

TECHNIQUE OF TEACHING IN HIGHER EDUCATION. BETWEEN CLASSICAL AND MODERN

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Abstract: An overview over the results obtained by students in technical education, during the last quarter century reveals that they have been in continuous decline. There are some internal problems in teaching activities, which should be considered seriously and solved wisely and sustainably. In the context of topic work we will do a review of the senses and we will analyze in terms of how they participate during training activities, especially at the reception of knowledge taught in class. The tandem hearing and vision is essential in learning but speech is more important than sight.

1. INTRODUCTION

An overview over the students' results in technical education, during the last quarter century reveals that they have been in continuous decline. Causes of social, demographic, legal, etc.; excuses are many. Neither finding the causes and no excuses cannot elude reality - performances of students in learning are far from satisfactory. Let us focus on the teaching of technical higher education and analyze it in terms of partners in the process:

A. Staff blames:

- Gaps in knowledge downstream students;
- Lack of student motivation to learn, both personal and social;
- Deficiencies in the training process of the following ways:
- Organizational;
- Technical knowledge transmission;
- Fastening means knowledge;
- To lack of ownership of knowledge - students "do not know how to learn"

B. Students, through their responses to questionnaires aimed at just the quality of education require the following:

- Organization - subjects in the curriculum are not related to succession and their relevance or properly sized for future job skills;
- Schedule Tasks - times are distributed as "day light";
- Transmission of knowledge – the way of teaching using IT resources is without stress but it is unmotivated and lacking liveliness;
- Request - discussion on the concepts, explaining and illustrating them.
 - Determining the knowledge and vocational skills at classes applied:
 - Practical work which does not encourage teamwork or competition;
 - Sometimes improper equipment grounds and often poor and old;
 - Practical executions are carried out by teachers, not students;
 - Experimental results are suggested rather than measured;
 - There is no debate on interpretation of results and the conclusions completion;
- Request - laboratory practical guides designed, still students can perform their own;
 - Evaluation - is considered irrelevant for the following reasons:
 - Examination is mainly in writing, based on theoretical topics and grading is done according to "how and why" the student knows, not after the "perceived" and "thinking like" it. Note the "reproduction" and not "produce";
 - Evaluation grid based on multiple choice questionnaires is totally groundless; promote superficial learning and even fraud;

- Even when there are practical issues that have to be solved, the results are the mainly interesting part, not how you get it.

A brief look over the presentation proves that there are some internal problems, which should be considered seriously and solved wisely and sustainably. All are of interest but in this paper we address only the sequence for conveying knowledge and information. This is because we regard it as an essential activity - the number of hours provided in the curriculum and crucial - given that it is the first activity that the student comes into contact with, it set the tone and all other activities revolve around it and its applications.

2. TRANSMISSION AND RECEPTION OF KNOWLEDGE

Academic knowledge transfer in Romanian universities is done during the time allocated by the curriculum. The teaching activities (courses) follow an established staging knowledge taught by covering chapters contained in the "discipline sheet". At university level there is not a so-called formal "lesson plan", so that discipline holder is free to choose between the means and techniques of teaching, so that, on the one hand to provide the knowledge needed, and on the other, to ensure the attractiveness and interest to students. Among the teaching methods most used is dictation, academic lecture and presentation with IT support. Experience shows that sometimes a teacher addresses the three styles depending on the subject to be exposed. Most often we have deal mainly teachers from three styles. As such, we have teachers in the categories: "dictators", "rhetoricians" and "presenters". What types of students are formed by the three teaching styles? Also the student's answers to "Questionnaires on quality in education", shows that students we have from the following types: "scribes", "listeners" and "viewers". In fact, the last category can easily transit through "sleepy" and the first to "copyists-dreamers" (see Figure 1). If style "oratory" is correctly implemented as approach and coverage, i.e.: rhetoric, drama, gesture, mimic, debate, dialogue, written warnings and emphasis, then the lecture is easily received and understood, the student is receptive and away from boring. If not, he will soon join the latter category.

The provided is describing a situation. We took note of something that is so. A first idea arising from this is that the style of teaching is one that sets the tone for educational activities. Can be still asking some questions: how best to achieve perceived knowledge, how to get faster and more effectively to the student's mind? To answer we need to examine the phenomenon of transmission and reception of information. We need to see to whom and how we are addressing the information and what channels make their reception, but also, sustainable and storage areas of memory that would be further easily accessible, activated and used for creative engineering processes.

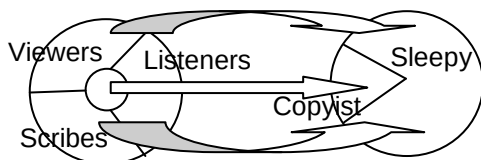


Figure 1. Transforming types of students during the course

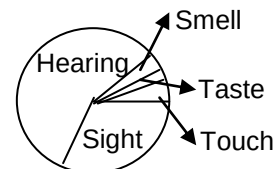


Figure 2 Involving senses in receiving information

3. CHANNELS ON THE TRANSMISSION AND RECEPTION OF INFORMATION

The anatomy and human physiology reveals that man meets the external world through his sense organs. Any kind of knowledge is achieved by man through his senses first and then thinking rational deductive and inductive. In the paper topic context we will

do a review of the senses and we will analyze in terms of how they participate during training activities, especially at the reception of knowledge taught in class.

Sense of smell - smell assume by contemporary science, in a genetic point of view, the oldest human sense, so the most primitive of all senses. Nietzsche linking olfactory sense to instinct as intuitive knowledge in this way, the smell gives sensorial model for pre-conceptual practical knowledge [3]. Illustrate current and unexplained experience that spontaneous feel antipathy or attraction to a person due to a simple "trailing". That is why the nose is assigned with some metaphorical significance: clairvoyance, insight, brief "practical intelligence" or as Rolf Dgstra says, is a "measuring instrument of feeling, spirit and intellect" [1].

However this sense is less important for teaching, but should not be all underestimated. This is because space is a place odoriferous, concrete, and well defined qualitatively. Classroom has its specific smell, is the smell itself, it is explained that some places are inextricably linked in our memories by smells - pleasant or unpleasant. You cannot hold scientific lectures in a restaurant or a hall of fish, but we are interested or hinder us smells like an amphitheater, a classmate or even the teacher.

Sense of taste - is a sense of contact through which, in case of transmission of information is not picking anything - whether taste eraser, pencil, etc. As such, its importance for the purpose of our analysis is negligible.

Sense of touch - like taste, is a sense of contact and all similar, is not relevant for receiving information in a classroom.

Visual sense - a sense of distance, directed, but wide open, very important in their reception and storage of information (so-called visual memory (i.e., what you saw with your eyes, do not forget easily). Looked through the theme of analysis, because of its certainly potential, this sense must be used for the transmission of knowledge. This is why, always in the educational process was used sketches, drawings, symbols, graphics, illustrations, photographs and then microfilm, slides, computer graphics and commercial products. If there is any problem in provide training using this sense, it is about supplying information through this channel with efficient, accurate and proper understanding of knowledge transmitted - see subliminal messages, optical illusions, confusion and ambiguities of representation, whether intentional or accidental.

The silent film, statue, painting, panorama can transmit emotions, to arouse other senses and feelings, as well as can transmit technical and scientific information. Effective understanding of information transmitted in this way and discerning their authenticity cannot be complete but without an appropriate comment, verbal or written.

Sense of hearing - a sense of distance, received from all directions in both waking and sleeping. He gives a major way for their reception and transmission of information, both the warning and those for communication and information. Through thinking, this sense provides the fastest browser distance between "perception" and "understanding" [4]

Hearing sense is the underlying language occur first as onomatopoeia, in order to describe or to warn. It's been a long time until speech has exceeded the „call” - which commands (come, go, bring, do) and "indication" – Which indicates (there, here, there, almost ...), and became a means of communication experiences, feelings, news, information and ideas. Switching from call to indication and then to „question”, marks in advance of building, development and perfection of language through linguistic signs and finally to writing. First, language was intended to communicate more exhortations and guidance than news. For a long time it remained more a means of action than a means of circulation of knowledge and ideas. Rise of "style" of language, far from being considered as a means to provide a higher fidelity commonplace frocks, meant an indispensable process of transforming knowledge and reality. When, however, is no longer in the service

of an idea, stylistic performance information more obscure meaning rather than transmitted it and there is not even producing emotions. Language is meant to help the knowledge and knowledge transmission.

We appreciate that speech is superior in terms of both cognitive and indication exhortation to "see" something. This language allows for the "question", the responses thereto may be converted to other questions, and so the dialogue, that is true bi-univocal transmission of knowledge.

4. CONCLUDING REMARKS

Conclusion on the contribution brought by the reminded senses in order to obtain a good reception of knowledge through courses, we can give the next guidelines:

- **Smell** - classroom must have a specific smell, the smell is not disturbing the audience and the teacher to be pleasant-smelling

- **Taste** - with very few exceptions (sour, salty, sweet ...) is only relevant in practical applications of food science, agronomy, gourmet etc.

- **Touch** - practical applications of interest only for warning (cold, hot, sharp...) or for the qualitative assessment (fine, coarse, soft ...);

- **Visual** - very important sense mainly for receiving information but excesses are harmful. Not changed during a viewing of the film, in which knowledge is came in and out before the eyes of students, whether open or closed. Graphics "transcribe" a talk of essence and less "describes" phenomena ". As such, current audio-videos can lead to destruction of both human creativity and the reunification and its progress. Choose depends on the teacher how to use the technique. In addition, exacerbating the sense of sight at the expense of other senses is the greatest misfortune of alphabetic writing, continued with icons and other graphic techniques electronics [2].

- **Hearing** - is essential for education. Language involved in discovering, preserving and transmitting knowledge, constant and repetitive properties of things and phenomena. Fashioned as a means of communication, he became primary means of knowledge. We have to appreciate and use it mainly in educational activities. We believe that for the activities of knowledge transmission, speech is more important than sight. To say that the Earth revolves around the Sun even "see" that is opposite to say that the universe is infinite "see" that everything around is finished, is a paradox made possible only verbal.

The tandem hearing and vision is essential in learning. Lecture, dialogue, the book remains the main ways of countering the trend they have audio-visual media, to weaken the critical spirit. Any excess is negative. Hypertrophy use of IT in education to the detriment of oratory or reading, enhances life at the expense of interior and. In an era when painters appeared who cannot draw, poets who refuse rhyme, musicians who dislike the song, singers who have no voice, we must guard against to produce engineers who cannot create, nor teachers that style teaching is just speaking and writing, beyond the true and false, good or bad, beautiful or ugly and cannot adjust their relationship to the audience.

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