Developing a Pedagogy for Active Learning (PAL)

including a brief history of Active Learning in Thailand

by
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Abstract:

Active learning methodology has become the preferred way to change the traditional teacher centered classroom into the newer student centered approach to learning. Little development, however, on the pedagogy of active learning or the assessment of student retention using active learning methodology is available in literature.
This paper addresses how active learning can support the conceptual development of the learner. How can active learning methodology be implemented to assure that a student learns through the techniques established in active learning but within a pedagogical framework? A case study showing a pedagogical syllabus developed and implemented at Nakhon Sawan Rajabhat University by the author will be demonstrated.

Introduction:

The many techniques of active learning are currently being implemented within classrooms around the world to promote student learning. The objectives of active learning techniques are to foster a more conducive learning environment for the student so that the student has an active role in his or her learning process.

The assumptions which are offered when using the active learning approach are that the techniques used will increase the student's learning of a given subject, or in the case of learning English as a second language, will allow the student to more easily gain language comprehension skills necessary for communication. The traditional teacher centered approach of itemizing various points to be taught in order to learn English or any other subject by explaining rules and procedures is not the methodology used in an active learning driven classroom.

Making the distinction between these two types of methodologies, i. e. teacher based and student based, is partly the reason for this paper. However, the emphasis will be more on how the student can take over the responsibility normally presented in the teacher based methodology and replacing it by giving the student concept development tools which will directly put the learning of the subject into the student's hands. The method for accomplishing this independent learning will be referred to as Pedagogy for Active Learning (PAL).

Briefly, the main distinction between a teacher based methodology and a student centered methodology is that with the teacher centered approach all the relevant information pertaining to a subject has to be remembered and then recalled by various testing schemes, whereas in the PAL system the students are given the information without explaining its content but are asked to arrange and make associations with the information to experience meaningful relationships by using active learning techniques.

Making the distinction between these two methods of learning is where the initial resistance from teachers is usually heard. The normal refrain is 'how do I get my students to learn if I don't teach them?'. This is the first question teachers raise when they hear about active learning. The teacher's concerns and frustrations are based on having to relinquish their role as the main provider of the information in the classroom, and let the students learn the information on their own. So, another question that is invariably asked is 'how do I get the students to learn if I don't teach them?'. It's at this point the teacher has to be taught about active learning by demonstrating the Active Learning Pedagogy so as to instill a degree of trust and confidence that indeed a new pedagogy for learning has been developed which allows all the innate potentials of a students learning behavior to be utilized and encouraged.

Brief history of Active learning in Thailand:

Over the last three years this author has been the active learning trainer for Thai teachers who have been selected to participate in a two week long workshop at the University of Montana. With the collaboration of four Rajabhat Universities in Thailand an organization was born known as the Montana-Thailand Action Learning Network (MTALN); Nakhon Sawan Rajabhat University, Suratthani, Pranakhon, and Rajabhat Institute Suan Dusit. The National Education Reform Act of 1999 of Thailand outlined the need to institute Active Learning in the Classroom. It was felt that this approach would encourage a Life Long Learning (LLL) process and also help students with their cognitive skills, which are also referred to as soft skills. These soft skills would encourage critical thinking, problem solving and task based learning skills in an Active Learning environment.

In 1995 Nakhon Sawan Rajabhat University invited Dr. Robert N. Carson from Montana State University to introduce for the first time his presentation titled, "Active Learning: What is knowledge? How do children learn? How should we teach?" A summary of this presentation was prepared in English and presented to Dr. Pratuang Phumpatrakom, president of Nakhon Sawan Rajabhat University. Shortly after Dr. Carson's presentation, the first training workshops began for teachers who were selected to attend a two week long workshop in Montana. Before they left for Montana I was selected to give an overview of Active Learning and explain active learning techniques. Likewise the university, as per the request of the Ministry of Education, asked the Language Center director, Darett Nauremon, to start designing courses incorporating Active Learning. A form was sent to the Language Center to be completed by each native speaker of English and submitted with a course syllabus incorporating Active Learning (appendix I). It was at this point that extensive research took place to study active learning techniques. There were no trainers in active learning, no text books, no lesson plans, only the internet to search what others had done and what the literature provided. As a result of three years of study and teaching using active learning, it became apparent that what was lacking to make active learning more effective was a deeper understanding of what was involved when teaching active learning to a Thai teacher who in turn had to teach their own students. Being a native speaker of English I also had to use active learning techniques when teaching my own students.

Both of these involvements, teaching teachers and teaching students, lead to a pedagogical technique for teaching active learning as well as how best to develop a teacher training approach for Thai teachers who would use active learning in their classrooms.

Brief History of Learning Theories:

The research and development in the areas of learning pedagogies and instructional methodologies are very active in the educational profession with new techniques being applied yearly as our knowledge environment becomes more mature. It is no wonder then that research in cognitive domains, cognitive routines, and metacognition are all enjoying a robust interest when applied to Active Learning. In many ways active learning has become the new standard by which to help students learn. But a pedagogical approach requires some understanding on the teacher's part on how to work with these techniques in the classroom.

The more notable early learning theories began with Piget, Vygotsky and Montessori. Jean Piaget shifted the dogmatic approach to teaching to a more learner based pedagogy in which the learners mind was engaged by interesting projects, topics, and questions. Lev Vygotsky, a Russian psychologist, developed the "zone of proximal development" (ZoPeD). His method showed that a learner can perform some tasks with help that they could not perform otherwise (Carson, 1995). This help, from the teacher, supports the learner's efforts as the learner acquires the missing skills. Vygotsky is known for introducing the role of social interaction in cognitive development. Marie Montessori was one of the most brilliant curriculum planners and established a learning technique using a revolutionary model called Seriation. Seriation is a technique which seeks the best enumeration order of a set of described objects. Montessori is well known for her cylinder blocks. (see fig. 3.) These blocks can appear to be the same but in fact they are quite different.

Fig. 1

When the children are old enough to work with this set of concepts they try over and over to place the correct size into the hole. This innovative approach to learning how to distinguish shapes is applicable to designing active learning lessons. Once the cognitive routine is

established to distinguish between shape and size the student can apply the cognitive routine to other tasks. This same approach can be applied when designing an active learning lesson.

More recently a pedagogical technique was introduced called the Generative Learning Model (Wittrock, 2007). Wittrock considers this a new "functional model of learning" that conceptualizes learning as the interplay between four components: motivational processes of the learner, learning processes, knowledge creation processes all of which are regulated by metacognitive processes of the learner. Wittrock describes his model (GLM) as a system whereby both the learner and the learning environment, along with the effort of the teacher affect the depth of the students learning. Obviously to determine the effectiveness of any of these models requires a significant degree of evaluation and testing. However, active learning techniques, independent from incorporating the metacognitive routines, has been developed and incorporated in many learning situations. However, ignoring these developments in the cognitive sciences would be an oversight for the teacher as well as the developers of any active learning program.

Such a program which does indeed incorporate all these methods is the Participatory Action Research (PAR). Informing Pedagogy and Research in Higher Education which has been developed by Dr. Michael Brody from Montana State University, who is also the director of the Montana-Thailand Active Learning Network. According to Brody PAR is a contextual approach sensitive to local factors and the idiosyncratic nature of informal environmental learning activities. Every educator in environmental settings has the ability to systematically study their management, teaching strategies, and learning outcomes. This is extremely important when teaching Thai students due to the fact that their environment is based on a set of values which are unique to the Thai culture. Brody encourages a so called triangulation of multiple perceptions which reveal different versions of reality and understanding leading to what he calls a "crystallization" of results and conclusions.

Brody introduced his PAR methodology at Nakhon Sawan Rajabhat University in February of 2009 for the first time. According to Dr. Brody a teacher should make sure that students receive practice in discovering information and creating knowledge on their own, that students choose to do activities, follow their abilities, their skill and interests so that they will be happy, that students practice discipline and responsibility in work and that students practice self evaluation, improve themselves and accept others to the point where they are interested in lifelong learning.

The future applications of learning theories combining technology with active learning have not gone unnoticed in the information technology (IT) sector. Klelia Sourmeli-Skotinou a training officer at the Cyprus Computer Society has coined a methodology as E-pedagogy. **E-pedagogy** is the pedagogy which is based on the use of Information, Computers and Technology (ICT) as a means for learning. In Particular it is based on the use of Web based learning environments, Open and Distance Learning (ODL) methods and materials that make the most beneficial use of the audiovisual dimension of pedagogy.

In brief, regardless of the educational field the pedagogical expertise requires more and more understanding and control of the modern electronic means that provide a new world of

audiovisual elements with an immense range of interpretations. The developments in ICT create the basis for new learning approaches including such concepts as the Virtual Learning Environments (VLE) that could be important factors for effective learning.

It would take a separate paper to cover all the techniques used in computer assisted learning and active learning, but with the increase use of the Internet the techniques that can be employed to assist the student to learn is an area which needs to be seriously considered. Computers in Teaching and Learning (CITAL) with Pedagogy and Theory are a resource on the Internet which covers all the above issues and more.
This then is a brief overview of the many methods that have been explored for developing pedagogy for active learning.

Definitions of Active Learning:
There are as many active learning teaching techniques available as there are definitions of active learning. Below are a few definitions offered by experts in the field of active learning.
*Active Learning is an effort to make learning authentic (Carson 1995).
*All learning is, in some sense, active but active learning refers to the level of engagement by the student in the instructional process (Fern et al 1993).
*Active Learning puts the responsibility of organizing what is to be learned in the hands of the learners themselves, and ideally lends itself to a more diverse range of learning styles (Dodge 1996).
*Active Learning attempts to model the methods and mindsets which are at the heart of scientific inquiry, and to provide opportunities for students to connect abstract ideas to their real world applications and acquire useful skills, and in so doing gain knowledge that persists beyond the course experience in which it was acquired (Allen & Tanner 2003).
*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 (McKinney 2007).
*Active Learning is comprised of a student centered environment which raises student's motivational level to stimulate thinking and go beyond facts and details (Brody 2009).
*Active Learning can be defined as instructional activities involving students in doing things and thinking about what they are doing (Bonwell&Eison 1991).

In all of these definitions there is a sense of excitement that, at last, an approach to teaching can offer the student an environment where his/her talents can be utilized to foster the learning process. This would be a fair assumption to make, except there is one hurdle yet to overcome; how do you teach the teacher the process of active learning (the pedagogy) so the classroom functions in such a way so these above mentioned outcomes in student learning can take place?

Using Active Learning Techniques in the classroom:
There are many active learning techniques which have been designed to encourage independent learning for the students in the classroom. The notion that the classroom is no longer a teacher centered classroom but a student centered classroom is a significant change in the way knowledge is transferred to the student. Most teachers throw up their hands when they are told to let the students figure out what they are suppose to learn leaving the teacher wondering what

they are suppose to teach. In other words if a teacher initiates an active learning technique such as scaffolding, or think-pair-share, what is the teacher's role in the class room while the students are busily involved in their active learning exercise? This question gets even more complex when evaluation and testing of what the student has learned is initiated.
Pedagogically speaking the teacher in an active learning classroom should have pre-designed steps prepared for the exercises a student will participate in, which in turn will challenge the student to increase their own learning skills. An easy exercise can be followed by a more difficult exercise until the teacher has fulfilled the design criterion for an active learning technique and the student has a working knowledge of the exercise. The following is an example of this pedagogical framework demonstrating active learning techniques.

It has been my experience that if students can discuss their lessons with other students in the classroom then the student engagement is very helpful is solving problems related to the student's assignment. Furthermore, this interactive approach enables the students to find common understanding about the problems which exist in the assigned lesson**.**
The following example demonstrates three active learning techniques to help the student understand their assignment in a group setting.

1. **Think-Pair-Share**
2. **Collaborative Learning**
3. **Scaffolding**

One of the most powerful ways to introduce active learning techniques is by changing the seating configuration for the **Think-Pair-Share** technique. This technique is where two students try to solve a problem together or complete the assignment together by sitting across from one another and asking each other questions.

After the students have experienced the **Think-Pair-Share** technique the next strategy is to apply the **Collaborative-Learning** technique. In this technique the students are next arranged into groups of three or more and collectively produce the required answers together. Incorporated into these two active learning techniques is a third active learning technique known as **Scaffolding**. "Scaffolding refers to providing contextual supports for meaning through the use of simplified language, teacher modeling, visuals and graphics, cooperative learning and hands-on learning" (Ovando, Collier, & Combs, 2003, p. 345).
The implementation of **Scaffolding** allows the students to be exposed to an increasingly more difficult or comprehensive task. The goal of **Scaffolding** is to help the students reach a higher state of problem solving.

When the students participate in an active learning exercise for the acquisition of English as a second language it becomes more difficult because the students are left to experience the language without the teacher explaining grammar points, composition, or conversation. Learning a second language with active learning techniques requires several steps that need to be incorporated into the active learning exercise before the student learns a particular grammar point.

Active learning takes on a more robust engagement for the teacher because even though the teacher may not be fully involved in the student learning activities the lesson that is designed,

using one or more of the active learning techniques, needs to be considered first before giving an assignment to the student. Another point the teacher needs to consider is how to anticipate a cognitive routine that the student will utilize when attempting to learn a task which the teacher has designed in the lesson. Taking into account that a learner may not always find the exercise easy to perform necessitates the teacher to vary the active learning techniques to optimize the cognitive development of the student. Not all students have the same learning style even though each student must learn the same exercise. Some students are reflective and prefer to work alone and others who are active in their learning with asking questions and working in pairs or groups is a factor the teacher must consider when helping their students learn a lesson.

Dr. Chet Meyers from the Community College of Aurora, Colorado has developed a program titled "Overcoming Impediments to Active Learning." His approach is to develop the basic assumptions of the Active Learning pedagogy and then outline the Corollary Principles to Guide the Practice of Active Learning. Meyers believes that the purpose of active learning is to get students to interact with disciplines in ways that cause reflection. Students can more readily synthesize new learning with old when they have worked with the new information and somehow made it their own.

It has been my experience that if students are allowed to work together in groups it increases their opportunity to communicate with one another leading to more understanding on how best to complete the lesson. When a similar lesson is then presented to a student on an individual basis the ability of the student to complete the lesson is usually enhanced.

Lastly, the University of North Carolina at Chapel Hill's Biology Department headed by Dr. Brain Rybarczyk introduced **Concept Maps** (see fig. 2.) as one of the many techniques in Active Learning.

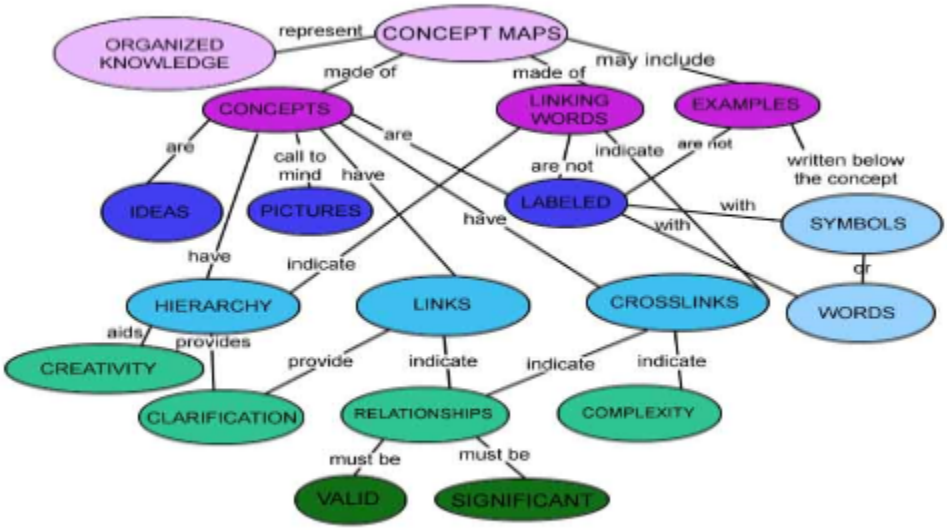

Fig. 2.

The concept map helps students represent knowledge in graphs by connecting their ideas so they can see how ideas are related and linked to one another. At the end of Dr.. Rybarczyk's lessons he lists several suggestions for all Active Learning instructors to consider.

- State expectations
- Incorporate assessments with activities
- Start off simple (low risk)
- Ask questions, walk around classroom, be attentive to student questions
- Have students rely on each other.

This then is a brief example of how different active learning techniques can be utilized in the classroom. This paper does not have the space to go into detail on how all the active learning techniques can be applied.

Cognitive and Metacognitive Skills:
One area that needs to be addressed very seriously, beyond how pedagogy can be incorporated into the active learning lesson, is how to take advantage of the student's innate cognitive skills. By innate, I am referring to a set of mental functions which will invariably be activated within the student's mind in order to help learn the task the teacher has placed before them. There has been some recent ground breaking work in the field of social learning and social cognition (Casibra & Gergely 2006) which shows that the ability to teach and to learn from teaching is a primary, independent, and possibly phylogenectically speaking, an even earlier adaptation than either language or the ability to attribute mental states. In other words there has been a dedicated system of knowledge transfer during the formative stages of human ontogeny all the way into adulthood. Human cognition has been an early adaptation from the very beginning of child development. Casibra & Gergely have discovered a dedicated cognitive system that requires active participation to convey generalized knowledge rather than factual information. Their main thesis is that human pedagogy is an evolutionary adaptation for efficient knowledge transfer. Basically what we have is a cognitive domain (our minds) which is always seeking knowledge. The discovery made by Casibra & Gergely is that this acquisition function is built into the cognitive domains.

At this point, as we recognize this natural ability to acquire knowledge outlined by Casira & Gergley, the concept of developing an active pedagogy begins to take shape. What this means is a pedagogy that has all the requirements of Blooms taxonomy of learning but instills activity that is independent of the teacher. This is a paradigmatic shift in the way knowledge is normally taught. An active pedagogy means that students are active in their own learning and the classroom becomes a problem solving environment rather than a one way delivery or teacher centered environment. Active pedagogy coupled with active learning means creating a learning environment, or a classroom, where the student is encouraged to do something. However, even though this doing something is easy for the students, based on what we know about innate knowledge transfer, it's the teacher who has to anticipate the cognitive routines of the students. The teacher has to visualize in their own mind's eyes those processes that facilitate an action that completes a task by the student. This has always been a difficult hurdle to overcome when examples have to be used in a teacher training environment. In order for a lesson to be adapted to cognitive routines the cognitive domain (the thought processes) of the intended subject, needs to be understood. In teaching physics how do you demonstrate friction or inertia or mechanical advantage incorporating a cognitive routine? In English how do you demonstrate an adjective or a superlative using a cognitive routine**?**

Trying to imagine a cognitive state is called metacognition (Vos, 2008). Vos is a professor from the University of Twente in the Netherlands. Vos states, "metacognition is the faculty of knowing about cognition. It includes: knowledge of the structure of knowledge, information or tasks associated with that knowledge; comprehension of texts, knowledge about self or others and the use of reflection". According to Vos this metacognition forms the basis for Active Learning. Vos is well aware of all the modes a student uses to learn something. He knows the student is not restricted to only using their ears and hands for writing notes, their tongues for answering questions, or their eyes to look at the teacher. Vos sees metacognition oriented to the

mental processes that occur with cognition. Therefore, according to Vos the learning objective on the teachers part is to understand the metacognitive level as formulated by the teacher and understanding the mental states and processes that comprise that state.

Metacognition on the other hand refers to higher order thinking (Livingston 1997) which involves active control over the cognitive processes engaged in learning. Another way at looking at this is "thinking about thinking". What this means is a student has to think about what the meaning of the lesson is before the lesson is acted upon. The student has the ability to know before hand what is involved in the lesson, such as how much time it might take to do the lesson or what information is needed before the lesson can be started. In metacognition the student has the necessary knowledge about the knowledge that is needed to complete the lesson. The metacognition component is where the student thinks about what is needed for the cognitive component which is how to solve the problem.

Cognitive strategy is an active learning technique referred to as **Cognitive Analogies**.
This is an activity whereby students are asked to imagine how an idea or a fact, or even a procedure can be understood. As an example the student could be asked to demonstrate the shape of a car using a Lego block set or a set of wooden blocks. One medium is used to describe another medium. Dr. LuAnn Jordan from the University of North Carolina has developed a whole series of cognitive strategies to help a students make connections between one idea and another (Jordan 2005).

Considerations before developing Pedagogy for Active Learning (PAL)
Finally we come to the time where we have to design a lesson plan using an active learning technique, incorporate a cognitive routine in the lesson, which will give the student an opportunity to learn on their own or with another student and with the right combination of an active learning technique and a cognitive routine will lead to a successful pedagogy.
Before the lesson plan is developed, which will give the students an experience in learning in a different style, here are a few points for the teacher to consider.
First you must ask what is the overall purpose of teaching using Active Learning?.

- Increase student participation
- Increase student engagement
- Increase student retention
- More student ownership in course
- Less lecturing by instructor
- More exciting classroom experience
- Higher level thinking

Admittedly these points look like an ideal formula for any classroom. The difference is the teacher has to incorporate these points into a very different set of techniques whereby the less lecturing by the teacher refers to selecting an active learning technique which has been developed to use in an active learning classroom. In other words the teacher has to realize that their own modeling and their own behavior is also part of the pedagogy and that the student has to receive the signals the teacher is putting out to facilitate the learning environment. When teaching English as a second language to a Thai student the students will invariably try to model

the exercise that the teacher gives them. It's at this point active learning pedagogy begins. When a teacher doesn't model the exercise then nothing will happen and no learning takes place.

Secondly, how the student perceives the lesson that the teacher is presenting requires a special type of communication. When the cognitive routines that are associated with the desired lesson are understood then any modeling that approaches these cognitive domains is helpful in learning the lesson. This approach however requires a very different design strategy from the teacher because the teacher is not stating what he or she wants the student to learn but is instead developing a cognitive routine that causes a behavior that models the objective to be learned in the lesson. Put another way the teacher knowingly allows the student to solve the problem based on a preconceived cognitive routine associated with the problem.
Thirdly, explore a lesson within a framework where the student can learn the lesson with a sense of autonomy and responsibility.

A design strategy for Pedagogy for Active Learning (PAL):
The following steps are suggestions when considering designing a pedagogy for active learning. Foremost in importance when designing a Pedagogy for Active Learning is that it is going to take place within a social environment which will convey the knowledge applicable to the lesson and also be valid beyond the particular situation. The pedagogy will require active participation by the student and the relevant knowledge to be learned is the responsibility of the teacher.

.**Step one:** Design a cognitive routine in conjunction with an active learning technique. The way in which cognitive routines can be developed is to recognize some basic ways the mind operates when experiencing something. A cognitive routine asks whether an object is inside something or outside something? A sound usually makes the head turn in the direction the sound is perceived to be originating from. What activity will excite the student's attention? Does the idea of something high or tall lend itself to something that is going up rather than down? According to (Bullot 2003) cognitive routines are at work during the monitoring of mental activities linked to the perceived object. Therefore, if an active learning technique uses a cognitive routine in the lesson the student is being supported in the learning process by these built in mental routines.
Step two: Select an active learning technique that utilizes the cognitive routine or a metacognitive facilitator that helps the student know what it is they have to know to complete the lesson. Once the cognitive routines have been selected and associated with the lesson, the next step is to select an active learning technique whereby the student is participating either on their own initiative or with a partner. As an example select **Think-Pair-Share** as an active learning technique. The lesson requires the use of an adverb to describe a feeling using the gap fill technique.
Example:
Student A states: The dark room made Jane feel……..frightened.
Student B states: the adverb (terribly).
What is the cognitive routine? Feeling frightened requires a response. The cognitive routine taking place in this situation is how a person might feel when they are frightened. Student A has to construct a sentence requiring an adverb. Student B has to think of how to use an adverb describing the situation of being frightened. Even though this is a simple example it engages a metacognitive function of (how to I feel) for a specific communicative situation. This is a

beginning stage in a communicative approach in learning the English language for a specific situation.
Step three: Build the lesson using more **Cognitive Analogies** to encourage Higher Thinking skills with the use of active learning techniques **(OIC).**
Step four: The use of evaluation and testing is the most controversial area and the one deserving the most scrutiny. Did the student learn the lesson? A better question might be did the student experience the cognitive routine while participating in the active learning technique? The testing format used by the teacher applies the same pedagogy as was used in the lesson plan. If the student can answer the questions utilizing the cognitive routines designed by the teacher combined with the active learning techniques then the lesson has been learned. The student actively found the answer or determined the answer by an activity that was not accomplished by memorizing a set of rules or facts.

Conclusion:
After all these histories of learning theories and definitions of active learning techniques coupled with cognitive routines and pedagogical outlines, what have we learned?
We find that cognitive routines are the basic operating principle of any given situation for solving a problem and active learning techniques are ways to actively get the student involved in the learning process.

It is far more important to understand the function of a cognitive routine than a theory that only explains rules. Principles of behavior, principles of speech, and principles of language all have set cognitive routines which put things into place so an action can take place related to the problem. Once the action is understood it can be applied to any field of endeavor especially English for a specific situation. It is more important to have the student experience the cognitive operating principles than it is to see if they have checked all the right answers or in this case remembered how to use an adverb. Memory and recall are not as effective in learning a lesson as is anticipation, imagination or the thought processes that can be applied to an activity.

For example if I see that a student is trying to make associations between adjectives and nouns, and the association may be incorrect, I know that the student is using the cognitive routine of matching (bringing two things together) in order to try and make the correct association. Getting thinking to be active is more important than just memorizing a rule without actively participating in the results of applying that rule i. e. an adjective usually comes before a noun. As a rule memorizing is not as effective as knowing that a flower can also be a beautiful flower or a person can be terribly frightened. In other words the meanings of rules are more effectively learned when the rules are actively applied using active learning techniques in real situations utilizing cognitive functions to complete the rule.

Admittedly much of the application of cognitive routines are subjective, and the teacher has to be reflective on what cognitive or metacogntive function are associated with a particular activity when designing a lesson. The choice of an active learning technique, of which there are many, requires much practice to see how the student behaves in each situation to determine which active learning technique is best suited to the students learning style. The is no question as to the effectiveness of having a student becoming active in the learning process but the ways in which

this action is implemented is the essence of developing an effective Pedagogy for Active Learning.

Disclaimer: The thoughts expressed in this paper are of a general nature and if a rigorous analysis is required to prove or disprove the claims made I will take that responsibility to provide clarity.

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