The effectiveness of active learning over passive learning

In this study, there has been a thorough study and careful observations show that within the passive learning although primitive form of learning there is some kind of active learning involved in it. There is no clear difference between the active and passive learning and there is some kind of active learning is involved within the passive learning which is unconsciously being ignored. In reality, active learning is the measurement of the extent to which the learner is challenged to use his or her mental abilities while learning. The effect of various teaching and learning strategies and shows the clear impact of active form of teaching and learning techniques on the higher level students but there are still some factors that are posing a great barrier to active learning at secondary levels. These barriers involve curriculum, content, teaching pedagogy, school and classroom environment, behaviour, social factors and new electronic media (mobiles and social networking sites) being the worst. In order to create a better active learning environment within the secondary schools, there is strong need for giving more autonomy to teachers within the classes. There are also some factors which have been discussed that could influence the student's involvement within the classes which also hinders the active form of teaching and learning. There is also need to realise that there are several teaching and learning styles that one could use to gain same learning skills that are again ignored unconsciously. Each and every learning activity have different processes that could initiate the active form of learning within the brain even though they are regarded as active or passive learning in real world. Teachers also have to realise that there are some students who like to learn through passive way and active form of learning poses a several disturbing factors that have been discussed in this study.

Context:

It was a state school where I was performing my teaching duties and it was purely girls school with 70% ethnic minority background girls. The school accommodates above 1000 students with above 100 teachers from diverse back grounds. I initially covered the sickness period for 1 month and then got permanent. The problem arose when I started teaching MFL at the state school where there was a tendency of leaning through passive teaching over past few years. The behaviour of school was generally good with some odd occasions of rough behaviour. There was a mix tenedency and attitude towards innovation and active leaning by the students and the language faculty. Majority of my students were from the ethnic background learning to improve their Urdu language. The major problems with the students were their reading and writing skills because of the alien nature of the writing style of Urdu language. The students were very good at the speaking and listening skills due to their social environment and the electronic media around them. There is a huge difference between two sets of skills and is very hard to correlate at most of the time. There were students who were forced to learn Urdu by either parents or by their peers and were there in the class without any love or passion for the subject. Also the students were not willing to accept the new changes such as the new teacher, teaching style and the presence of opposite gender within their classes.

There was a change within the school at management level and was a tendency towards a " change" in teaching methodology and assessment. The higher management was trying to implement the OFSTED lesson observation criteria throughout the school. The behaviour management

system also went under changes and some staff members had problems in understanding and implementing them within the classes. Alongside these factors there was a huge task of assessing the pupils within all the four essential skills within MFL (Listening, speaking, reading and writing). I had few lesson observations that did not go well because of the behaviour problem and by being defensive as I was teaching more passively than active.

I had implemented various strategies within the class of which some worked very well and some of them were disaster. One of them was the introduction of the active form of learning and teaching upon which some classes appreciated the new strategies and techniques where as some gave an insight of the problem that could arise when introducing the active form of learning and teaching within the classes.

Analysis of Problem:

Active learning is probably more striking for learners than more passive forms of leaning. Learners are supposed to be more motivated and interested when their mental activity is challenged and when they can make decisions about their own learning. By being involved in some of the decisions related to their own learning the learners can connect to their prior knowledge and their needs more optimally. As a consequence, they will learn all the kinds of valuable skills, such as social skills, decision making skills and taking responsibility. In addition, by finding out things independently, they can follow their own interests and motivation.

Figure 1: Edgar Dale Cone of Experience Media by Jeffrey Anderson

In reality, active learning is the measurement of the extent to which the learner is challenged to use his or her mental abilities while learning. The passive learning is does the same in less content as the passive learning is mainly involved in the initial phases where as the active learning enhances the passive learning. There are various kinds of learning skills that could form the focus of process-oriented instruction: cognitive skills, meta-cognitive skills and affective-motivational skills. (new learning book ref). The cognitive skills involve deep learning strategies like comparing, overview skills like summarising, criticising and structuring, reviewing and generalising, schematising, and transfer skills like considering possible and necessary conditions of use. Meta-cognitive skills involve making a planning of times and strategies for leaning, orientation on goals and outcomes, realistic goal setting, regular checking and testing and finally restarting when problem occur and reflection on process and outcome.

There are two main types of communication happens within the class named one way and two way communications. Within One-way communication, Listener has little or no opportunity to respond straight away and directly. A teacher must make assumptions about the listener's skill level, prior training, and understanding of the material being communicated. Therefore, errors like the following could be made by the teacher: making the material too difficult, making the material too simple, making assumptions which are not fully shared by the audience, thus making it impossible for them to understand what is being said. Other characteristics: faster transmission less accuracy, potential lack of common vocabulary.

Within Two-way communication, there is a flow of information among and between individuals. Because of the opportunity for immediate feedback, many of the assumptions that one makes under one-way communication about skill level, prior training, and understanding of the material being communicated get tested immediately. Other characteristics: slower transmission, greater accuracy, time to develop a common vocabulary.

According to Bergquist, Psychological effects of one-way communication on students.

Frustration-the student cannot easily communicate or ask for clarification of teacher information.

Apathy-a lack of involvement and interest in what is going on.

Fear-students don't want to talk in front of the group for fear of being put down or for fear of making the teacher angry.

Dependence-students expect the teacher to give all the necessary information. Most become unable to judge the value of the information.

Hostility and/or aggression-they may cheat or quit coming to class

Three other learning styles are more likely to result in classroom participation; they are:

Collaborative: This style is typical of the student who feels he can learn the most by sharing his ideas and talents. He cooperates with teachers and

peers and likes to work with others. He sees the classroom as a place for social interaction as well as content learning.

Participant: This style is characteristic of the student who wants to learn subject content and likes to go to class. He takes responsibility for getting the most out of class and participates with others when told to do so. He feels that he should take part in as much of the class related activity as possible, but he does little that is not part of the subject outline.

Independent: This response style is characteristic of the student who likes to think for himself. He prefers to work on his own, but he will listen to the ideas of others in the classroom. He learns the content he feels is important and is confident in his learning abilities

Research shows that students do not have just one style but that instead they have several in varying degrees and in various situations. It is not necessary to have a battery of psychological instruments to assess these styles, since an awareness of your students' behaviours will give you clues as to which ones are operating. A more formal way of obtaining this information is to give each student the description of the various learning styles (without the descriptive word) and ask them to rank the styles on a scale of most and least like them. A tabulation of that information may give you useful information about the predominate learning styles in your classroom. (Bergquist & el, 1975)

Students exhibit a number of learning styles in their approach to the classroom. Three that are related to a lack of involvement are:

Avoidant: This response style is typical of a student who is not interested in learning subject content in the traditional classroom. He does not participate with students and teachers in the classroom. He is uninterested or overwhelmed by what goes on in the classes.

Competitive: This response style is exhibited by the student who learns material in order to perform better than others in the class. He feels he must compete with other students in the class for the rewards of the classroom, such as grades or teachers' attention. He views the classroom as a win-lose situation where he must always win. Other students are unlikely to join this student in participation because of the win- lose nature of the interaction.

Dependent: This style is characteristic of the student who shows little intellectual curiosity and who learns only what is required. He sees teachers and peers as sources of structure and support. He looks to authority figures for guidelines and wants to be told what to do. Consequently, this student is unlikely to initiate or have much that is original to say in class discussions

Analysis of Intervention (Solution):

Learning to collaborate and learning from collaboration means acquiring skills like dividing tasks between group members, leading a group, learning together, monitoring group progress, defining group goals and group learning goals, negotiating and co-structuring knowledge, coordinating cognitive and social communicative actions and creating a supportive collaborative climate.

Another important factor is the ability to regulate own learning which is the gradual increase of independence in learning and thinking through

systematic scaffolding. Simons and S uijlen (1995) proposed the following sequence: working independently, Learning strategically and self directed learning. When working independently the learning goals, the learning strategies, the time and place of leaning, the way of testing and feedback is determined by the teacher or learning environment. Students just have to fulfil assignments and learning will occur if and when they obey.

When leaning strategically, students have freedom of choice related to the learning strategy: what kinds of learning strategy to take, where and when learning takes place. The leaning goals, ways of testing and feedback/judgement procedures, however, remain under teacher control. In self-directed learning students have more freedom, for instance with respect to choice goals, self testing and or feedback/judgement procedures.

In the beginning phase of any learning the simpler forms of independence should occupy more time than the more complex ones with a gradual increase of time for more complex forms and more complex forms of independence can in the beginning phase of learning to regulate only be practiced with respect to themes where one has relative high level of expertise. Simply there should be more independent work and some strategic learning in relation to topics in the beginning phase which will provide more room for strategic learning, also in relation to less familiar topics and some room for self directed learning about familiar topics.

More importantly the important thinking, learning and regulation skills are made public, by demonstrating and discussing them with each other on a regular basis. " One of the main obstacles to learning and think is that these

processes are hidden and remain invisible" the students don't realise that all human beings have many different ways to approach tasks instead of believing their way is the only possible way for learning new things.

Interventions aimed at fostering student's development of active general self regulated learning and conditional or metacognitive knowledge about learning have involved specifically designed learning how to learn programs as well as integrated programs where learning how to learn is embedded within regular discipline instruction. Simpson et al. (1997) especially mention the problems of limited transfer of the learned strategies to new situations and the lack of long term evaluation data. One well know successful program of that kind emphasise " integrated learning to think, integrated learning to learn and integrated learning to regulate learning and thinking" (Simons, 1997).

In integrated programme, students are induced to activate their existing knowledge and strategies about learning, to reflect on their own and alternative approaches to learning, and on the impact of different learning styles on the quality of learning outcomes in their particular discipline area as well as in general. A major advantage of integrated programme is that they can be implemented with, and benefit learners of all ages, all levels of development and across all fields of study. Cognitive interventions during regular instructions rely on reflection, persuasion, awareness raising as well as constructive frictions (Vermunt & Verloop, 1999) in order to raise challenge students possible misconception about learning. Carrying out such interventions during the actual process of learning is particularly well suited

to raise student's awareness of the relationships between learning strategies and learning outcomes.

Evaluation (analysis of findings/evaluation of impact):

Active learning is defined as a form of learning in which the learner uses opportunities to decide about aspects of learning process or the extent to which the learner is challenged to use his or her mental abilities while learning. In reality, there is no clear difference between active and passive learning. It is more a dimension a matter of less and more than dichotomy. In other words in active learning the learners make their own time planning, they choose learning goals and activities they like, they test their progress, they take care of their learning and understanding on their own, and they reflect on errors and successes. Thus active learning also involves preparation, execution, regulation, control, feedback and maintenance of learning activities by learners. (New learning book ref)

In independent active learning, it is not so much the number and quality of decisions about learning that count but how much activity is asked from the learner. Are the students figuring out things on their own? Are they working without teacher supervision? Are they working together as a group? Are they thinking while learning? The goals and kings of activities, the control and regulations as well as the feedback and maintenance of the learning are under teacher control.

The major findings after the research show the same findings as Riemersma & Veugelers, 1997; Van Hout-Wolters, 1994; Veugelers, 1999 have identified

a number of factors contributing to the difficulties in the implementation of active forms of learning.

School Management and organisation: Some schools are providing very few opportunities for active learning to students because of too many traditional teacher directed classes and insufficient self study hours in their time table. School experience problems with changing the curriculum to fit in the learning-to-learn lessons or with integrating learning to learn instructions in the content lessons.

Teachers: Many teachers are not highly motivated to give attention to active learning as they do not see the benefits of it within the subject matter and argue that these activities take up too much valuable time. Other teachers want to concentrate all their attention on the instruction of content knowledge as otherwise it will affect their results or grades. This result in creating a chaos amongst the students relating various new forms of teaching and learning. The use of active learning within the class makes teaching more intensive and time consuming, while teacher salaries remain the same. Also not all the teachers possess sufficient knowledge and skills to foster active learning and to supervise their students in active self directed learning. Most teachers would need to develop forms of instruction which are fundamentally different from those they are currently using and familiar with.

Perhaps the single greatest barrier of all, however, is the fact that faculty members' efforts to employ active learning involve risk–the risks that students will not participate, use higher-order thinking, or learn sufficient

content, that faculty members will feel a loss of control, lack necessary skills, or be criticised for teaching in unorthodox ways. Each obstacle or barrier and type of risk, however, can be successfully overcome through careful, thoughtful planning.

Learners are not always motivated to invest much time and energy in gaining the new skills either. They do not always recognise the usefulness of these skills, or they dread the needed effort to learn them (Rabinowits , Freeman, & Cohen, 1992). Students often hold strong beliefs and persistent approaches to learning especially failure fearing students prefer to learn a whole paragraph by heart than to understand and remember the main issues. Students in especially secondary schools are not very interested in the subject matter instead they go to school to meet their friends; learning seems to be more or less a side issue. Such students prefer to follow teacher directed lessons, than to engage in self directed activities. Individual differences between students creates problem such as attention seeking students get more attention as well behaviour disruption. Some students get little teacher attention during individual study hours as they ask very few questions and thus little supervision.

A failure to periodically solicit student feedback in a subject about how it is progressing. Are students getting out of the subject what they want? Are the classroom procedures and methods used well? Are there some things that you are doing which students don't like (for example, lecture, clarity of presentations, unfriendly manner)? Information on these factors not only helps make the classroom atmosphere better but it also creates an

atmosphere where students feel the teacher is interested in what they have to say. This has a tendency to transfer into content areas as well.

Contents: There are specific learning skills which are considered most important by a school or teacher. There still appears to be a lack of good learning-material within the subject areas in which active learning is incorporated.

Snow and Lohman's (1984) argument that direct training of content related cognitive strategies may be counterproductive for more able students because they have already developed effective models of learning. Therefore students were provided with opportunities to witness the mental activity of more able individuals, and then encouraged to practice the strategies with guidance in a socially supportive environment.

While some students learn to self regulate their learning without much tuition or prompts, others need guidance, not only to acquire the strategies but also to develop the conditional knowledge necessary to know how, when and where to these strategies can be applied appropriately (Hattie, Biggs, Purdie, 1996; Winograd & Hare, 1988).

There are several techniques or strategies that are regarded as Passive learning strategies were used for the externalisation of mental activity such as think aloud and expert modelling that provided learner unique insight into the thinking processes of expert. While scaffolding, cognitive coaching, reciprocal teaching and other forms of guided learning are expected to provide the support necessary to develop the skills and confidence for independent use of strategies. Two popular instructional strategies based on

problem-solving model include the case study method of instruction and Guided Design. Other active learning pedagogies worthy of teachers' use include cooperative learning, debates, drama, role playing and simulation, and peer teaching.

College teachers are commonly facing problems and complaining that the secondary school teachers are not playing their roles properly as they trying wasting their times in games or activities rather than giving attention to reading or improving cognitive skills. Where schools and parents fail students at school, when they get to college they are las y, foul-mouthed, and without the capacity to concentrate on anything for longer than about 10 minutes at a time. Those students have been failed by their schools and teachers, as in many cases it's too late for them to change and their chances of a decent education/job are already finished.

Conclusions and Recommendations:

Active learning is also important for teachers. Motivational and burnout problems of teachers are likely to decrease if students are more motivated and more actively engaged in their own learning. Besides, teaching becomes more intellectually challenging when students are learning actively and independently.

An excellent first step is to select strategies promoting active learning that one can feel comfortable with. Low-risk strategies are typically of short duration, structured and planned, focused on subject matter that is neither too abstract nor too controversial, and familiar to both the faculty member and the students.

The modification of traditional lectures (Penner 1984) is one way to incorporate active learning in the classroom. Discussion in class is one of the most common strategies promoting active learning with good reason. If the objectives of a subjectare to promote long-term retention of information, to motivate students toward further learning, to allow students to apply information in new settings, or to develop students' thinking skills, then discussion is preferable to lecture (McKeachie et al. 1986).

Bergquist & el have described the following factors within GETTING STUDENTS INVOLVED IN THE CLASSROOM.

Encourage exclusive dialogue with the teacher and not between students. This fosters a lack of involvement since students must compete with each other for the " king's ear."

Front to back seating arrangements encourage one-way communication. It is hard to talk to the back of someone else's head. Front to back seating arrangements discourage students from talking among themselves but they do focus attention on the teacher .

Students who feel pressurised into attending every session are less likely to want to participate. An overemphasis on grades and grading. Constantly stressing the importance of material for the midterm or final, how important a good grade in your subject is, and how much you appreciate good students will lead to a lack of involvement. Students are less likely to be involved when the name of the game is to get a grade and not learning something that might be of value to them.

If active self regulated learning is to increase in school, at university and in the workplace, there is a need for learners to be equipped with the skills, confidence and commitment for active learning across tasks and situations. It also requires the educational context to provide the opportunities and affordance for the active and independent self regulated learning to take place and be valued.

All of the above help create an atmosphere where students do not want to get involved (The non-involvement cycle). Consequently, they begin to behave that way, which leads the teacher to assume they are apathetic and uninterested, and the teacher continues to treat them in ways that lead to more apathy and uninvolvement. Thus a self-fulfilling prophecy begins to emerge.

Even though the active learning poses a great benefit within the teaching and learning arena but question is still there whether the students at secondary schools are ready for this change. Huge research has been done at higher level students where the learning skills and behaviour reached to a mature state and majority of the students are there to learn. Whereas at secondary schools, there are several issues that require attention at the higher level such as behaviour issues within schools and classes, teachers training, teachers right with in the classes, more freedom with the curriculum, specially designed curriculum to promote active teaching and learning etc.

In recent article at gaurdian news paper, Peter Mortimore reiterates that teachers are the solution not the problem. This means the profession

attracting, and keeping, the most talented and the best-motivated people. It also means the government allowing teachers reasonable autonomy in how they teach. If the officials address the following issues, there will possibility of promoting active learning at the secondary level.