АДАБИЯТТАР:

1. Гальперин П.Я. Введение в психологию. -М.: МГУ, 1976.
2. Лернер И.Я. Дидактические основы методов обучения. -М.: Педагогика, 1981. -185 с.
3. Мамбетакунов Э.,Сияев Т.М. Педагогиканын негиздери:Жогорку окуу жайларынын студенттери учун окуу куралы. -Бишкек: Педагогика, 2002. -148 бет.
4. Подласый И.П. Педагогика: Новый курс. -М., ВЛАДОС, 1999. Кн.1: Общие основы. Процесс обучения. -576 с. - Кн.2. Процесс воспитания. -256 с.
5. Разумовский В.Г. Преподавание физики в условиях гуманизации образования. // Педагогика. -М.,1998, №6. 102-111 с.
6. Мааткеримов Н.О. Теоретические основы нормирования учебного процесса по молекулярной физике. - Каракол: ИГУ им.К.Тыныстанова, 2002, 210 с.
7. Махмутов М.И. Проблемное обучение: Основные вопросы теории, -М.: Педагогика,1997. -367 с.
8. Алиева Д.Ш., Асаналиев М.К., Мааткеримов Н.О. К проблеме формирования творческой деятельности студентов. // Педагогика, -Вып.1: Приложение к "Вестнику ИГУ". -Каракол, 2003, 43-49 с.

УДК 370.157

Aynur Pala

Kyrgizstan-Turkey Manas University

ACTIVE LEARNING
WHAT IS ACTIVE LEARNING?

Active learning is defined as any strategy "that involves students in doing things and thinking about the things they are doing" (Bonwell, C., & Eison, J. (1991).

"Active learning involves providing oppourtunities for students to meaningfully talk and listen, write, read, and reflect on the content ideas, issues, and concerns of an academic subject" (Meyers & Jones, 1993).

The role of the student and faculty member changes and both must be ready to accept those changes. Students must take responsibility for their own professional development and increase their level of participation in the process. Faculty must be ready to develop new skills and attitudes as they make the shift to an active learning environment.

WHY ACTIVE LEARNING

"learning is not a spectator sport. Students do not leran much just sitting in classes listening to teachers, memorizing prepackaged assisgnments, and spitting out answers. They must talk about what they learning, write reflectively about it, relate it to past experiences, and apply it to their daily lives. They must make what they learn part of themselves (Chickering and Gamson, 1987)"

Most of the time, in a typical classroom settings, students are involved only passive in learning: i.e., in listening to the instructor, looking at the occasional overhead or slide, and reading (when required) the text book. Reseach shows that such passive involvement generally leads to a limited retention of knowledge by students.

Research evidence overwhelwing support the claim that students learn best when they engage with course material and actively participate in their learning.

Many faculty members assume that their role is to teach. Instead, think:

My role is to help students learn.

Teachers should actively involve students in the educational process and believe that the benefits to students include an increasd ability to utilize the cognitive skills of objectivity, creative thinking, judgment, interpretation, and problem solving while enhancing their affective behaviours. If students are to develop these skills effectively, they must be actively engaged with the subject and learning process. Under these circumctances, students are more likely to undertake a deep approach to learning and improve their academic performances. Students will perceive this improvement in their cognitive skills and affective behaviours and as a result, their self- esteem will be enhanced. As the students' academic performances improve, their motivation to participate in the educational process also increases. Finally, students who are actively engaged in this process develop an intellectual passion for wanting to understand and know the material. This fosters an attitute on the part of the student consistent with lifelong learning.

However, for this happen, the instuctor must create a lerning environment which increases students' involment in, and responsibility for, the learning process.

ACTIVE LEARNING STRATEGIES

Active learning includes a range of teaching and learning activities. Active learning means transforming traditional classroom practicess through problem-based learning. Active learning techniques do not make teachers' job easier. In fact, these teaching strategies usually require a lot of up-front work from teachers (creating effective problem sets) and likewise, require careful attention from teachers during the process. However, research suggest that these strategies greatly increase students' retention of both knowledge and skills.

Below some active learning strategies have been explained:

Questions

One way to increase student participation within the lecture is for the instructor to ask questions. However, successful utilization of this technique is not as simple as it might first appear. Questions are a valuable teaching strategy when thoughtfully implemented. Questions which are used to achieve well-defined educational objectives help emphasize the process of learning. Effective questioning skills can be learned, but the instructor must make the commitment to develop and practice these skills. Students quickly perceive behaviors on the part of the instructor which are inconsistent with, or negate, an interactive learning process. The student must feel free to ask and answer questions without the fear of an adverse response if he or she should provide an incorrect response. If this is the case, the benefits to students will be quickly lost as they withdraw from the process.

Advanced planning on the part of the instructor is required if this educational technique is to be successful. Key questions are planned in advance in order to provide structure and direction for the students. It is important that questions not be based on trivial information or used as fillers. It is necessary to decide in advance the content upon which the questions will be based and the purpose of each question. Questions should pertain to material which is fundamental to the concepts or principles being taught. It is important to determine at what level and where in the lecture the question will be asked before formulating the actual question(s). To do this, the instructor must be aware of the types of questions which can be posed, the cognitive level to which they pertain, and when to use each type of question. Lower level cognitive questions evaluate student preparation and comprehension through review and summarization techniques. High-level cognitive questions encourage critical thinking, problem solving and stimulate students to assume greater responsibility for seeking information on their own. While it is important to utilize questions of all cognitive levels, the greater proportion of questions should aim to develop the cognitive skills of comprehension, application, analysis, and synthesis.

Modified Lectures

Other modifications to the lecture format may be utilized by the instructor in order to increase student participation in the learning process. One technique is termed "pausing for enhanced retention and comprehension." The instructor pauses every 12-18 minutes and provides students with 2-3 minutes to work in dyads in order to clarify and assimilate the material just presented. The process is reinforced by a 3-minute period at the end of the lecture in which students are asked to record everything they can remember through free recall. It has been demonstrated that student performance on subsequent examinations is significantly improved upon when this technique is used.

Guided lectures are designed to help students synthesize lecture material and develop their note-taking skills. Students should be provided with the lecture objectives in advance of the session. In this setting students are required to listen to a 20-30 minute lecture and not take notes. At the end of the session, the students are given 5 minutes to record everything he or she can recall. At the end of this period, the students are asked to form dyads or triads, reconstruct and discuss the lecture, and in the process complete their notes. During this time, the instructor is available to clarify any issue or question which might arise within the groups. The entire process can be facilitated through the use of study guides, well-designed questions and pre- and post-session mini-tests.

Brainstorming

Brainstorming techniques may be used by the instructor in order that students may participate in, and help create, the lecture. This technique is less time efficient for information transfer than the lecture, but it actively engages students in the learning process. The instructor must have a clear idea of what he or she wishes to be revealed or discovered in the process and plan accordingly. The instructor initiates the process by asking students to tell him or her everything they know about a topic. Everything goes, and no evaluations are made of the suggestions or comments put forward by the students. The points are recorded by the instructor, as they are made, on a chalk board or on an overhead projector. During the process, the ideas are then categorized or placed in groupings by the instructor with the students' guidance. The lecture becomes a process of arranging and reordering ideas and concepts regarding the topic into a coherent and rational pattern. The final creation reflects what the students and instructor consider important about the topic. During the lecture, the students have spent their time thinking about and organizing the salient concepts or points of the topic as opposed to simply recording information.

Tests and Quizzes

Research has demonstrated that after a lecture, students recall 62% of the information. However, only 45% is recalled by students after 3-4 days and in 8 weeks only 24% of the information is recalled. If a quiz or exam was administered after the lecture, recall was doubled at the 8-week period.It is interesting that many faculty members appear to ignore the potential impact which tests can have upon learning. This may relate to the fact that tests or exams require time which faculty would prefer to, or must, allocate to other activities. Regardless of the reason, faculty should reconsider the use of tests within their courses.

Conclusion

I believe that student involvement in the educational process should be increased. In doing so, students will recognize and accept their responsibility for lifelong learning and continued professional development. Increased involvement does not mean additional requirements for independent study on the part of the students. Rather, educational strategies which take students out of the passive role and place them in an active, thinking mode should be used. In order to implement active learning techniques, or improve upon the learning environment, faculty need to learn new educational strategies and develop new skills.

REFERENCES

1. Bonwell C.C., Eison J.A.. *Active Learning: Creating Excitement in the Classroom* (1983). Washington, DC: George Washington University, Bouton C., Garth R.Y.: *Learning in Groups*. San Francisco: Jossey-Bass Inc. 1991.
2. Brubacher M., Payne R., Rickett K. *Perspectives on Small Group Learning - Theory and Practice.* Oakville: Rubicon Publishing Inc, 1990.
3. Crow M.L. Teaching as an interactive process. In *Improving Teaching Styles*. San Francisco: Jossey-Bass Inc, 1980.
4. Chickering, A. and Z.Gamson. "Seven Principles for Good Practice, AAHE_Bulletin, 39: 3-7, March, 1987.
5. Gutek G.L. *Philosophical and Ideological Perspectives on Education.* Englewood Cliffs: Prentice Hall, p 1. 13, 1988.
6. Forrestal P: Talking: toward classroom action. *In Perspectives on Small Group Learning - Theory and Practice*. Oakville: Rubicon Publishing Inc, 1990, pp 157-167.
7. Huczynski A. *Encyclopedia of Management Development Methods*. Aldershot: Gower Publishing Co, Ltd., 1983.
8. Meyer C. & Jones, T.B. *Promoting active learning:Strategies for the Colleg Classroom.* San Francisco: Jossey-Bass, 1993.
9. Seeler D.C, Brace J. Faculty development: program for change. *Jour Vet Med Educ* 19:34-36, 1992.
10. Talbot R.B, McGovern PT, Carrig CB, McGrath CJ. Preparation versus delivery. *Jour Vet Med Educ* 10:16-18, 1983.
11. Turnwald G.H., Bull K.S., Seeler D.C. From teaching to learning: part I. critical issues and historical perspectives. *Jour Vet Med Educ* 20(2):37-39, 1993.
12. Turnwald G.H., Bull K.S., Seeler D.C. From teaching to learning: part II. traditional teaching methodology. *Jour Vet Med Educ* 20(3): 148-156, 1993.
13. Weimer M.G. *Teaching Large Classes Well.* San Francisco: Jossey-Bass Inc., 1987.