

ESL MAGAZINE

THE INFORMATION SOURCE FOR
ESL/EFL PROFESSIONALS WORLDWIDE

Plus:

Inside the NCELA

Teaching Vocabulary
for Peace Education

English Teaching
Argentina

www.eslmag.com

July/August 2002

U.S. \$3.95, Canada \$4.95



Kagan on Cooperative Learning

See page 30 to subscribe!

PSRT STD
U.S. POSTAGE
PAID
GREENFIELD,
OH
PERMIT NO. 80

Kagan Structures for English Language Learners

BY DR. SPENCER KAGAN AND JULIE HIGH

Kagan Structures are radically transforming classrooms across the United States and in many parts of the world. These easy-to-learn, easy-to-use instructional strategies are ideal for promoting second language learning. In classrooms in which the Kagan Structures are used regularly, students for whom English is a second language learn both English and academic content far more quickly and far more thoroughly than when traditional instructional strategies are used. The Kagan Structures also promote language and content learning far more than does group work.

Let's do a thought experiment. Imagine three classrooms—Classrooms A, B and C. In all three classrooms there are a number of ESL students at different stages of language development. In each classroom the students are at exactly the same ability level in both language and content mastery. In all respects the classrooms are identical with one important exception—they differ in their approach to instruction

Classroom A: Traditional. The teacher in Classroom A relies primarily on Whole-Class Question-Answer. That is, to promote content and language learning the teacher asks questions of the whole class, students raise their hands to be called on, and when called on by the teacher, they respond. We peek into Classroom A during a vocabulary lesson. The teacher asks, "Who can tell me some of the items we find in the produce section of the market?"

Classroom B: Group Work. The teacher in Classroom B relies primarily on Group Work. That is, to promote content and language learning the teacher has students sitting in groups of four and often calls for student interaction in groups. We peek into Classroom B during the same vocabulary lesson. The teacher gives groups a directive, "In your groups talk it over. What are some of the items we find in the produce section of the market?"

Classroom C: Kagan Structures.

The teacher in Classroom C knows and uses a range of Kagan Structures. That is, to promote content and language learning Teacher C, like Teacher B, has students sitting in groups of four and often calls for interaction in groups. There is a critical difference, though. The interaction of students in Classroom C is highly structured. Teacher C uses Kagan Structures. We peek into Classroom C during the same vocabulary lesson. The teacher gives groups a



directive: "In your groups, turn to your shoulder partner and do a RallyRobin. Take turns naming some of the items we find in the produce section of the market."

On the surface of it Classrooms B and C appear radically different from Classroom A, but not that different from each other. In fact, all three classrooms are radically different—especially with regard to the language and content learning that results for ESL students. Let's analyze why.

Why Classroom A Fails. Classroom

A is exquisitely designed to have ESL students fall through the cracks. Juan is in Classroom A. He knows the names of some produce items but does not dare raise his hand. He knows there are other students who are more fluent than he is, and he does not want to risk the embarrassment of speaking out before the whole class. In his culture, it is not the norm to compete, to put oneself in front of others. He is also a bit shy. Given this, he finds it much easier to simply not raise his hand. Because he is not participating, after a time his mind drifts to other things. Soon he is not learning any new content or language.

Why Classroom B Fails. In Classroom B Juan is in a group of four students. In his group there are two students who are more fluent than he is, so again he sits back and lets them take over. Sometimes during group discussions he does not say a word, and again, his mind drifts because he is not participating.

Why Classroom C Succeeds. When Juan is placed in Classroom C, he becomes engaged. His partner names an item and then it is his turn. Juan is hesitant, but his partner patiently waits. When he names an item his partner smiles. Each time it is his turn he gets encouragement and support from his partner and is able to name a number of items. Further, because he is engaged, he listens to the items his partner is naming and is learning both content and language.

The Design of Kagan Structures

All of the Kagan Structures are very carefully designed. They are carefully structured to implement four basic principles of cooperative learning, PIES (Kagan 1994):

- P = Positive Interdependence
- I = Individual Accountability
- E = Equal Participation
- S = Simultaneous Interaction

Positive Interdependence. To determine if we have satisfied the principle of positive interdependence we ask, *Is a gain*

for one associated with a gain for others, and is help necessary? Positive Interdependence places students on the same side so a gain for one is associated with a gain for another and students cannot succeed alone. In our example, in Classroom A, students were not on the same side. They were competing for the teacher's attention. When one was called on, the others lowered their hands in disappointment. A gain for one was a loss for the others. Further, no help was necessary. Students could succeed entirely on their own, so they felt no need to cooperate or support each other. In Classroom B, students felt themselves to be on the same side, but their interaction was not structured, so one or two students could complete the task without help from the others. In Classroom C, students had to cooperate. The structure not only placed them on the same side, working together, but it made it so one person could not do it all. To do a RallyRobin you need to cooperate with your partner.

Individual Accountability. The principle of individual accountability is satisfied if we can answer yes to the question, *Is individual public performance required?* To satisfy the principle of individual accountability, students must perform on their own in front of at least one other. Classrooms A and B fail the test of individual accountability as students can choose not to participate. Classroom C passes the test because during a RallyRobin individual public performance is required. No one can opt out.

Equal or Equitable Participation. The critical question to ask here is *How equal is the participation?* In Classroom A we end up calling most on those students who least need the practice and calling least on those who most need the practice. In Classroom B the same problem of unequal participation is recreated in the groups: The more fluent and outgoing students take over. When Kagan Structures are used, the interaction is very carefully designed so there is far more equal participation.

Simultaneous Interaction. The critical question to ask regarding simultaneous interaction is *What percent of the students are overtly active at any one moment?*

When we call on one student in Classroom A, with thirty students in the class, we have only one of thirty students producing language—a little over 3% of the class! When we have students in groups of four, partici-



pation goes up dramatically. With one student at a time talking in their groups, at any one moment 25% of the class is producing language. Notice, though, using RallyRobin doubles the overt active participation: 50% of the class is producing lan-



guage at any one moment. Because pair work doubles the active participation compared to group work, many Kagan Structures include pair work.

Structures Produce Gains. Given this analysis, it is no mystery why students

post dramatic language and content gains when Kagan Structures are used. To take one example, the Catalina Ventura School in Phoenix, Arizona, adopted Kagan Structures in 1996. Three years later they showed marked improvements in 23 of 26 areas when looking at percentages of students that mastered a skill. Some grade levels showed as much as 25% growth in students demonstrating mastery. Mastery of district skills in math at the sixth grade level increased 22%, progressing from 63% to 85%. Fourth grade reading scores jumped from 53% to 85%, a 32% increase. Finally, Catalina eighth graders jumped 33% in writing, climbing from 49% to 82%. These gains were all the more remarkable because of the high percentage of ESL students and the increasing number of students from low-income homes. Students receiving free or reduced lunch rose from 55% to 74% at the same time the dramatic test score gains were being posted (Moenich 2000). When Kagan Structures are used, all students are engaged and all students learn both content and the language of instruction.

Lots of Kagan Structures to Choose From

There are over 150 Kagan Structures with different functions. Some are designed to produce mastery of high consensus content, others to produce thinking skills, and yet others foster communication skills. A few favorite Kagan Structures are described in the sidebar below.

The primary source for Kagan Structures is *Cooperative Learning* (Kagan 1994) Here you will find a description of well over 100 Kagan Structures, when to use them, how to adapt them for use with English language learners. A second primary source for Kagan Structures is *Multiple Intelligences: The Complete MI Book* (Kagan and Kagan 1998). In the multiple intelligences book, there are simple structures to engage each of the eight intelligences. For example, with Kinesthetic Symbols, students learn to use their hands to symbolize the content, engaging the bodily/kinesthetic intelligence. Those structures best suited for second language learning are described in

Favorite Kagan Structures

TIMED PAIR SHARE: One student talks for specified time and the other listens. Then they switch roles.

TEAM INTERVIEW: Each student on a team in turn is interviewed by his/her teammates.

NUMBERED HEADS TOGETHER: After the teacher asks a question, students write their own answer, discuss it in their groups, signal they are ready, and the teacher calls a number. Students with that number respond using a range of simulta-

neous response modes.

BOSS/SECRETARY: One student ("Boss") dictates to another ("Secretary") who records the answer. The boss receives praise and then students switch roles.

MIX-N-MATCH: Students circulate in the room with cards, quizzing each other and then finding their match. For example, the person who has the picture of a shoe searches for the one who has the word "shoe."

Second Language Learning through Cooperative Learning (High 1993), which also contains ready-to-use ESL activities to go along with the structures.

Structures not Lessons

The use of Kagan Structures is very much in contrast to other approaches to cooperative learning. The most important difference is that other approaches are lesson-based. That is, they ask teachers to plan cooperative learning lessons. With the Kagan approach, rather than planning cooperative learning lessons, we make cooperative learning part of any lesson by including structures. The structures can be inserted at any point in any lesson to create greater engagement and learning for all students.

Advantages of Kagan Structures for English Language Learners

Besides implementing the PIES principles, structures have a number of advantages:

1. **Greater Comprehensible Input.** Students adjust their speech to the level of their partner because they are working together.

2. **Natural Context.** Language is used in real-life, functional interaction, reducing problems of transference.

3. **Negotiation of Meaning.** Students have the opportunity to adjust their language output to make sure they understand each other.

4. **Lowered Affective Filter.** Whereas it is frightening to speak out in front of the whole class, it is easy for students to talk with a supportive teammate.

5. **Peer Support.** Students encourage and support each other in language use.

6. **Enhanced Motivation.** Because the structures are engaging interaction sequences and students need to understand each other, there is high motivation to speak and listen for understanding.

7. **Greater Language Use.** Using a pair structure such as Timed Pair Share, it takes but two minutes to give every student in the class a full minute of language output opportunity. In contrast, in Classroom A, using whole-class question-answer, to provide the same amount of oral language output per student it would take over an hour because the teacher is asking a question and responding to each student one at a time.

These and many other advantages of the Kagan structures are documented and detailed at length in three publications: Kagan 1995; Kagan, Kagan and Kagan 2000a; Kagan and McGroarty 1993.

Adapting Kagan Structures for Levels of Language Development

The Natural Order Hypothesis (Krashen and Terrell 1983) postulates that as students learn a second language, they pass through five stages or levels called "the five levels of language acquisition":

1. Pre-Production
2. Early Production
3. Speech Emergence
4. Intermediate Fluency

5. Fluency

In a typical classroom, there are students at several stages of language acquisition. Even a group of students who arrive in the country and begin school on the same day will have acquired vastly different capabilities in the target language within a few weeks.

Kagan Structures possess a unique capacity: they can be adapted to accommodate full inclusion of language learners at all acquisition stages at once. The same structure can involve limited as well as fluent speakers so that language practice and content mastery are combined. There is a wide range of structures that can be used at each of the levels of language production and many structures accommodate many levels simultaneously. Many structures have been modified for different levels of language proficiency; specific modifications of many structures for different levels of language acquisition are spelled out in four publications with associated videos (Kagan, Kagan, and Kagan 2000a, b, c, d).

Pre-Production. For students at the Pre-Productive language acquisition level there are structures that allow kinesthetic responses so students can engage in and demonstrate the full range of thinking skills: knowledge, comprehension, analysis, application, synthesis and evaluation. In classrooms where students exhibit a range of language acquisition stages, use of structures like Line-Ups, Formations, Mix-Freeze-Group, Similarity Groups and Corners offer all students the chance to participate equally. Similarly, kinesthetic response modes can be easily integrated into structures such as RoundTable, RallyTable and others so students can demonstrate concepts through manipulatives or drawing.

Early Production. Students at the Early Production stage benefit from choral response modes and gambit development that are associated with many Kagan Structures. Praising, asking critical questions, and responding to input from teammates or partners are integrated with the steps of many structures such as Timed-Pair-Share, Fan-N-Pick and Find-Someone-Who. Using the musical intelligence to increase retention, Poems for Two Voices, Songs for Two Voices and ReadingBoards involve the entire class in reading and reciting essential language.

Speech Emergence. At the Speech Emergence stage all Kagan Structures provide appropriate language production opportunities. Because students at this stage are making many errors and do not have a large vocabulary, structures that accommodate brief responses include all students fully. RallyRobin, Numbered Heads Together, Showdown, Match Mine and Spin-N-Review are examples of structures that are excellent for use at this stage with no accommodations required.

Intermediate Fluency and Fluency. All Kagan Structures are fully appropriate for students at Intermediate Fluency and Fluency. Talking Chips, Timed Pair Share,

Spin-N-Think and One Stray all structure opportunities for extended language production.

What may be even more important than the opportunities for language acquisition in Kagan Structures is their focus on higher-level thinking and cognitive development. Through full inclusion in classroom activities that require understanding concepts and applying new knowledge, language learners have full access to curriculum. Language proficiency truly can be acquired simultaneously with content mastery and achievement of challenging performance standards through Kagan structures.

Spencer Kagan, Ph.D., is a former professor of psychology and education at the University of California. Presently he directs Kagan Publishing and Professional Development, San Clemente, CA. www.KaganOnline.Com.

Julie High, M.A., taught high school ESL and French and directed Title VII project services for ELL students in grades pre-K through eight in North Monterey County Unified School District in Moss Landing, CA. She is a National Certified Trainer for Kagan Professional Development.

REFERENCES

- High, Julie. 1993. *Second Language Learning through Cooperative Learning*. San Clemente, CA: Kagan Publishing.
- Kagan, Spencer. 1994. *Cooperative Learning*. San Clemente, CA: Kagan Publishing.
- Kagan, S. and M. Kagan. 1998. *Multiple Intelligences: The Complete MI Book*. San Clemente, CA: Kagan Publishing.
- Kagan, S., Kagan, M. and Kagan, L. 2000a. *Reaching English/Language Arts Standards through Cooperative Learning: Providing for ALL Learners in General Education Classrooms*. Port Chester, NY: National Professional Resources, Inc.
- Kagan, S., Kagan, M. and Kagan, L. 2000b. *Reaching Mathematics Standards through Cooperative Learning: Providing for ALL Learners in General Education Classrooms*. Port Chester, NY: National Professional Resources, Inc.
- Kagan, S., Kagan, M. and Kagan, L. 2000c. *Reaching Social Studies Standards through Cooperative Learning: Providing for ALL Learners in General Education Classrooms*. Port Chester, NY: National Professional Resources, Inc.
- Kagan, S., Kagan, M. and Kagan, L. 2000d. *Reaching Science Standards through Cooperative Learning: Providing for ALL Learners in General Education Classrooms*. Port Chester, NY: National Professional Resources, Inc.
- Kagan, S. and M. McGroarty. 1993. Principles of Cooperative Learning for Language and Content Gains. In *Cooperative Learning: A Response to Linguistic and Cultural Diversity*, ed. D. Holt. McHenry, IL: Delta Systems, Inc.
- Kagan, Spencer. 1995. We Can Talk: Cooperative Learning in the Elementary ESL Classrooms. *Elementary Education Newsletter* 17(2): 3-4.
- Krashen, S. and T. D. Terrell. 1983. *The Natural Approach: Language Acquisition in the Classroom*. Hayward, CA: Alemany Press.
- Moenich, D. 2000 Kagan Structures Increase Achievement at Catalina Ventura School. *Kagan Online Newsletter*, Fall 2000, Permanently archived: <http://www.kaganonline.com/Newsletter/1000/SpecialArticle.html>.