

*Diversity in Teaching in the Classroom*

Vijaya Supriya Sam

Loyola College, India

0017

The Asian Conference on Language Learning 2013

Official Conference Proceedings 2013

The logo for the International Academic Forum (iafor) is centered on the page. It features the lowercase letters 'iafor' in a light blue, serif font. The text is surrounded by two large, overlapping, semi-transparent circular arcs. The outer arc is a light red color, and the inner arc is a light blue color, matching the text. The arcs are positioned such that they appear to frame the text, with the red arc on the left and the blue arc on the right, creating a sense of depth and movement.

iafor

iafor  
The International Academic Forum  
[www.iafor.org](http://www.iafor.org)

## **DIVERSITY IN TEACHING IN THE CLASSROOM**

Being a good teacher involves having a variety of skills, from being able to connect with students to classroom management, organization, understanding learning styles, providing engaging activities, and much more. When all of these things come together, they can create a fun and effective learning atmosphere. One of the most rewarding parts of teaching is connecting with the students. It's not as difficult as it might sound. Trust can be slowly built by engaging students in simple small talk and remembering what they say. It's also important to have a positive attitude in the classroom. Be fair, consistent, and avoid playing favourites, because failing to do these things is one of the fastest paths to alienating students. Classroom management is another big concern, especially for newer teachers. It's impossible to facilitate learning when there is constant disruptive behaviour. There is a fine line, though, between being too permissive and overly authoritarian. Discipline is actually closely related to trust, because students misbehave less when they have a connection with their teacher.

### **Connecting with Students**

Give each participant the handout and explain to them that the purpose of this opening activity(KWL) is to trigger prior knowledge. It serves as a model for active thinking during reading where students can apply higher-order thinking strategies which help them make meaning and help them monitor their progress toward their goals. The three column form can be modified from “we” to “I”.

With all participants, come up with ideas and record them either on the white board or newsprint. Complete each column (K – what you already know; W – what you want to know).

Stress to participants that they need to re-examine this sheet in order to complete the third column (L – what I learned) at the end of the session. Make sure you don't skip this step in the process even if there is only time to share one significant learning experience.

Generally they know what they want and where they are going. Although just because some of them may know what they want out of a career, doesn't mean that they know how to act in the “new” classroom where the shift has gone from teaching to learning. Instructors act as a facilitator rather than the presenter of learning. The adult learner's previous experience was probably teacher-directed and now we are expecting them do much more of the learning themselves. The “new” classroom strategies consist of active learning, cooperative learning, blended learning and flipped classroom activities, which may need to be explained to adult learners because this is not the way they are used to learning.

Most adult students are not in the classroom to compete, are there to succeed and improve themselves. Therefore, as an instructor of adults, minimize competition and

increase cooperation to promote student success. New adult learners may experience apprehension as they pursue a certificate or degree in higher education. As an effective teacher, it is important to cultivate trust and openness because without proper support, this anxiety may underestimate the student's ability to succeed. Focus on their needs and when in doubt, ask them. A caring teacher connects with students. Characteristics of caring include qualities such as patience, trust, honesty and courage. Be sure to point out whether or not the group came up with some of these qualities in the previous brainstorming activity. An effective teacher establishes rapport and credibility with students by emphasizing, modeling and practicing fairness and respect. Point out to participants the importance of modeling expected behaviour. Effective teachers consistently behave in a friendly and personal manner while maintaining appropriate teacher-student role structure. Teachers who are considered effective allow students to participate in decision making. Ask participants for examples. You may want to suggest having a class meeting to discuss issues that may arise during the course. Effective teachers have a good sense of humor and are willing to be self-revealing.

*(Rogers, Ludington, Graham 1997, p.2) wrote "The struggle is not in how to motivate students to learn. The struggle is in creating lessons and classroom environments that focus and attract students' intrinsic motivation; thus increasing the likelihood students will actively engage in the learning."* Focus is on what is current in education now, ie. creating a positive, safe environment for learning.

The more the pressure placed upon the student, the more they begin to doubt their abilities and their motivation and determination to succeed tends to decrease. Extrinsic rewards will overpower intrinsic for a short period of time, or as long as the extrinsic is perceived to be more powerful or desirable. The intrinsic motivator will always be more powerful in the long run. Extrinsic rewards do reduce risk-taking because they are focused on the grade and they don't want to be creative or think "outside the box" if they fear they will be marked down for it. Intrinsic motivators are often what pull students through the most difficult classes, the ones that they don't think they will pass but that they work hardest to pass. Not every student can tap into this kind of motivation all the time.

Introduce brainstorming as a way to tell new instructors what not to do in a classroom. After the five minutes are up, have participants create a positive for every negative.  
*Negative Ways for Instructors to Impact Student Motivation:*

Sarcasm, insincere listening, failure to meet basic needs, vague or infrequent feedback, failure to account for learning styles, failure to provide accurate examples or models, bribes, content and tasks that are ill-defined or repetitive, "busy" work.

College teachers in many disciplines argue that a lecture approach is key for learning. Teachers worry that if they do not lecture, students will leave at the end of the semester without a notebook full of key concepts and up-to-date information. It is *not* being suggested that lecture should be tossed out the window, rather it should be used with a greater variety of teaching strategies so that students will share in the work of teaching and learning. During lecture...

- Students are not attending to what is being said 40% of the time (Pollio 1984)

- Students retain 70% of the information in the first 10 minutes, 20% in the last 10 minutes (McKeachie 1986)

Now that we have talked about motivating and de-motivating behaviours that can occur in the classroom, let's talk about things that instructors can do to engage learners, enhance motivation, and use higher order thinking skills.

**Active learning** is understood to stand in contrast to traditional classroom styles where teachers do most of the work and students remain passive. The focus has now shifted from a teaching-centric approach to a learning-centric approach. This shift calls for a rethinking of the traditional classroom replacing the standard lecture with a blend of pedagogical approaches that more regularly involve the student in the learning process. Under a learning-centered approach, the instructor retains "control" of the classroom, but thought is regularly given to: (a) how well students will learn the material presented, and (b) the variety of pedagogically sound methods that may be employed to help the students better understand the core information to be learned. Research shows that active learning seeks to engage a greater range of students in effective learning. Furthermore, it positively affects the attitude of students toward self and peers in the learning process. Active learning develops social experiences between students and between teacher and students. It can build community within the classroom. Teachers give up their centralized role as "expert," "group leader," "source of authority and control." For many teachers, giving up authority and control of the teaching situation challenges a model they have lived with throughout their academic careers. College students have expectations of the role of teacher and their role as students. Active learning challenges these expectations.

**In active learning**, students solve problems, answer questions, formulate questions of their own, discuss, explain, debate, or brainstorm during class; **cooperative learning**, in which students work in teams on problems and projects under conditions that assure both positive interdependence and individual accountability; and **inductive teaching and learning**, in which students are first presented with challenges (questions or problems) and learn the course material in the context of addressing the challenges. Inductive methods include *inquiry-based learning*, *case-based instruction*, *problem-based learning*, *project-based learning*, *discovery learning*, and *just-in-time teaching*. Student-centered methods have repeatedly been shown to be superior to the traditional teacher-centered approach to instruction, a conclusion that applies whether the assessed outcome is short-term mastery, long-term retention, or depth of understanding of course material, acquisition of critical thinking or creative problem-solving skills, formation of positive attitudes toward the subject being taught, or level of confidence in knowledge or skills.

#### **WHAT IS ACTIVE LEARNING AND WHY IS IT IMPORTANT?**

The term "active learning" has been more understood intuitively than defined in commonly accepted terms. As a result many educators say that all learning is active. Are not students actively involved while listening to lectures or presentations in the classroom? Research however, suggests that students **must** do more than just listen: They must read, write, discuss or be engaged in solving problems (Chickering and Gamson 1987). Further, students must be engaged in such higher-order thinking tasks as analysis, synthesis, and evaluation, to be actively involved. Thus strategies promoting **activities that involve students in doing things and thinking about what they are doing** may be called **active learning**. Use of these techniques in the classroom is vital because of their powerful impact upon students' learning. Studies

have shown that students prefer strategies promoting active learning to traditional lectures. Other research studies evaluating students' achievement have demonstrated that many strategies promoting active learning are comparable to lectures in promoting the mastery of content but superior to lectures in promoting the development of students' skills in thinking and writing. Some cognitive research has shown that a large number of individuals have learning styles that are best approached using pedagogical techniques other than lecturing.

Active learning stands in contrast to "standard" modes of instruction in which teachers do most of the talking and students are passive. *When you have learned something you have changed your brain physically.* Active learning refers to techniques where students do more than simply listen to a lecture. Students are DOING something including discovering, processing, and applying information. Active learning "derives from two basic assumptions:

(1) that learning is by nature an active endeavour and

(2) that different people learn in different ways"

(Meyers and Jones, 1993).

It is important to remember, however, that lecture does have its place and that active learning cannot happen without content or objectives. research has made it abundantly clear that the quality of teaching and learning is improved when students have enough **opportunities to clarify, question, apply, and consolidate new knowledge**. There are many teaching strategies that can be employed to actively engage students in the learning process. Some of these are group discussions, problem solving, case studies, role plays, journal writing, and structured learning groups. The benefits of using such activities include improved critical thinking skills, increased retention and absorption of new information, increased motivation, and improved interpersonal skills. However, research also indicates that by re-organising or adapting the ways they present material to students, instructors can create an environment in which knowledge retention is significantly increased; of course, such situations require the cooperation of the students themselves. One of the best methods is to implement so-called *active learning*.

*Active learning is involving students directly and actively in the learning process itself.* This means that instead of simply receiving information verbally and visually, students are receiving, participating **and** doing. Thus *active learning* is:

- *engaging students in doing something other than listening to a lecture and taking notes*

- *students may be involved in talking and listening to one another,*

- *or writing, reading and reflecting individually or in small groups*

Small group activities are educationally sound as long as they are carefully designed with realism and learn from each other. With the group, brainstorm ideas on what makes small groups an effective teaching and learning strategy—what are some basic considerations for positive results? Record these ideas on the whiteboard. After brainstorming ideas, provide participants with handout of small group guidelines.

## **WHAT ARE THE ELEMENTS OF ACTIVE LEARNING METHODOLOGIES IN THE CLASSROOM?**

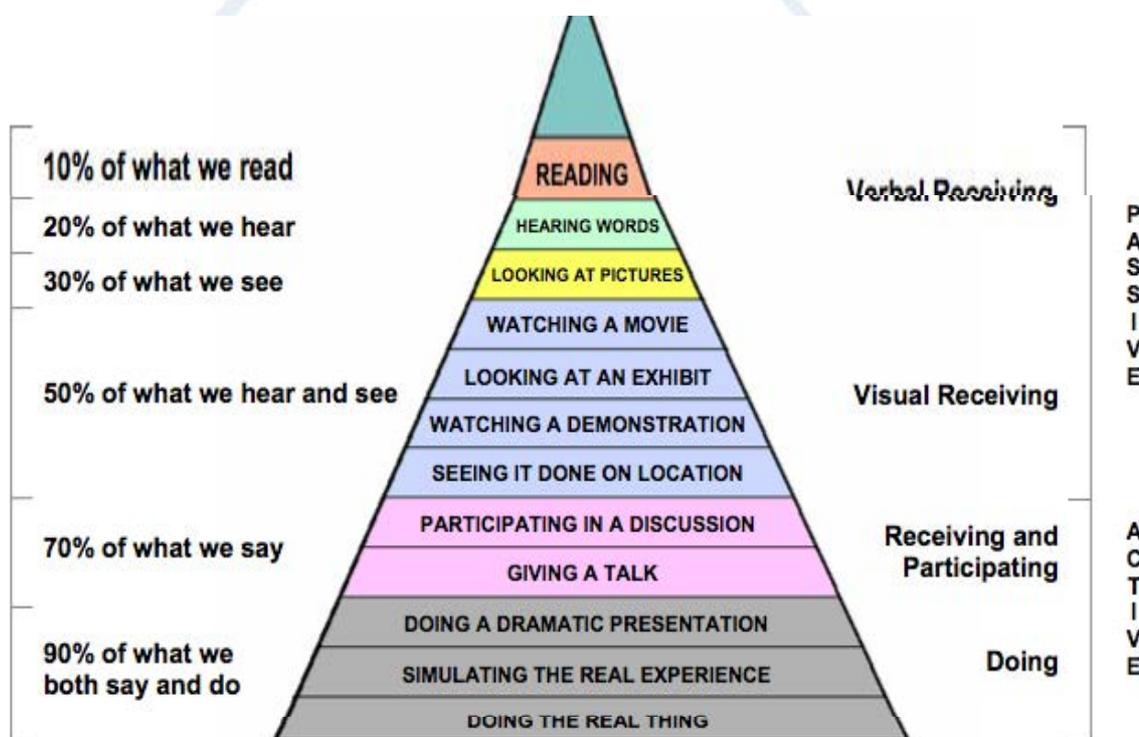
Active learning methodologies necessitate that the student must find opportunities to meaningfully talk and listen, write, read, and reflect on the content, ideas, issues, and concerns of an academic subject. (Meyers & Jones, 1993). Bonwell and Eison (1991) state that some merits of active learning are:

- Students are involved in more than listening,
  - less emphasis is placed on transmitting information and
  - greater emphasis on developing students' skills,
  - students are involved in higher-order thinking (analysis, synthesis, evaluation),
  - students are engaged in activities (e.g., reading discussing, writing), and
  - greater emphasis is placed on students' exploration of their own attitudes and values.
- “Active learning shifts the focus from the teacher to the student and from delivery of subject content by teacher to active engagement with the material by the student. Through appropriate inputs from the teacher, students learn and practice how to apprehend knowledge and use them meaningfully.”

## CONE OF LEARNING

### WE TEND TO REMEMBER OUR LEVEL OF INVOLVEMENT

(developed and revised by Bruce Hyland from material by Edgar Dale)



Edgar Dale, *Audio-Visual Methods in Teaching* (3<sup>rd</sup> Edition). Holt, Rinehart, and Winston (1969).

### Well if Active Learning works, why don't more teachers use it?

- We tend to teach the way we were taught ourselves, rather than in the way that work best.
- We know too much, and rather enjoy explaining. So when one sets activities, listen carefully to learners as they work, this can be even more enjoyable and less hard work than explaining, and the feedback is very informative.

I. In the context of the college classroom, what are the major characteristics associated with active learning?

A. Some of the major characteristics associated with active learning strategies include:

1. Students are involved in more than passive listening
2. Students are engaged in activities (e.g., reading, discussing, writing)
3. There is less emphasis placed on information transmission and greater emphasis placed on developing student skills.
4. There is greater emphasis placed on the exploration of attitudes and values.
5. Student motivation is increased (especially for adult learners).
6. Students can receive immediate feedback from their instructor.
7. Students are involved in higher order thinking (analysis, synthesis, evaluation).

B. In summary, *in the context of the college classroom, active learning involves students in doing things and thinking about the things they are doing.*

C. A conceptual framework encompassing active learning might be a continuum that moves from simple tasks on one end to complex tasks on the other. This is of course, an artificial, oversimplified construct, but it does provide both visual and conceptual model that is useful for designing courses that maximize students' intellectual engagement. Neither end of the continuum is considered to be "better" or more "desirable" than the other. Simple tasks are defined as short and relatively unstructured, while complex tasks are of longer duration-- perhaps the whole class period or longer-- and are carefully planned and structured.

### Figure 1

Simple tasks ----- Complex tasks  
The Active Learning Continuum

### Why is active learning important?

A. The amount of information retained by students declines substantially after ten minutes (Thomas 1972).

B. Research comparing lecture versus discussion techniques was summarized in the report *Teaching and Learning in the Classroom: A Review of the Research Literature* prepared by the National Center for Research to Improve Postsecondary Teaching and Learning (McKeachie et. al., 1987). The review concluded that In those experiments involving measures of retention of information after the end of a course, measures of problem solving, thinking, attitude change, or motivation for further learning, the results tend to show differences favouring discussion methods over lecture. (p. 70)

C. Numerous researchers and national reports also discussed the use of active learning strategies in the classroom. Consider the following statements:

All genuine learning is active, not passive. It is a process of discovery in which the student is the main agent, not the teacher.

(Adler 1982)

Students learn what they care about and remember what they understand.

(Ericksen 1984, p. 51)

Learning is not a spectator sport. Students do not learn much just by sitting in class listening to teachers, memorizing pre-packaged assignments, and spitting out answers. They must talk about what they are learning, write about it, relate it to past experiences, apply it to their daily lives. They must make what they learn part of themselves.

### **What obstacles or barriers prevent faculty from using active learning strategies?**

Six commonly mentioned obstacles to using active learning strategies include:

- A. You cannot cover as much course content in the time available;
- B. Devising active learning strategies takes too much pre-class preparation;
- C. Large class sizes prevents implementation of active learning strategies;
- D. Most instructors think of themselves as being good lecturers;
- E. There is a lack of materials or equipment needed to support active learning approaches;
- F. Students resist non-lecture approaches.

### **IV. How can these barriers be overcome?**

A. We believe that there are two primary sets of obstacles that prevent faculty from using active learning strategies in the classroom: (1) the six potential obstacles noted above, and (2) the fact that using active learning strategies involves risk

B. With respect to the six commonly reported obstacles, the following should be noted:

1. The use of active learning strategies reduces the amount of available lecture time that can be devoted to content coverage. Faculty who regularly use active learning strategies typically find other ways to ensure that students learn assigned course content (e.g., using reading and writing assignments, through their classroom examinations, etc.)
2. The amount of pre-class preparation time needed to implement active learning strategies will be greater than that needed to "recycle old lectures;" it will not necessarily take any more time than that needed to create thorough and thoughtful new lectures.
3. Large class size may restrict the use of certain active learning strategies (e.g., it is difficult to involve all students in discussion in groups larger than 40) but certainly not all. For example, large classes can be divided into small groups for discussion activities, writing assignments can be read and critiqued by students instead of the instructor, etc.. See (Weimer 1987) for several excellent articles on how this can be done.
4. Most instructors see themselves as good lecturers and therefore see no reason to change. Though lecturing is potentially a useful means of transmitting information, teaching does not equal learning; this can be seen clearly in the painful disparity between what we think we have effectively taught, and what students indicate they have learned on the examination papers that we grade.
5. The lack of materials or equipment needed to support active learning can be a barrier to the use of some active learning strategies but certainly not all. For example, asking students to summarize in writing the material they have read or to form pairs to evaluate statements or assertions does not require any equipment.

6. Students resist non-lecturing approaches because active learning alternatives provide a sharp contrast to the very familiar passive listening role to which they have become accustomed. With explicit instruction in how to actively participate and learn in less-traditional modes, students soon come to favor the new approaches.

## **AN ACTIVE LEARNING MODULE**

Please read the instructions given below. After fully reading the instruction sheet you may ask any questions you have.

Instructions:

### ***INDIVIDUAL WORK***

1. Take 20 minutes over the following exercise.
2. Please read the above passage (Eg. refer book page 45, 2nd para to page 47, 3rd para.)
3. As you read underline the words you find difficult to understand.
4. Check the meaning of the words you underlined using the dictionary.
5. Would you like to read the passage again? Please do so if you do not understand
6. Please answer the following questions:

1. What are some questions that come to your mind when you read this passage?
2. What are some important ideas in this passage?
3. Connect these ideas in your note book as a mind map.
4. What is the most important idea/ fact here?
5. Why do you think so?
7. What is your feeling about this piece of writing?
  1. Does it connect to your life in any way?
  2. Would you like to change the beginning? / ending?
8. What do you feel like doing now? (This question is to help you understand yourself. You may or not be able to do what you feel like.)
9. Please end this part of the exercise when the bell rings. It is time for some discussion

### ***1. SMALL GROUP***

**10. Now sit in small groups. Class wise, not more than 5 to a group. Take 15 minutes for this part of the exercise.**

1. Share answers to the question 6d and 6e.
2. Discuss - What is the author trying to say?
11. End when the bell rings.

### ***1. LARGE GROUP***

**12. Gather together as a class and discuss your questions with the teacher and also listen to her views. The teacher begins by asking questions for each group to answer**

1. Is there any question you wish to share with the whole class?
2. Say one sentence about the manner in which your small group discussion went
  1. Did People listen to each other?
  2. Was it interesting?
  3. Did everyone participate?
13. What would you like to do next to take your learning forward? An experiment, more reading, more discussion, making a model?

### Cooperative

### Learning

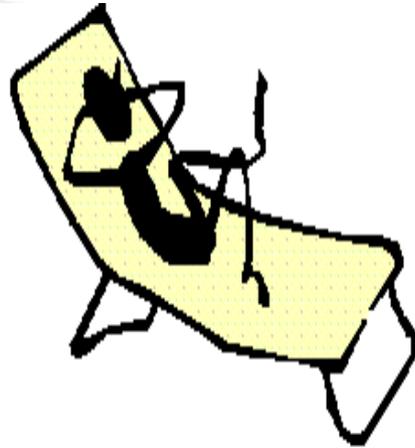
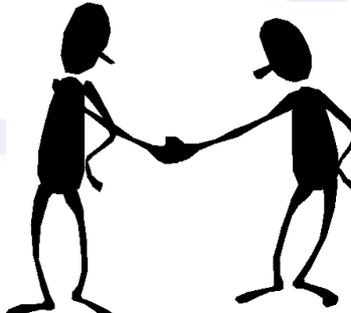


**Cooperative learning** is a successful teaching strategy in which small teams, each with students of different levels of ability, use a variety of learning activities to improve their understanding of a subject. Each member of a team is responsible not only for learning what is taught but also for helping teammates learn, thus creating an atmosphere of achievement. Students work through the assignment until all group members successfully understand and complete it.

### Elements of Cooperative Learning

It is only under certain conditions that cooperative efforts may be expected to be more productive than competitive and individualistic efforts. Those conditions are:

<p><b>1. Positive Interdependence</b>                      (sink or swim together)</p> <ul style="list-style-type: none"> <li>• Each group member's efforts are required and indispensable for group success</li> <li>• Each group member has a unique contribution to make to the joint effort because of his or her resources and/or role and task responsibilities</li> </ul>	An illustration of several people in a small boat on water. They are all holding onto the sides of the boat, symbolizing that everyone's effort is needed to keep the boat afloat and move forward.
<p><b>2. Face-to-Face Interaction</b>                      (promote each other's success)</p> <ul style="list-style-type: none"> <li>• Orally explaining how to solve problems</li> <li>• Teaching one's knowledge to other</li> <li>• Checking for understanding</li> </ul>	An illustration of two people, one with a yellow head and one with an orange head, both wearing black clothing. They are crouching on the ground and looking at a brown football between them, representing a collaborative learning interaction.

<ul style="list-style-type: none"><li>• Discussing concepts being learned</li><li>• Connecting present with past learning</li></ul>	
<p><b>3. Individual &amp; Group Accountability</b> (no hitchhiking! no social loafing)</p> <ul style="list-style-type: none"><li>• Keeping the size of the group small. The smaller the size of the group, the greater the individual accountability may be.</li><li>• Giving an individual test to each student.</li><li>• Randomly examining students orally by calling on one student to present his or her group's work to the teacher (in the presence of the group) or to the entire class.</li><li>• Observing each group and recording the frequency with which each member-contributes to the group's work.</li><li>• Assigning one student in each group the role of checker. The checker asks other group members to explain the reasoning and rationale underlying group answers.</li><li>• Having students teach what they learned to someone else.</li></ul>	
<p><b>4. Interpersonal &amp; Small-Group Skills</b></p> <ul style="list-style-type: none"><li>• Social skills must be taught:<ul style="list-style-type: none"><li>○ Leadership</li><li>○ Decision-making</li><li>○ Trust-building</li><li>○ Communication</li><li>○ Conflict-management skills</li></ul></li></ul>	

### 5. Group Processing

- Group members discuss how well they are achieving their goals and maintaining effective working relationships
- Describe what member actions are helpful and not helpful
- Make decisions about what behaviors to continue or change



### Why use Cooperative Learning?

Research has shown that cooperative learning techniques:

- promote student learning and academic achievement
- increase student retention
- enhance student satisfaction with their learning experience
- help students develop skills in oral communication
- develop students' social skills
- promote student self-esteem
- help to promote positive race relations

### Class Activities that use Cooperative Learning

Dr. Spencer Kagan / Kagan Publishing and Professional Development.  
[www.KaganOnline.com](http://www.KaganOnline.com)

1. **Jigsaw** - Groups with five students are set up. Each group member is assigned some unique material to learn and then to teach to his group members. To help in the learning students across the class working on the same sub-section get together to decide what is important and how to teach it. After practice in these "expert" groups the original groups reform and students teach each other. (Wood, p. 17) Tests or assessment follows.



2. **Think-Pair-Share** - Involves a three step cooperative structure. During the first step individuals think silently about a question posed by the instructor. Individuals pair up during the second step and exchange thoughts. In the third step, the pairs

share their responses with other pairs, other teams, or the entire group.



**3. Three-Step Interview (Kagan)** - Each member of a team chooses another member to be a partner. During the first step individuals interview their partners by asking clarifying questions. During the second step partners reverse the roles. For the final step, members share their partner's response with the team.



**4. RoundRobin Brainstorming (Kagan)**- Class is divided into small groups (4 to 6) with one person appointed as the recorder. A question is posed with many answers and students are given time to think about answers. After the "think time," members of the team share responses with one another round robin style. The recorder writes down the answers of the group members. The person next to the recorder starts and each person in the group in order gives an answer until time is called.

## **Blended Learning**

A blended learning approach combines face to face classroom methods with computer-mediated activities to form an integrated instructional approach. For example, a blended approach to a traditional, face to face course might mean that the class meets once per week instead of the usual three-session format. Learning activities that otherwise would have taken place during classroom time can be moved online.

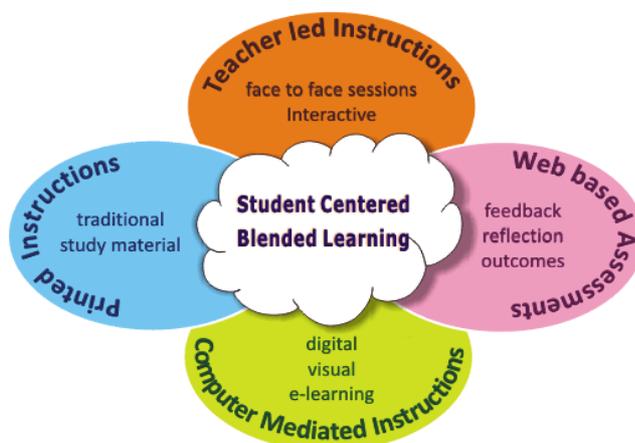
### ***Why Blend?***

The goal of a blended approach is to join the best aspects of both face to face and online instruction. Classroom time can be used to engage students in advanced interactive experiences. Meanwhile, the online portion of the course can provide students with multimedia-rich content at any time of day, anywhere the student has internet access. This allows for an increase in scheduling flexibility for students.

### **How to Blend?**

There are no rules in place to prescribe what the ideal blend might be (Bonk reference). The term "blended" encompasses a broad continuum, and can include any integration of face to face and online instructional content. The blend of face to face

and online materials will vary depending on the content, the needs of the students, and the preferences of the instructor.



### Flipped classroom

**Flip teaching** (or flipped classroom) is a form of blended learning which encompasses any use of technology to leverage the learning in a classroom, so a teacher can spend more time interacting with students instead of lecturing. This is most commonly being done using teacher-created videos that students view outside of class time. It is also known as **backwards classroom**, **reverse instruction**, **flipping the classroom**, and **reverse teaching**.

The traditional pattern of teaching has been to assign students to read a section of a textbook after-school, which will then be discussed the next day in class. Students would then be assigned an assessment for homework to demonstrate their mastery of the topic. In flip teaching, the student first studies the topic by himself, typically using video lessons created by the instructor or shared by another educator, such as those provided by the Khan Academy. In the classroom, the pupil then tries to apply the knowledge by solving problems and doing practical work. The role of the classroom teacher is then to tutor the student when they become stuck, rather than to impart the initial lesson. This allows time inside the class to be used for additional learning-based activities, including use of differentiated instruction and project-based learning.

Flip teaching allows more hands-on time with the instructor guiding the students, allowing them to assist the students when they are assimilating information and creating new ideas (upper end of Bloom's Taxonomy). Flipping the classroom has also proved to lessen the drop out rate among students, and an increase in the amount of information that the students learn. Many people speculate that flipping the classroom would be harmful to students who do not have access to the internet outside of school. However, many teachers have found ways around this by burning CDs, and giving out thumb drives with the videos on it.

### Credits:

David and Roger Johnson. "Cooperative Learning." [Online] 15 October 2001. <<http://www.clcrc.com/pages/cl.html>>.

David and Roger Johnson. "An Overview of Cooperative Learning." [Online] 15 October 2001. <<http://www.clcrc.com/pages/overviewpaper.html>>.

Howard Community College's Teaching Resources. "Ideas on Cooperative Learning and the use of Small Groups." [Online] 15 October 2001. <<http://www.howardcc.edu/profdev/resources/learning/groups1.htm>>.

Kagan, S. Kagan Structures for Emotional Intelligence. Kagan Online Magazine. 2001, 4(4). <http://www.kaganonline.com/Newsletter/index.html>

### Reference

Kagan, Spencer. Cooperative Learning. San Clemente, CA: Kagan Publishing, 1994. [www.KaganOnline.com](http://www.KaganOnline.com)

Inputs on Blended learning and Flipped classroom from Wikipedia and notes given to me by

**Dr.A. Devaraj,**

Senior Associate Professor

P.G.D.M.C.,M.A.,B.L.,M.Phil.,Ph.d

Member, Academic Council,University of Madras

Director Training & Placement, Loyola College, Chennai

**Email:devaraj8856@gmail.com**



