Kagan Cooperative Learning Model: The Bridge to Foreign Language Learning in the Third Millennium

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Abstract—Cooperative learning has been a popular topic in educational circles for more than a decade. Researchers and practitioners have found that learners working in small cooperative groups can develop the type of intellectual exchange that fosters creative thinking and productive problem—solving. One of the best models of cooperative learning, it is kagan cooperative learning. The expended use of Kagan's cooperative learning structures could bring about increased language achievement .increased use of Kagan's cooperative learning structures may bring about outcomes including greater employability, social skills and language skills in order to prepare students (learners) for real world situation. The authors try to introduce this model to the world of language learning.

Index Terms—kagan, cooperative learning, structure, inside -outside circle

I. Introduction

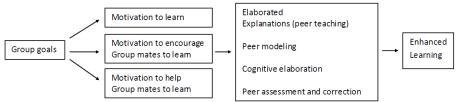
Teachers need to help students make connection between foreign language abstracts concepts and language concrete concepts .the days of teachers standing in front of class, lecture for 60 minutes and then assigning a text in the language book are no longer effective for today's students. The traditional mode of organization is a teacher –centered one with native speakers sitting in rows facing the teacher. The students spend most of their time repeating and manipulating models provide by teacher, the text book and the tape and develop skills in choral speaking and repeating. Change is necessary in order for students to become creative students in the learning language.

Sewell (2002) stated "learning is active process that allows students the opportunity to construct understanding through empirical investigation and group interaction" .(p 6)

Slavin (2000) stated "cooperative learning is one of greatest success stories in the history of educational innovation. Almost unknown in the mid-1970's cooperative learning strategies are now so commonplace that they are often seen as a standard part of educational practice, not as an innovation".

Kagan (2001) placed cooperative learning among strongest of all methods for increasing student achievement .He insisted students learn best when day can encourage and tutor each other. (p31)

Slavin (1996) listed over 90experimental studies. He concluded that the reason cooperative learning succeeds as an educational methodology is its use of convergent tasks: group goals based on individual responsibility of all group members leads to increased learning achievement, regardless of subjects or proficiency level of students involved (see figure 1)



(Based on slavin 1996, p 78)

Rationale for cooperative learning in FL (foreign language)

Recent research and experience in language classroom have established the benefit of small- group activity in expanding student exposure to a new language and in providing many more opportunities to practice language naturally than are available.

In traditional whole- group instruction. Students (learners) participation in pair and small-group work following cooperative methods facilities second language acquisition along with the subject matter mastery. For these reason, educators concerned building students second language skills would benefit from learning about cooperative learning techniques.

Kagan cooperative learning model

Kagan (2010) defined cooperative learning as "a teaching arrangement that refers to small, heterogeneous groups of students working together to achieve a t common goal students work together to learn and are responsible for the teammate's learning as well as their own" (p.85). the kagan model of cooperative learning, based on the concept and use of "structures" is an innovate approach to classrooms instructions .these structures such as "numbered heads together"

"Quiz Quiz trade" and "rally coach" create greater student motivation higher student achievement and effective classroom management. The primary goal is communication about important and personal themes; the participation of foreign language students in traditional sequential class activities is inadequate. When students are given a variety of opportunities to practice listening and speaking with others can they develop mastery with communication. In a foreign language class,

More than in other classes, the true nature of the language arts became clear. Listening, speaking, reading and writing are developmental skills that are naturally mastered in sequence. language learners understand more of what is said to them than they can say in return ,and can read with comprehension more than they can write. Writing correctly demonstrates achievement of mastery with the principles of grammar, vocabulary and mechanics of language. Because exposure, practice and feedback provide the experiences that increase these skills, then the structural Approach to cooperative learning fosters language acquisition. The structures create additional students involvement and the optional for mastery.

What is structure?

Kagan has two definitions for structure:

- A) Organizes classroom instruction. A structure is an instructional strategy that describes how the teachers and students interact with the curriculum.
- *B)* is content free and repeatable. Structures are used to explore the curriculum, But are not tied to any specific curriculum. They can be used repeatedly with different curriculum, creating new learning experiences.

There are 150 kagan structures. Structures have different functions. Some are designed to produce master of high consensus content, other to produce thinking skills and yet others foster communication skills.

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 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 lessons to create greater engagement and learning for all students.

This model has four basic elements.

The four basic elements are:

- 1) Positive interdependence occurs when gains of individual or teams are positively correlated.
- 2) *Individual accountability* is observed when all students in a group of held accountable for doing a share of the work and for mastery of the material to be learned.
 - 3) Equal participation is noticed when each member of group is afforded equal shares of responsibility.
- 4) Simulations interaction is allowed when class time is designed to allow many student interactions during the period .these elements have come to be known as the basic principle of "P.I.E.S"

Why are structures important?

Structures control our behavior to a great extent, and different structures elicit different forms of behavior such as active /passive and social /asocial behavior.

Far too much of what goes on in schools; according to kagan is training in asocial behavior via competitive situations. One person wins if the others lose. The class conversation, for example, is a competitive structure: it encourages students to complete against each others for the teacher's attention and permission to answer. Only the strongest have a chance here, which is why many opt out. Somewhat simplistically, one could say that the structure encourages asocial behavior and passivity. Interaction in pairs, on the other hand, we normally be a cooperative structure. It is hard to be passive in a situation where the tax is, for example, to interview each others in pairs. Cooperation and social behavior arise naturally here. But why so many structures? Because the aims of one steaching can vary. If the aim is to acquire concrete knowledge one needs different structures than if the aim is to train communication skills or thinking skills .for this reason kagan categories structures according to the overall purpose (s) they serve best, there by making it easier to choose the structure that is relevant, both in relation to the nature and amount of the material that is to be worked on and the teaching goal that has been set. The following domains of usefulness for the structures are used:

Team building

Class building

Thinking skills Information sharing Communication skills

Mastery

The overall categories refer to the overall learning goals which the individual structures are best able to promote, without excluding the possibility that one has positive spin-off at the same time. Kagan's categorization actually shows that many of the structures are equally good at promoting various different overall aims: Round Robin, for example, is grouped as a team-building, mastery and information-sharing structure.

The aim of these overall categories is to ensure that the teacher chooses a structure that is in line with his overall objective; just as suitable as the structures are to serve the aims for which they were created can they be unsuitable in relation to other objectives. If, for example, one wishes the students to acquire some concrete material, one should not choose a communication-skills structure such as Talking Chips (the storming (the aim of which is to generate new ideas) but a mastery structure such as Expert-Jigsaw, the aim of which is to become an 'expert' in certain material in order to explain it subsequently to others.

Advantage of kagan structures for language learners

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

* greater comprehensible input. Students adjust their speech to the level of their partner because they are working together.

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

- * Negotiation of meaning. Students have the opportunity to adjust their language output to make sure they understand each other.
- * Lowered affective filter. Whereas it is frightening to speak out in front of the class, it is easy for students to talk with supportive teammate
 - * Peer support. Students encourage and support each other in language use
- * Enhanced motivation. Because the structures are engaging interaction sequence and students need to understand each other there is high motivation to speak and listen for understanding.
- * 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.

Some of the benefits of cooperative learning based on Kagan model

- * social skills. In cooperative learning increases a long list of social skills, including listening, taking turns, speaking, conflict resolution skills, leadership skills, and teamwork skills. Students coming from cooperative learning classrooms are more polite and considerate of others. They can make team learning in language learning and they say their ideas and attitudes to second language.
- * Class Climate. Cooperative learning leads to increased liking for school, language class, academic content and the teacher.
- * *Diversity skills*. As a result of working in heterogeneous cooperative teams, students learn to understand and work with others who differ from themselves. These skills are essential for the 21st century as we are becoming more and more diverse.

Memory systems and kagan cooperative learning

The ability to remember – whether it be facts, skills, new words or grammar rules – is essential for classroom success. Kagan introduces five *major memory systems* (figure. 1). Each memory system is a passport to a different type of academic success. All schooling is the process of creating memories in the minds of the learners. Can we truly say students learned a new word or grammar if they are unable to recall it?

Perhaps it was taught, but until it is in memory, it is not learned. What practical importance does education hold if students are unable to remember what they learned? Memory is learning.

1. five major memory systems (SPEWS)

Semantic: (fact memory)

Semantic memory is "fact" memory academic content knowledge such as ideas, words, answers and grammatical rules. Semantics memories are created through repeated practice. Students can quickly recall that two times two is four, the definition of a word or the dates of an event in history. Students may not know how or when they acquired the information, they gust know. It can take many, many repetitions to lay down long-term semantics memories. In fact, semantic memory is our weakest and most recently evolved memory system. Semantic memory is for information we have over –learned – content we have learned so well we just know it.

Procedural: (skill memory)

Procedural memory is "skill" memory. It is our "how to" memory system. This memory system is sometimes called the "motor memory" or "muscle memory"

Because often it involves physical activity such as riding a bike or driving a car.

Procedural memory is also referred to as "tacit knowledge" or "implicit knowledge" Because often it can be expressed only by performing the specific skill and people often have problem verbalizing procedural memories. We acquire procedural memories by doing. We remember how to perform the skill unconsciously. For example, learning to

ride a bike was difficult; it involved learning to simultaneously balance, pedal and steer. But with practice, it becomes so automatic we move on to doing wheelies, jumping .the same is true for classroom procedural memories. Words and verbal skills require repeated practice but eventually become automatic.

Episode (episode memory)

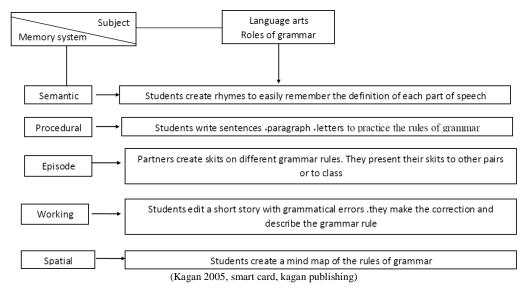
Episode memory is "episode" memory. Episode memory is not produced by repetition. Episode that occurred for one time in one place, without difficulty, we remember what we had for dinner or what we did yesterday, we store episode in long term memory if they are rich in sensory input, stir our emotions, or relate to prior experiences. Whether we won the spelling bee or broke an arm on the play ground these autobiographical events matter to us and are likely to be retained for years although episodes are one —time events, frequent recall of episode enhance probability of future. Students relive event (for example a short story) in their minds by discussing, drawing, visualizing.

Working: (thinking memory)

Working memory is dubbed the "thinking" memory because it is inextricable from thinking .it is the short – term memory system where we hold the things that are at the forefront of our minds, literary. The more things in working memory, the lower its capacity to hold additional information and the less capable students are of new learning .this system allows students to talk through problems to themselves, and with partners and teammate. Verbalizing their thinking keeps students focused and provides auditory and social stimuli, two additional channels to make the content memorable. Enhancing students working memory builds better thinkers and language learners.

Spatial (map memory)

Spatial memory is our "map memory" it includes our mental maps of where physical objects are located in our environment and how we know how to get from place to place. students can remember what category an object belongs to based on where it is written on the page for example when studying nouns and verbs, a student can list nouns on the left side and verbs on the right mapping out the content is key to engaging spatial memory.



The five levels of language acquisition

- a) Pre -production
- b) Early production
- c) Speech mergence
- d) Intermediate fluency
- e) Fluency

In a typical class room, 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 cogent mastery are combined. There is wide range of structures that can be used at each of levels of language production and many structures accommodate many levels simultaneously.

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 the classrooms where students exhibit A range of language acquisition stages, use of structures like line-ups, 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 round table, rally table and others so students can demonstrate concepts through manipulative or drawing.

Early production. Students at early production stage benefit from choral response modes and gambit development that are associated with many kagan structures. Praising, asking critical questions and responding input from teammate or partners is integrated with the steps of many structures such as Time – paired share ,Fan - n – pick and find – someone – who . Using the musical intelligence to increase retention, poems for two voices, songs for two voices and reading boards 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 errors and do not have large vocabulary, structures that accommodate brief responses fully include all students. Rally robin, numbered head together, show down, match mine, 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, one stray all structure extended language production opportunities.

What may be even more important than the opportunities for language acquisition in kagan structures in 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.

Coopertive learning and the language acquisition revolution

We are undergoing transformation in how we teach our student s a second language. The traditional methods failed. Yes, we got students to memorize vocabulary words and conjunctions and to give them back successfully on a weekly test. But no, we never produced fluency in the target language. Why not? Because memorizing concoctions and grammar structures produced at the best some knowledge about a language. *Knowledge about language* is very different from *acquiring the language*.

Why kagan cooperative learning fosters acquisition?

When we are implementing cooperative learning activities according kagan approach, we are putting into 4 principles of language acquisition:

1. Maximizing language output:

The simultaneity principle

We learn to speak by speaking. Students learn to speak in proportion to the extent to which they actually speak target language. And cooperative learning by implementing the simultaneity principle, maximize student language production.

In fact, the structure of the traditional classroom is exquisitely designed to prevent language learning. In cooperative learning we discard sequential structures for simultaneous structures. Rather than calling on the students to participate one –at – time ,we direct them to talk to each other in pairs, all students at once .the interaction is simultaneous, occurring all over the room.

2. Moving towards meaning:

The communicative Approach

When students answer a question posed by the teacher they are they are engaging in *display behavior*. They are showing off what they know, speaking to be evaluated, when students are sharing with each other what they did over the weekend they are engaging in communicative behavior during communities behavior, words are produced not as an end in themselves, but as a means towards accomplishing a goal, communicating meaning the student in the act of commutating is not offering him/herself up as an object be evaluated in fact, during true commutation, the student forgets him/herself the focus is on transferring meaning. When words are the means not the ends, words flow. Fluency in a language occurs when the language is used as a vehicle for communication. Fluency in a language is partially a function of opportunity to speak, it is also partially

A function of willingness to speak is determined by a simple formula:

(Willingness = attraction - fear)

3. Langauge learning and gambit development

The most important aspect of this structured natural approach for language acquisition is gambit development: students learn what to say and what to do, to work well together. For example, if a Joe begins to dominate a group, the other students learn verbal gambit like "Susan, I would like to hear you ideas on that".

Or "does anyone else on the team have anything to add?" Instead of put –downs, The students learn praising gambits such as, "great idea!" and you "certainly got that one right"

4. Peer pulling language

Language production is a push and pulls process. When I need to buy something, Share a feeling with a friend, or plan a trip with the family, language production

Is primarily a push process. That is, energy to express myself builds up, tending to push language out. On the other hand, when I am asked the time of day, or what I feel about war in Iraq, or possible topics for our team presentation, language production is primarily a pull process. That is, others around me are pulling language out. There are many a number of other ways in which peers facilities language acquisition: they provide a missing word or phrase, they model

words and phrases which might have not otherwise be heard, and they adjust their level of language difficulty in order to be understood by their teammates, providing

Comprehensible input. With regard to this last point, the cooperative learning team can do something a teacher cannot as teachers, we often face a dilemma:

When speaking with whole class, if we speak at a level of difficulty easy enough For the whole class to understand, we fail to provide adequate stimulation for the highest achieving students; on the other hand, if we speak to stimulate our highest students, we lose the lowest students. We cannot provide optimal language experiences for all students at once. Within a pair or team, however, the dilemma is reduced: students can adjust their level of language difficulty to make input more comprehensible for their teammates.

II. SOME OF THE SELECTED STRUCTURE

Juli (2010) explained kagan structures completely. In this here, we will describe some of them:

A. Inside -outside Circle

Half of the students in the class form a circle, shoulder to shoulder, facing outward. The other students each stand facing one person in the circle .the pairs briefly exchange greeting, interview each other, or review a few words or grammar items. at the teachers signal the students stop talking. The teacher gives instructions for their inside or outside circle to rotate to the left or right past a specific number of students before forming new pairs.

The repetition of word and grammatical structures in the target language with various other students provide a unique opportunity for students to rehearse and Master new information.

B. Round Table

In this structure, we have two steps:

Step1: the problem

The teacher asks a question with many possible answers, such as name all the sports you can or list any items you can identify in the classroom.

Step 2: students contribute

Teams have one piece of paper and one pen or pencil that rotate around team. Each student writes one answer on the list and passes the pen and paper .if any student is having difficulty thinking of what to write, the teammates can make suggestions.

Roundtable:

Alphabetical parts of speech lend themselves to the pace of the Round table format. Team round table nouns, verbs or verbs beginning with each letter of the alphabet or start with a different letter than "A".

C. Story Scramble

Teacher selects a story appropriate to the proficiency level of students. He /she cuts up a copy for each team into 4 strips. Teacher mixes up the strips and place them in an envelop. Team members each take one strip out of the envelop at a time and read it to the team .the teams then decide the sequence of the parts in the story. To increase the difficulty of the activity, select a longer story and cut the story into 8 or 12 strips, or choose a story in which the order of events could vary without changing the outcome. Each team member can read his or her part of the story as a team presentation.

III. CONCLUSION

Kagan cooperative learning structures enable students to work as teams, partner, classmate .these structures empower learners to work to together for learning language .By participating in kagan cooperative learning structures students (learners) are not frustrated alone, they are supported by each other .the students learn multiple ways to solve language problem and learn to tackle a language challenge as a group. These structures prepare happy place for learners and students so they don't feel tired. And they learn language concepts deeply.

Any teacher can easily learn some simple structures and be confident he/she implementing good cooperative learning. Students become skilled with others they can express their ideas, attitudes and feelings. Cooperative learning based on kagan model prepares a happy place .Learners learn language better because this environment is not boring. When they learn second language based on cooperative learning, they familiarize with culture society in second language. In Cooperative learning helps learners become a real language user in or out of class and learning environments. This type of learning prepares learners for entry into the Third Millennium.

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