $40 or an Amazon gift card. I believe there are some structures that a single teacher could implement into their classroom, and there are a few I'd be interested in adding to my repertoire. Dr. Spencer Kagan proposed his model about cooperative learning in 1985 in his book 'Cooperative Learning Structures'. In his model, he mainly advocated two basic principles. He first stated that the world is pretty much competitive while in some fields it isn't that much. However, you have to be fully equipped with knowledge in the fields you are going to face. Coming to the second principle, he wanted to have a learning method which was a mixture between competitive and individualistic, with cooperative classroom organization so that it could help in preparing the students for complete sort of social situations. According to Dr. Spencer Kagan, there are some advantages and disadvantages of cooperative learning. Starting with academic achievements has been increased among those who have used cooperative learning. Cooperative learning also builds an ethnic relation among students creating mutual understanding between them. Cooperative learning also increases one's self-esteem, social skills, and study skills. It teaches student empathy and builds social relationships. It not only makes a student like the school, class, lesson plans, the teacher but also teaches them to be more responsible, creating a sense in them that they do make a difference. Moreover, in working in groups students learn to work with and understand others who differ from themselves. In addition to that, student also increases their higher level thinking skills. More to it, individual accountability will be credited, in which each student contribution will be held accountable, which result in equal participation from each student. There are students who raise hands while other sometimes or never raise hands to participate in the class, so through cooperative learning participation is also increased. Cooperative learning also introduces the sense of social orientation so that students find other students someone to work with rather than someone to beat. Lastly, the students learn the workplace skills which are a necessity in the twenty-first century as the students need to know how to work in groups. Moving towards the disadvantages of cooperative learning, the first thing we come across is the student having a lack of social skills would not know how to work in groups and this could result in task or social conflicts. Another disadvantage is the group grades, what if only one student is working in a group and all the others are just enjoying the grades due to his hard work. Another disadvantage is the fear of failure; a student who might want to avoid failure might not participate in the group task to by expressing his or her worries by blaming the task being stupid or his or her group members being dumb. Moving further, competitions will start between teams and the team not winning will stop trying. This will not only lower their grades but also their self-esteem. Another disadvantage which occurs due to cooperative learning is the dependency on the group members which make some student not able to work alone. Moreover, when controlling many groups you never know when a single group goes off-track from the task and till you find out a lot of time has been wasted. The worst disadvantage of cooperative learning is the parents of high achievers complaining that their son or daughter is being used in spending their precious time in teaching the dummies of the class. It is truly visible that cooperative learning is not for those who are shy. There are many problems and to avoid these problems, it is necessary that the students sit in rows, do not talk with each other, and quietly follow the teacher's worksheet. Even so, then, according to Dr. Spencer Kagan are we masking the fact that the students won't be acquiring any social skills? They will be deprived of social skills when they face the time of its need? Surely, we can face the disadvantages of cooperative learning leaving out its advantages. More Information On Kagan on Cooperative Learning Correlation to Nunley's Layered Curriculum Changing my Brain about Cooperative Learning- A neat blog. Dynamics of Effectively Using Learning Groups- This looks at multiple angles based on learners. Kagan Online- Official site.Kagan Structures Advanced Cooperative Learning, Differentiated Learning, Problem Based Learning Spencer Kagan's Cooperative Learning Structures- This paper briefly describes and discusses Spencer Kagan's approach to cooperative learning. Cooperative learning is a type of structured peer interaction emphasizing positive human relationships, collaboration between peers, active learning, academic achievement, equal participation, and equal status of students in the classroom. It can be used to teach any subject matter, whether that be foreign languages, math, social studies, etc. Spencer Kagan's Cooperative Learning Structures by Jane Joritz-Nakagawa (Aichi University of Education) Abstract This paper briefly describes and discusses Spencer Kagan's approach to cooperative learning. Cooperative learning is a type of structured peer interaction emphasizing positive human relationships, collaboration between peers, active learning, academic achievement, equal participation, and equal status of students in the classroom. It can be used to teach any subject matter, whether that be foreign languages, math, social studies, etc. Dr. Kagan's approach utilizes contentless structures that provide a blueprint for classroom activities, where students can collaborate with each other in supportive and egalitarian ways, with content provided by the teacher or students. This paper features examples of Kagan's cooperative learning structures, comments from Japanese university students about a Kagan workshop they attended, and some observations from the author, a long-time user of cooperative learning and teacher/teacher trainer in Japan. Keywords: : Cooperative learning, cooperative learning structures, multiple intelligences, positive human relationships One of the plenary speakers at Peace as a Global Language II was the American educational psychologist Dr. Spencer Kagan, famous for the so-called structural approach to cooperative learning. This pedagogical approach has two aims. One aim is to foster positive, cooperative relationships between learners studying any subject in a class. The second aim is high academic achievement for all learners in a class. During a two-week visit to Japan, Kagan gave two experiential workshops at the conference, and numerous workshops prior to the conference dates. I was able to attend many of the workshops and talk with him about his approach to cooperative learning. I will explain briefly the fundamentals of his approach, relative especially to critical thinking and positive classroom relationships. The structural approach to cooperative learning Kagan (1994; Kagan and Kagan, 1998) has developed roughly 200 classroom "structures", which may be thought of as steps to classroom activities. These structures stress positive interpersonal peer relationships, equality, self-esteem, and achievement. Students can work together by following the steps to the structure, using material or content selected by the students themselves or by the teacher. The structures have various aims, such as: building team spirit and positive relationships among students; information sharing; critical thinking; communication skills; and mastery (learning/remembering) of specified material. Many of the structures can fulfill a number of aims simultaneously, depending on how the teacher uses them. Structures can be mixed and matched, and adapted to the particular student group. [p. 1] Let us look at some example Kagan structures and some of their uses. (1) Timed pair share Students pair off, then number off, 1-2. The teacher chooses a number, 1 or 2, to speak first. That student speaks about a specified topic for a specified length of time. The other student listens quietly and can nod or smile, but cannot speak or interrupt the speaker. After the allotted time has elapsed, the other student speaks for the same period of time on the same, or another, stipulated topic, with her or his partner in the listener role. After both partners have had equal opportunity to speak, the teacher randomly chooses a number of students, and asks them to summarize what their partners have said. (In a small class, all students could perhaps report.) This structure encourages self-expression and idea exchange by having students "share the floor" equally. Listening is encouraged by students' need to summarize their partner's contribution after the exchange is complete (students cannot accomplish this step without listening). If the teacher does not wish to call on all students to report what has been said, randomly choosing a few students encourages all students to be ready to do so. Students do not know in advance whether or not they will be chosen to report, so they prepare in the event they will be chosen. In my own courses which typically have a large number of students, I use small name cards prepared by the students in order to randomly select students to report either orally, addressing the whole class, or in writing, for example, by students using the blackboard. (2) Folded value line A problem, or issue, is raised (e.g., U.S. policy towards Iraq; capital punishment; building shelters for the homeless). The teacher elicits which students are strongly supportive of, or against, the issue or idea via a show of hands. Students who feel strongly for or against the issue stand at either end (the "poles") of the Value Line, where one end of the line represents strong support for an issue/concept, and the other represents its opposite. The rest of the class physically position themselves along the line at the point reflecting their own opinion. Thus, those who feel squarely in the middle of an issue stand at the middle, while those who feel rather strongly in agreement with either "pole" stand near that end of the line. For students to first think about and articulate views with others holding similar views, students can pair off with persons standing next to them in the line. In pairs, they can exchange opinions and explain rationales for their viewpoints. This can also be done in groups of three or four. It can also be practiced first in pairs, followed by two pairs joining to create a group of four, participating in an idea exchange which includes reiteration of points made during the first pair exchange. Summarizing earlier conversations gives students additional language practice (in language courses) and/or helps students find out what was heard/understood/remembered. Subsequently, for students to listen to views different from their own, the line can be divided in half. The two halves can then be lined up as two parallel lines of students facing each other. To illustrate, if you have 24 students in a class standing in a single line, with person 1 strongly supporting the issue/statement, and person 24 being strongly against it, the line would initially look like this: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 The teacher can then ask students to divide the line between persons 12 and 13. Person 13 leads the second half of the line over to person 1. The second half of the line then thus pairs off with the first half like this: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 Students can now exchange opinions easily with the person standing across from them. The lines can be repeatedly divided and refolded to regroup students, who then repeat their idea exchanges, to allow further airing of diverse views. It is also possible to combine this structure with ones like the Timed Pair Share, in which student exchanges are structured for equal participation via time limits and rotating speaking order. A final step can be for randomly selected students to orally summarize to the class the views they heard, or for students to write a paper for homework that describes the breadth of opinions they heard, complete with supporting and opposing arguments that were given. Students could also be instructed to write/speak from the point of view of an opinion they heard which is opposite, or very unlike, their own opinion, rather than their own, to encourage perspective-taking. This structure can be used to encourage self-expression, listening, paraphrasing, turn taking, and trying to understand and appreciate various viewpoints. Listening to, and then evaluating, various viewpoints boosts critical thinking skills as students consider an issue from various angles. Students can be asked to note, for example, the strong points of each diverse view, or to come up with a composite view incorporating what they believe to be valuable in all viewpoints. [p. 2] (3) Corners As with the previous structure, Corners can be used to have students express, and listen to, various opinions on a topic, honing listening, critical thinking, and self-expression skills. The teacher can make each corner of the classroom represent a stipulated view. For example, three possible corners could constitute For, Against, and Undecided relative to a topic. Students move to the corner that represents their viewpoint. Next, students discuss their opinions, or respond to a comment, within their corners. This could first be done in pairs, and later with pairs joining other pairs to make groups of 4, or with subsequent changes of partners to form new pairs. Students can begin by summarizing their earlier conversation to their new partner(s). Summarizing or repeating ascertains whether the listener listened and understood, and helps validate the ideas of former speakers. The views of all members in one corner can be aired for the benefit of the entire corner after ideas have initially been exchanged in smaller groups. For example, students stand in a circle in the corner, and each person summarizes what the person on their left said. Asking students to summarize what another person said encourages them to listen to others, since if they haven't listened, they will not be able to complete this task. After students have finished their in-corner discussions, they can rotate around to other corners in order to share their corner's viewpoints. One way to do this is for the teacher to randomly select two representatives from each corner to go to another corner and summarize their corner's viewpoint. They can rotate to all other corners, making their presentation to each new corner; these presentations can be performed within specified time limits to give all representatives an equal chance to speak. The final step could include randomly choosing students, other than rotating representatives, to report to the class on what was expressed, heard, or learned. (4) Team statements; Blackboard share Students first think about a stipulated topic alone, such as What can we do to rectify economic disparities?, or What can we do to alleviate gender based job discrimination?. After students have had time to think Ñndash; and perhaps take notes if they wish Ñndash; they share their ideas in pairs or small groups. Next, students again work alone and devise one statement that reflects their view. Students then alternate presenting their individual statements to each other, allowing other students in their group to ask for clarification, or further information. The team then creates a Team Statement that represents an opinion everyone in the group agrees with relative to the topic. After this, (some or all, depending on class size) groups in the class share their team statements orally, or in writing, with the rest of the class. One simultaneous method of reporting, called Blackboard Share, is a structure that can be used at this stage. Blackboard Share requires the teacher to section off portions of the blackboard equally for groups to use. After groups write their Team Statements on the board, these can be viewed/discussed by the entire class. If not all teams share (such as in very large classes), one technique is for the teacher to randomly choose only some teams to share. Since no team knows in advance which teams will share, all prepare in the event they are called on to share. Team Statements is designed to give students practice in self-expression, consolidating views, and reaching a consensus despite differing opinions. Blackboard Share can be used to have students simultaneously summarize any individual or team view or result in writing for the whole class. (5) Draw a gambit A "gambit" is a sentence or expression that can be used orally during a face-to-face interaction. "Draw a gambit" can be used to help students learn and practice social skills (in a native or foreign language). In a foreign or second language course, expressions socially acceptable in the target culture could be the focus of instruction. Students, or the teacher, can create expressions to be used in interactions focusing on a specific skill, such as showing interest in what is being said, disagreeing politely, or praising the speaker. These expressions are then written down on strips of paper by students (for example, after being copied off the blackboard), and placed in a deck or pile. Students, in pairs, or groups, then have a conversation. While listening, listeners draw expressions from the deck and use them during the interaction in ways they think are appropriate. Teachers or peers can monitor this as desired; for example, through real time observation followed by commentary, or responding after listening to or watching audio- or video-taped exchanges. This structure helps students practice socially acceptable language. The goal is to help create a positive ethic in the class by having students practice skills such as praising (being verbally supportive), or disagreeing politely (avoiding threatening or non-peaceful manners of communication), etc. This instruction can be combined with teaching socially acceptable body language, for example, modeled by the teacher, practiced in groups, and monitored by other learners and the teacher. (6) Paraphrase passport; Rally robin Paraphrase Passport requires students engaging in a group discussion to paraphrase what others have said. Before a student can go on to offer their own opinion or input, they must paraphrase what was last said. The person whose statement was paraphrased indicates whether the speaker has correctly captured their meaning. Once the speaker is satisfied that she or he has been accurately paraphrased, the discussion continues with the next speaker's comments. Thus, each person taking a conversational turn must paraphrase the prior speaker's comments before giving their own ideas. This structure aims to give all speakers in the group a chance to be heard and feel understood. It is also a useful device for checking comprehension in a language class. It can be combined with other structures such as Rally Robin. Rally Robin is a structure requiring students to alternate speaking in a set order. It is used so that all students take turns speaking, so that everyone will receive an equal chance to participate. [p. 3] (7) Other structures Many other structures can be found in Kagan (1994), and Kagan and Kagan (1998). Kagan and his associates have identified approximately 200 cooperative learning structures of which the above are just a few examples. The "PIES" concept More than just clever classroom routines, each Kagan structure is based on four factors that Dr. Kagan considers essential to his structural approach to cooperative learning: (P) positive interdependence; (I) individual accountability; (E) equal participation; and (S) simultaneous interaction. Positive interdependence means a "win-win" condition in which the success of one student is linked to the success of others in the class in a positive way. In other words, students need each other to succeed, and a gain for one student is a gain for others. In this kind of relationship, students care about each other and help each other so that all learn. In the positively interdependent relationship, a loss for one student is a loss for the whole group; in other words, the failure of one member is not merely an individual failure but a group failure, if the group did not adequately support the learner. Yet an individual success can be a group success if the group helped each team member succeed. We can contrast this concept with negative interdependence, where one student's failure could be another student's gain, such as when teachers grade on a curve (norm-referenced grading). With norm-referenced grading, a student doing badly increases the chance that another learner's score will be rated more highly. Thus, a loss for one student becomes a gain for another. Negative interdependence is often characterized by competitive rather than cooperative relationships between learners. Cooperative learning teachers reject norm-referenced grading in favor of criterion-referenced grading. With criterion-referenced grading, any learner can do well assuming s/he meets the specified criteria. Some cooperative learning teachers also use specific incentives and rewards in addition to positively interdependent task design to increase the level of positive interdependence among a team or in a class. No interdependence means that what one learner does has no effect on another learner. Positive interdependence is built into Kagan structures in that the activity cannot be successful unless the students cooperate Ñndash; the students need each other for success. They cannot do the activity alone, and if they do not cooperate well the result will be failure; yet if they cooperate well the result will be success. While there are various models of cooperative learning, of which Kagan's structural approach is only one, all cooperative learning theorists and practitioners agree that cooperative learning must incorporate the concept of positive interdependence, and this characteristic distinguishes it from mere "group work". The concepts of positive/negative/no interdependence have origins in Morton Deutsch's studies of conditions which foster conflict as opposed to cooperation (see Deutsch, 1973). Cooperative learning research has found positive interdependence to create better results in terms of learner achievement, human relationships, and psychological health, versus negative interdependence or no interdependence. For a more thorough treatment of research results, see, for example, Johnson and Johnson (1989). Individual accountability means a procedure to check that each participant individually contributes a fair share to a group effort. It also means there is a way to evaluate the quality of the effort/result of each member. Equal participation means that all students receive the same chances and incentives to be involved in class. Kagan's approach uses careful task design (e.g. the task has equal sized and equal status roles for all participants in the activity, or if roles are not equal status, such as leader and checker, roles are randomly assigned and would be rotated over the course of the term), rewards, and accountability procedures to encourage equal participation. For example in Timed Pair Share, each member is given exactly the same amount of time to speak. Without using a structure --ndash; for example, just asking two students to talk for four minutes, versus to alternate speaking for two minutes each--ndash; the teacher may find that one student is inclined to do far more or even all of the talking; this could be, for example the older student in Japan, the higher status student, the more confident student, or the more extraverted student. However, a structure such as Timed Pair Share requires that both students speak for the same amount of time, regardless of individual differences of age, background, personality, or language skill. Accountability procedures can be implemented via devices such as teacher or peer observation, and requiring students to report on what the partner said (to quote Dr. Kagan, individual public performance must [also] be required). Simultaneous interaction means that all students are actively engaged at the same time during the class. An example would be 20 pairs of students in a 40-person class all talking/listening simultaneously, as opposed to one student out of 40 answering a teacher's question, while all the others are or are not listening or participating. In Kagan's view, these four characteristics (PIES) must be built into the activity itself (i.e. be part of the task design). His over 200 structures were designed with the four elements in mind. Multiple intelligences and Kagan's structural approach Gardner (1993) identified numerous kinds of human intelligence including: interpersonal Ñndash; knowing how to effectively interact with others; intrapersonal Ñndash; the ability to know oneself; mathematical; musical; linguistic; bodily-kinesthetic; spatial; and others. In Gardner's view, people may differ in their natural talents but all talents are important, can be honed, and are worthy of appreciation. Kagan and Kagan (1998) present CL activities that promote the various multiple intelligences (MI), via peer collaborative tasks involving music or skills such as drawing, classifying, computing, moving the body, requiring students to collaborate in teams (interpersonal), or be introspective (intrapersonal), etc. Use of interpersonal intelligence CL structures enable the teacher to target interpersonal effectiveness as a skill for student development, which in turn helps foster peaceful classroom social environments. Intrapersonal intelligence is also linked to positive human relationships; research shows that persons who do not understand themselves are incapable of understanding others, and thus incapable of responding appropriately to others (Ciaramicoli & Ketcham, 2000; Goleman, 1995; Goodman, 2002; Kagan and Kagan, 1998; Meyers, 1994). Using a variety of MI activities in class highlights the MIs of students. As students witness the diverse abilities of peers, and notice their usefulness while performing the structures, they learn to appreciate and value each other's differing skills and gifts. [p. 4] Many of the structures and activities in Kagan and Kagan (1998) involve the activation of more than one intelligence. For example in A Song About Me, students first brainstorm their own unique qualities, drawing upon intrapersonal intelligence, and then include these qualities in a song they compose, drawing upon musical intelligence. In a structure called Self Portrait, students first draw their own portrait. Then, they tell a partner, orally or in writing, why they drew themselves as they did. Self Portrait calls upon visual/spatial, intrapersonal, and interpersonal intelligences. Being a Friend asks students to write about what it means to be a friend, share these writings with teammates upon completion, and then discuss with teammates similarities and differences among the team writings. This activity requires students to use linguistic, logical, and interpersonal intelligences. If the teacher, or students, select a broad range of activities which require various MI to complete them, students will have a chance to see each other shine over the course of the term, as some students are likely to excel at tasks requiring musical intelligence, others at tasks requiring visual/spatial intelligence, or others at tasks requiring linguistic intelligence (etc.). Use of non-linguistic intelligences can also help to compensate for the still developing linguistic skills of language learners in Jap

students I taught, anonymously polled by the university, reported dissatisfaction with the cooperative learning-based English courses. Positive comments from students in anonymous end-of-term course evaluation questionnaires have focused most especially on their satisfaction regarding relationships with other students in the same class, their appreciation of the many chances to exchange opinions with peers in class, the active nature of learning, and, in English courses, their increased confidence in their English abilities over the course of a term. Other comments focus on knowledge gained, respect of students in the class, and appreciating the variety of classroom activities. I use many of the structures outlined in Kagan's publications and demonstrated in workshops lead by Kagan and his colleagues. I have also adapted them, and developed my own structures for language and other courses in Japan (Nakagawa, 1999(a), 1999(b), 2000, & 2001). Many of the structures I use were inspired by, or improved upon, following exposure to Kagan training materials and the work of other cooperative learning specialists. Other than using the structures themselves, I believe that giving students choices about projects (in other words, adopting a student-centered curriculum), and changing peer groups every class meeting so students work with all the other students in the class throughout the term, are important factors that lead to student satisfaction. Many students specifically note that they like, for example, the grouping procedure, done by randomly shuffling name cards which are placed on desks to indicate where students should sit, with pairs and groups usually subsequently formed based on learners' physical proximity to each other. Structures are indexed in Kagan (1994), and Kagan and Kagan (1998), according to which skills and abilities will be utilized by learners who complete the activity. The indexing makes it very easy to locate a structure for a particular purpose. Compared to other cooperative learning approaches or manuals requiring a significant investment of teacher time, the approach in these two training/teacher resource manuals is practical, flexible (steps can be altered and content can be determined by the teacher or students), and "teacher friendly" (structures are easy to find and follow). [p. 6] In addition to Dr. Kagan's approach, I have also studied and learned from reading about and observing the approaches of cooperative learning specialists such as Aronson (Aronson & Patnoe, 1997), the Sharans (Sharan & Sharan, 1992), the Johnson siblings (Johnson, Johnson and Holubec, 1993 & 1998; Johnson & Johnson, 1981 & 1991; Johnson, Johnson & Smith, 1991) and the Buzz Learning approach practiced by some specialists in Japan (Sugie, 1995 & 1999). The approach advocated by the Johnsons emphasizes social skills training of students, and includes a step by step approach to peer-mediated conflict resolution. It also offers an alternative to traditional (in the USA) competitive debate. Rather than ending in a lose-win, the Johnsons' "Academic Controversy" approach requires the conclusion of the learners' controversy ("debate") to be a composite view jointly constructed by team members that finds strengths on both sides (versus identifying a winning/losing team). Aronson is famous for the Jigsaw Approach to cooperative learning, where each student initially has part of the information needed to complete a task, and subsequent cooperation at the team level is essential for completion of the task. The Sharans of Israel are best known for a collaborative project design approach known as Group Investigation. Other major approaches include those of Slavin (John Hopkins University), Cohen (Stanford University) and, in Japan, Buzz Learning, practiced by Sugie (Chukyo University), and others. A useful introduction to many of the various cooperative learning methods may be found in Sharan, (1994). Potential difficulties related to cooperative learning in Japan CL may not be appropriate for the teacher who wishes to be the center of attention in the class, since CL makes students the focus of attention more than the teacher, especially if used in conjunction with a student-centered syllabus or curriculum. Although CL can be combined with other approaches, including teacher-centered and materials-centered approaches, it is essentially a student-centered approach. CL takes some time for teachers to learn, although Kagan's approach attempts to simplify the process by providing teachers with more or less ready-made structures for a variety of pedagogical purposes. Teachers who wish to focus only on academic results, rather than academic results as well as the psychological health of students and positive interpersonal relationships, may be uninterested in the approach. It is important to note, however, that CL can also be used to help students master specified material (e.g. for entrance tests), if that is an aim. For example, students can work collaboratively in CL groups to master grammatical points that they will, subsequently, be tested on. In this case the goal would be for everyone in the group to master the material. If the teacher's goal is not for all students to master the material, there would be no incentive to use CL. A prominent Japanese educational psychologist (Sugie, 1995) explains that CL is not widely known or practiced in Japan. Although he cites studies showing its positive effects for Japanese learners, he believes that many Japanese teachers do not have the time or opportunity to study it, and that Japanese educational bureaucracies, concerned primarily with keeping costs down and increasing efficiency, create an inhospitable environment for it. He also notes that it may be difficult to inspire Japanese teachers or teachers in training, and believes that many teachers may tend to teach in the manner they were taught, which was likely not CL (see Sugie, 1995; 1999). Conclusion It was a great pleasure to be able to attend Kagan's practical and informative lecture/demonstrations of the structural approach to cooperative learning in Japan this year. His structures can be used for student mastery of material, active learning, equality, critical thinking, positive human relationships, and for raising student self-esteem and respect for others. As a student workshop attendee commented, however, a teacher needs to be trained in the approach in order to use it. While it may take time before the teacher truly excels at CL, it may be possible to make some immediate pedagogical improvements by quickly learning a few cooperative learning structures as outlined by Kagan and his associates. My own view is that mastering the use of structures, learning how to teach social skills and conflict resolution strategies, and understanding the theory of CL, are all useful. Over time, the teacher may perfect her implementation of CL and be able to innovate CL pedagogy on her own adaptable to her particular classroom. Although admittedly CL takes time to learn and perfect, one of the advantages to Dr. Kagan's structural approach which offers 200 nearly ready-made classroom activities for the teacher is that the teacher can learn to use a few simple structures even before having perfected her or his knowledge of the theory (as opposed to first learning the theory and then trying to figure out ways to apply the theory). At the same time, this author's belief is that a long-term commitment to increasing one's expertise in CL is a worthwhile endeavor. If Japanese or Japan-based in-service teachers cannot find the time for teacher development in order to learn CL, it may be best to introduce teachers in training to CL while they are still at the pre-service level. Among native English speaking/non-Japanese teachers in Japan, CL is not widely known or well understood, although it has been the theme of several articles published in the journals of the Japan Association for Language Teaching (JALT) (Kluge et al, 1999; Poel, et al, 1994). Increased awareness about this useful pedagogical approach could lead to further beneficial research and study in the Japan context. Japan-based teachers interested in further study of CL may wish to contact the Japan Association for the Study of Cooperation in Education via its website www.jasce.jp/ or contact the author of this paper, a JASCE board member, via jane@auecc.aichi-edu.ac.jp. Further information about Dr. Kagan's approach can be found at www.KaganOnline.com. Although I believe all cooperative learning approaches have merits and are worthy of study, I believe a particular benefit of Kagan's structural approach to CL is its practicality and teacher-friendliness, as well as its commitment to equal participation in the classroom found in ready-made, yet flexible and adaptable, classroom structures. [p. 7] References Aronson, E. & Patnoe, S. (1997). The jigsaw classroom: building cooperation in the Classroom. New York: Longman. Campbell, C. & Kryszewka, H. (1992). Learner-based teaching. Oxford: Oxford University Press. Cranton, P. (1994). Understanding and promoting transformative learning. Hoboken: Jossey Bass. Ciaramicoli, A. P. & Ketcham, K. (2000). The power of empathy. New York: Plume. Cohen, E.G., Lotan, L. & Catanzarite, L. (1990). Treating status problems in the cooperative classroom. In S. Sharan, (Ed.). Cooperative learning: theory and research. pp. 203-230. Wesport: Praeger. Deutsch, M. (1973). The resolution of conflict: constructive and destructive processes. New Haven: Yale University Press. Gardner, H. (1993). Multiple intelligences. New York: Basic Books. Goleman, D. (1995). Emotional intelligence: Why it can matter more than IQ. New York: Bantam. Goodman, H. (2002). Emotional literacy. The Teacher Trainer, 16 (1), 23. Johnson, D. W. & Johnson, R. T. (1981). Belonging. (VHS videocassette) Edina: Interaction Book Company. Johnson, D. W. & Johnson, R. T. (1989). Cooperation and competition: theory and research. Edina: Interaction Book Company. Johnson, D. W. & Johnson, R. T. (1991). Teaching students to be peacemakers. (VHS videocassette). Edina: Interaction Book Company. Johnson, D. W., Johnson, R. T., & Holubec, E. (1993). Circles of learning. Edina: Interaction Book Company. Johnson, D. W., Johnson, R. T., & Holubec, E. (1998). Cooperation in the classroom. Edina: Interaction Book Company. Johnson, D. W., Johnson, R. T. & Smith, K. A. (1991). Active learning: cooperation in the college classroom. Edina: Interaction Book Company. Kagan, S. (1994). Cooperative learning. San Clemente: Resources for Teachers. Kagan, S. & Kagan, M. (1998). Multiple intelligences: the complete MI book. San Clemente: Resources for Teachers. Kluge, D. et. al. (Ed.). (1999). JALT applied materials: Cooperative learning. Tokyo: JALT. Meyers, D. T. (1994). Subjection and subjectivity. New York: Routledge. Miller, N. & Harrington, H.J. (1990). A situational identity perspective on cultural diversity and teamwork in the classroom. In S. Sharan, (Ed.). Cooperative learning: theory and research. Pp. 39-76. Wesport: Praeger. Nakagawa, J. 1999(a). A cooperative performance test for Japanese university conversation classes. In D. Kluge, S. McGuire, D. Johnson, and R. Johnson, (Eds.) JALT applied materials: cooperative learning. Tokyo: JALT, 179-188. Nakagawa, J. 1999(b). Hospital drama. English for Special Purposes Newsletter, 13, 35-37. Nakagawa, J. (2000). Instant student-centered reading and discussion. IATEFL Issues, 155, 20-21. Nakagawa, J. (2001). Writing pop song lyrics. The Language Teacher, 25 (5) 31-32. Ochi , A. & Sugie, S. 2001. Dowa kyouiku to Bazu Gakushuu. [Dowa education and buzz learning]. Tokyo: Youkansha Poel, C. J., Homan, R. M., & Flaman, W. F. (Eds.). (1994). The Language Teacher, 18, (10). [special issue on cooperative learning]. Sharan, S. (Ed). (1994). Handbook of cooperative learning methods. Westport: Greenwood Press. Sharan, Y. & Sharan, S. (1992). Expanding cooperative learning through group investigation. New York: Teachers College Press. Slavin, R. (1995). Cooperative learning. Boston: Allyn and Bacon. Slavin, R. & Cooper, R. (1999). Improving intergroup relations: lessons learned from cooperative learning programs. Journal of Social Issues. (Winter). Retreived from the World Wide Web at www.findarticles.com/cf_dls/m0341/4_55/62521561/p8/article.jhtml?term= on 13 Jan 2004. [EXPIRED LINK] Sugie, S. (1995). Cooperative learning in Japan. International journal of educational research, 23 (3), 213-225. Sugie, S. (1999). Cooperative learning in Japan: history and present situation of research and implementation. In Kluge, D., McGuire, S., Johnson, D., and Johnson, R. (eds.) JALT applied materials: Cooperative learning. Tokyo: JALT, 179-188. Woodward, T. (2002). Stimulus-based teaching. English teaching professional, 25; 17-18. Dr. Spencer Kagan To cite this article: Kagan, S. Cooperative Learning Structures, San Clemente, CA: Kagan Publishing. Kagan Online Magazine, Issue #53. www.KaganOnline.com How we structure the interaction among students impacts dramatically on achievement and acquisition of social skills. Simply telling students to “Turn and Talk” increases the achievement gap; having students do a “Timed Pair Share” equalizes participation and reduces the gap. To a remarkable extent, the situations we are in determine our behavior. Applying this principle, we can structure the interaction of students in ways that improve a range of educational outcomes. How we structure the interaction among students determines how much they will achieve, the size of the achievement gap, how much they will like school and learning, and how often they engage in positive v. disruptive behaviors. Situations Determine Behavior There is a great deal of psychological research demonstrating that situations determine behavior. Two classic experiments demonstrated that given specific situational variables, good people will perform terrible things—administer lethal shocks, invent and carry out sadistic punishments. The power of situational variables to control behavior also can work for good. Given the right situations in a classroom, we can promote cooperation, and achievement. The easiest way to grasp the power of situations to determine behavior is a simple thought experiment. Thought Experiment Situation 1: Imagine a classroom of students. Imagine further the teacher stands before the class with a basket of valuable coins. The teacher announces to the class he/she will start a 3-minute timer and then toss all the coins out into the classroom. The teacher then says any coin a student collects during the 3 minutes is theirs to keep. The teacher then tosses the coins out into the classroom. What would the behavior of the students look like? Almost certainly there would be some grabbing and even pushing in the scramble to compete for the coins. Students would feel themselves to be in competition. Situation 2: Now imagine the same teacher, the same students, the same basket of coins, and the same 3-minute timer, but with one change. The teacher announces that at the end of the 3 minutes, all the coins that are placed back in the basket will be divided equally among the students for them to keep. What would the behavior of the students look like now? Almost certainly the students would gather coins and run to put them in the basket. Quite probably students would cooperate to maximize their reward. They might help each other scoop up the coins or hand their coins to others to put in the basket. Students would feel themselves on the same side, part of a cooperative group. The same students, with the same amount of rewards and the same time limit, would be either very competitive or very cooperative, depending on the situation. How we structure the situations in which we place our students, to a large extent, determines their behavior. In our work applying situationism to the classroom, we have identified three basic types of situations: Traditional, Group Work, and Kagan Structures. Which one of these situations we choose to implement in our classroom has a dramatically different impact on student interactions and learning. Three Basic Classroom Structures, A, B, & C A. Traditional. I have now given workshops and keynotes in 37 countries. In each country I have visited a number of classrooms. In all countries I have visited, the most common way of structuring the interaction among students is what I call the traditional approach. The traditional approach takes two basic forms, one for responding to teacher questions and the other for worksheet practice. For responding to teacher questions, the traditional teacher asks a question of the class and those students who want to respond, raise their hands to be called upon. This traditional Hand Rasising Q-A structure results in the high achievers doing most or even all of the responding while the lowest achievers engage in mind-wandering. The result: an increased achievement gap. For worksheet practice, following direct instruction the traditional teacher often has students work alone on worksheets. This, too, results in an increased achievement gap because the high achievers get good practice while the low achievers may practice wrong, mind-wander, or avoid a failure experience by not performing, rationalizing by saying something like, “This worksheet is dumb.” B. Group Work. The second way of structuring interaction in a classroom is what I call group work. To have students respond to teacher questions, the teacher may have students interact in pairs, saying, “Turn and Talk.” Or the teacher might have students interact in small groups, saying, “Discuss it in your groups.” These ways of structuring interaction also widen the achievement gap because the higher achievers in each pair or group do most or even all the talking while the lower achievers may engage in mind-wandering. For worksheet practice, the group work teacher tells students to do a project or worksheet as a group. “Work together, cooperate.” This, too, widens the achievement gap as the high achievers take over. Almost everyone has been part of a group in which some did the work and others took a free ride. C. Kagan Structures. For years we have worked to carefully design ways of structuring interaction so there is equal and frequent participation of all students. We call these simple instructional strategies Kagan Structures. For example, for oral responding, rather than a Turn and Talk, the teacher might have students do a RallyRobin or a Timed Pair Share. In a RallyRobin, students in pairs take turns speaking, generating an oral list. For example, young students might take turns naming colors; older students might take turns naming prime numbers. In a Timed Pair Share, each student has a predetermined amount of time to share while his/her partner listens. For example, young students might spend 30 seconds each describing what they think will happen next in the story; older students might spend a minute each sharing their opinion on which of the ten amendments in the Bill of Rights they think is most important and why. Situations impact behavior, for good or bad. Different instructional strategies create different situations. Traditional classroom situations (calling on those students who raise their hands; having students work alone on worksheets) increase the achievement gap. Kagan Structures are alternative situations that increase equality of and amount student engagement, improving achievement, as well as social skills and behaviors. There are many advantages of RallyRobin and Timed Pair Share compared to the traditional Hand Raising Q-A: In the same amount of time the traditional teacher can ask and respond to the answers of two or three students each giving one response, with a RallyRobin every student in the class has given a number of responses. With Hand Raising Q-A, it would take a full class period to have every student in the class share their ideas for a minute because the teacher talks twice for every time a student talks, first asking the question, and then responding to the answer. For every student to share for a minute using Timed Pair Share, it takes just a little over two minutes. In 2 minutes, Timed Pair Share produces as much oral language production per student as the traditional teacher produces in an hour! When we use Timed Pair Share or RallyRobin, at any moment, half the class is verbalizing their ideas and every student is called upon to respond. No one can choose to hide. The participation is very unequal in the traditional and group work approaches; we call most on those who least need the practice and call least on those who most need the practice. In contrast, the Kagan Structures are carefully designed to equalize participation, either by equal time or equal number of turns. Sage-N-Scribe For worksheet work, rather than working alone, the teacher might have students do a Sage-N-Scribe. In Sage-N-Scribe, students work in pairs, with one worksheet. For the first problem, the Sage tells the Scribe how to solve the problem and the Scribe records the work. The Scribe provides praise, and, if necessary, coaching. Following each problem, students switch roles. Some of the many advantages of Sage-N-Scribe are that students get peer support, encouragement, and coaching. They receive immediate feedback and correction, if necessary. Students can’t do a whole worksheet practicing wrong. In the traditional classroom, they get feedback only after the teacher has had time to correct the papers. An additional advantage is the amount of feedback: With Sage-N-Scribe, students get feedback following every problem, not following every worksheet. Timed Pair Share, RallyRobin, and Sage-N-Scribe are but three of over 200 Kagan Structures we have created. Different structures have different functions. We train teachers in structures for interpersonal functions (Classbuilding, Teambuilding, Social Skills, Communication Skills, and Decision Making) and academic functions (Knowledge Building, Procedural Learning, Processing Information, Thinking Skills, and Presenting Information). Results Using Kagan Structures There are numerous controlled research studies documenting positive results of using Kagan Structures. The average effect size on achievement using Kagan Structures is .92, indicating a percentile gain of 31.9. A student scoring at the 50th percentile in a traditional classroom would be scoring at the 82nd percentile had the teacher used Kagan Structures! Research indicates implementing Kagan Structures results in dramatic reductions in discipline referrals and corresponding increases in positive behaviors such as helping, turning in lost items, preventing fights, and picking up trash without being asked. Why? When Kagan Structures are used regularly in classrooms, cooperation becomes the norm in the school. Just like the students who work together to gather the coins, students experiencing Kagan Structures feel themselves to be on the same side. Conclusion Applied situationism gives us leverage. With relatively little change in how we structure the interaction among students, we have a huge positive impact on a number of key educational outcomes, including academic achievement, social development, character development, race relations, and reduction of disruptive behaviors. Kagan S., 2013. Kagan Cooperative Learning Structures. San Clemente, CA: Kagan Publishing. www.KaganOnline.com Kagan S., & Kagan M., 2009. Kagan Cooperative Learning. San Clemente, CA: Kagan Publishing. www.KaganOnline.com Kagan S., 2014. Brain-Friendly Teaching: Tools, Tips, and Structures. San Clemente, CA: Kagan Publishing. Zimbardo P, 2007. Understanding How good People Turn Evil. New York, NY: Random House.