

# Renovating Teaching Methods in Order to Improve the Training Quality of Professional and Elite Fire Fighting and Prevention Force

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**Abstract:** *The University of Fire Fighting (UOF) belongs to the system of People's Police Schools and is an unique institution for training and retraining staff, doing scientific research on fire prevention and fighting in Vietnam. In the context of a strong socio-economic change, the demand on human resources for fire fighting and prevention is getting more and more increasing, meanwhile the traditional teaching methods are increasingly showing a lot of shortcomings. Therefore, one of the challenges posed to the education system in general and the UFFP in particular is the necessity to change the teaching methods, so as to create professional and elite fire fighters.*

**Keywords:** Specialized base, fire fighting and prevention, university of fire fighting and prevention.

## 1. Introduction

The traditional teaching method is the method in which mainly, the teacher speaks - the learners listen to him/ her. Even in the 1990s, such method was still strongly dominant at the colleges and universities, even in the United States of America [1]. Students often had to sit listening for a long time and learn in the way called by Freire the "education in a banking way" [2]. According to this method, lecturer teaches and students are taught; lecturer knows everything and students don't know anything; the way lecturer thinks and students are forced to think in such teacher's way; lecturer speaks and reads lecture and students listen to the lecturer; the lecturer makes decision (selects) and the students must follow. In general, lecturer is the subject and students are the object of the teaching - learning process. First at all, lecturer cares for imparting knowledge, aiming at making students understand and remember knowledge. This method is less interested in developing thinking, training skills and exercising attitudes for learners. It leads to the fact that most students study in a passive way and after graduation, they are unable to meet the job requirements well [3-8].

Chickering and Gamson (1987) argue that in order to study well, learners have to do more instead of just listening passively, specifically, they have to read, write, discuss, or participate in solving problems. Similarly, when studying all learning levels, Freire found out that students learn and retain much more knowledge when they play a real role in their studying process and have the opportunity to speak up, share their opinion, interact and feedback, ... According to John Goodland, academic learning is too abstract for most students, so if students want to study well, they need to "see, touch, and smell" what they read and write. And Victor Weisskopf thinks that people cannot learn by bringing information stuffed into their brains, so we can only teach in an unique way which is to create motivation for

accumulating knowledge. The above-mentioned information on the one hand shows the limitations of the traditional teaching methods; on the other hand, poses the urgent need to convert into new methods, attracting more students to involve in the teaching-learning process. For such new methods, we temporarily call them the active teaching methods.

## 2. Teaching methods

In fact, after all every teaching method can also contain its own positive activities. However, in order to become a method whose the positive factor becomes a specific feature, most researchers mention students' involvement level in the learning process. Learners must really be considered as the centre, the subject of the "learning" activity. In order to do that it is necessary to:

- Diversify teaching methods.
- Reduce time duration for presenting lecture and increase time duration for learners' activity.
- Create high interaction between teachers and learners, between learners and learners.
- Encourage independent and creative thinking, eliminate the imposing way on knowledge in a dogmatic way
- Aim towards cognitive development at higher level for students such as: analysis, synthesis, and evaluation
- Focus on developing skills and building up a positive working attitude for learners.

On the contrary, for the learner's side, it is necessary for them to change their attitudes and learning methods, actively participate in activities, actively seek knowledge, practice skills as well as adjust attitude in the process of working together.

The positive teaching method will facilitate and attract learners to be active in learning and to improve learning efficiency by reducing the time duration for preaching.

Russell, Hendricson and Herbert (1984) point out that: students learn and retain lecture information much better when the density of providing information is low (compared to the average and high levels in the experiment). The amount of new information students are able to learn over a period of time is limited, and it is the lecturer who breaks his own goal when he/ she exceeds that limit. Ruhl, Hughes, and Schloss (1987) came to an unexpected conclusion: if lecturers speak less, students can learn much more! This finding is in complete contrast to the beliefs of most lecturers who believe that students' learning is better if lecturers speak more and provide more information. Referring to students' level of focusing and paying attention, Wilbert Mc Keachie showed that: When teaching by positive method, the level of paying attention and concentration keep maintaining at a high level (75%) throughout 60 minutes. Meanwhile, teaching in the traditional preaching method, the concentration level only obtains a high level (75%) within 20 minutes, then it will gradually decrease (chart 1). Thus, with traditional teaching, we are going against our own goals because teachers speak too much, which makes students learn too little. In large-size classes, according to the research findings by Lewis and Woodward (1984), lecturers speak more than 88% of class time, their silence accounts for more than 6%, and time spent for students to speak only accounts for more than 5%. This convinces us to quickly implement positive teaching methods, thereby: lecturers speak less and students do more.

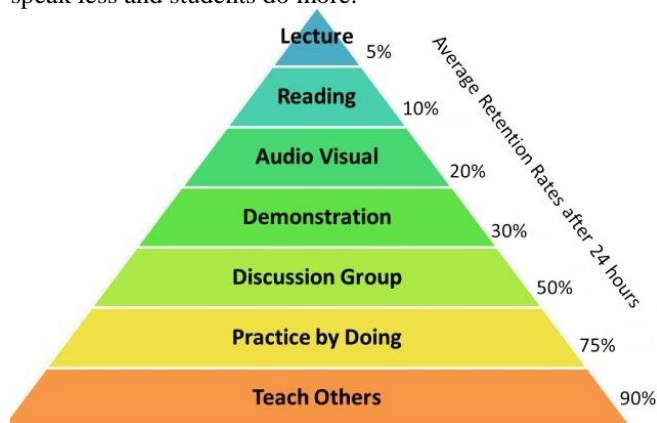


Figure 1: The learning pyramid

Innovating teaching methods originates from a change in the teacher's perception: Teachers need to change their own perceptions, must have an open thinking and access to advanced teaching methods. Teachers are a key factor, deciding on training quality of high quality human resources. Innovating teaching methods positively transforms a teacher from the person who imparts knowledge with a traditional, imposing, one-way communication meanwhile learners get knowledge in a passive, one-way knowledge, into an instructor who orients, organizes the learning for learners in a proactive, positive manner, supports them, answer questions and respond to queries and requirements posed by learners. The innovation of teaching methods of teachers derives from learning requirements of learners. Instead of

depending on memory, learners have to find out a way to systematize information they need, find out new information, this is just the starting step. After obtaining information, learners must have the skills to analyse, synthesize, process information and apply it into practice to solve problems. This work requires learners to have a new learning method that is the "active learning method" or "learning by doing and practicing". This method emphasizes the learning and acquiring process, not focusing on learning outcomes. This is also a method that helps learners to develop self-studying skills as well as problem-solving skills. Positive learning methods have an important meaning to help students know how to find out, search information, materials, organize them, do experiment and test their answers through the evaluation of teachers and of many other people. Gradually, the skills formed during the learning process bring in the learners more personal experiences, forming skills to handle jobs as well as the ability to be confident and adaptive in daily life. When applying active learning methods to the teaching process, teachers need to ask learners to explain what they have learned based on their personal perspectives, support them to discuss and share their personal opinions with their friends, eventually learners will draw their own conclusions through the interaction with the others.

However, it is not easy to change the studying way from "passive study" to "active study" because most learners and teachers are familiar with traditional teaching and learning methods. This habit is ingrained in the subconsciousness and hard to break down right away. In addition, most learners still tend to resist "reading material before going to class", "participating in class discussions" or "self-reading at home" in a proactive and positive way. This is a challenge for teachers and learners who wish to apply active teaching methods.

### 3. Conclusions

The use of active teaching methods will be an important factor contributing to improving the training quality of the training institutions, is a strong transformation and able to change the training quality in each product. The innovating of teaching methods for students of the University of Fire is an issue with an extremely important meaning in the training of fire fighting and prevention forces of next generations in a formal professional and elite way.

### References

- [1] Charles C. Bonwell and James A. Eison - 1991
- [2] In the method of " education in a banking way", instead of communication, the lecturers give out announcements and create deposits (such as a checking account at a bank) so that students can patiently accept, remember, and repeat - Preire - 1970
- [3] Fern et al 1993; McKinney - 2007; Brody - 2009; Charles C. Bonwell and James A. Eison-1991; Bonwell, C., and Eison, J., - 1991
- [4] According to Bloom, there are 6 levels of awareness from low level to high one: knowing (knowledge), comprehend

(comprehension), applying (application), analyse (analysis), synthesize (synthesis), evaluate (evaluation). In which, analysis, synthesis and evaluation are considered as a high-level perception. {Ut1}

[5] Foundation coalition; Edgar Dale, Daniel Sousa, Stice and some the others.

[6] USA Today June 10, 2004

[7] According to Jessica Holbrook - 2009, soft skills are a term used to refer to human character and skills that are not easy to measure or quantify. Researchers have listed a variety of such skills, such as: teamwork, communication (speaking and writing), personal communication, critical thinking, problem solving, and many other skills.

[8] Teaching the New Basic from Harvard's Graduate School of Education