LEARNER-CENTRED APPROACH: TYPES OF PERCEPTION

Abstract: Nowadays one of the main objectives of the higher educational organizations is to use the learner-centred approach, which aims at considering the individual peculiarities and needs of each student. Learning styles based on the dominating perception channel should be taken into account while preparing for the lessons. In this paper we try to give recommendations for compiling lectures and tutorials, which are suitable for each student’s learning style.

Key words: learner-centred approach, perception channel, visual, audial, kinesthetic.

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At present no one doubts that the higher education is a necessary part in the life of every person, it is a door to the world of opportunities to get a good job, realize one’s potential, develop, and occupy a prominent position in functioning of the society. That’s why one mustn’t underestimate the role of the teacher at higher educational institutions. The teacher not only imparts knowledge on a certain subject, but is also a person who has to get learners interested, share personal experience with them, become an example, encourage the development of the future specialists, and improve learners’ individual skills. In this respect, there is a problem of lack in the number of teachers of higher educational institutions, and it is often hard to pay appropriate attention to each learner, as one teacher may have about 100 or more students in an academic term. That’s why the teacher basically works with those students, who show their willingness to learn and are eager to pursue knowledge working actively during the lessons. However, some students are not involved in the learning process at all, as they do not show a clear interest in learning. Teachers excuse themselves saying that those students have chosen the wrong specialty, do not have the necessary abilities, cannot learn according to the given curriculum, and therefore, occupy another person’s place, etc. American linguist, psychologist and educator Betty Lou Leaver said that “all learners with no exception can learn. The only thing they cannot do is to learn in the way specified by the certain curriculum, course book or teacher” [Leaver 1995:6].

Teaching is a cyclic and cumulative process of regular updates and expansion of knowledge bank. The purpose of teaching is to change the behavior of the learner so that he or she can act more successfully. Learning is a constant transformation of the personality. It is good to differentiate between conscious and subconscious learning. The first is learning by means of education, and the second is learning based on experience. The conscious learning is usually more successful and it develops the abilities better than the subconscious learning, as it gives more chances to control the process. The students who are eager to pursue knowledge, learn consciously, they are completely adapted to getting knowledge and to the curriculum, and are motivated, they easily perceive information, and know what and how to learn, what methods to use in the learning process. However, most young people haven’t firmly decided their position in life, they have stress from the beginning of studies at higher educational institutions, which
changes their view of the goals and objectives of the study (as compared to the secondary schools, where they might or might not studied well) [Hubert K. Rampersad].

The goal of the modern university teacher is to aim at learner-centred approach, i.e. teaching aimed at demonstration and keeping of individual abilities of the learners, the content of which allows for and takes into account the individual viewing and understanding of the subject along with standard knowledge, and the methods, means and forms of teaching allow the learners to be actively engaged in compilation of the contents and organization of teaching, and provide the opportunity to choose the level of acquisition of the material.

The learner-centred approach shall take into account the learner’s age, physiological, psychological, and intellectual peculiarities; educational needs, orientation to different levels of complexity of the material available to the learner; level of knowledge and abilities of the learners; concerning each learner a unique personality. In the learner-centred approach there is a need to consider learning styles typical to every person. Learning styles represent how we perceive information, and what kind of conditions can help us easily understand and acquire something. According to Shrenk’s definition, “it is inclination of a part of the students to application of a specific learning strategy in accordance with the certain learning objectives”. We can say that a learning style is a system of individually special means and methods of solving a problem, which depend on the complex of natural traits of the person. Every person has his own certain learning style, and the teacher is no exception. There is often a conflict in styles: the teacher mechanically orients himself to his own learning style while presenting a new material, he tries to explain the material in a way that is easy for him to understand. Some students understand the material very well as their learning style corresponds with the teacher’s, however, other students have to figure out everything themselves or usually just skip the topic, and then the material of the whole course, regarding the examinations as a mere formality. That’s why learning styles are taken into account during the teaching process on the basis of the personal traits of the students and teachers.

Learning style is an individual and peculiar ways of acquiring information in the learning process; these are typical models of cognitive, affective and physiological reaction to the learning environment and interaction with it [Skotnikova 1998: 68]. There are several types of the learning styles: cognitive, affective and physiological. Considering these styles may help us to make teaching more comfortable for students, and get the maximum number of learners interested in learning.

The cognitive learning styles are preferable ways of acquisition, organization, use and keeping of the knowledge. Depending on the cognitive style there are impulsive and reflective learners (pace of acquisition and information reproduction), inductive and deductive learners (way of inference), abstract and concrete learners (type of information which is more comfortable to acquire). Affective learning styles are aspects of the learners’ personality, which are related to attention, emotions and values, and which motivate them. The learners are divided depending on the ways of interaction with a society (extravert and introvert), on motivation (cooperating and competing), on the way of perceiving the world (sensitive and intuitive). Physiological learning styles are biologically explained habitual reactions of the learners to the physical conditions of learning and teaching. In accordance with these peculiarities, people may be grouped depending on the sense organs, which are used in the process of information perception (audial, visual, and kinesthetic), on the time when the information is acquired better of all (day people and night people), depending on the design of the environment (formal and informal).

Time and the most appropriate design of the room for information acquisition are very difficult to prepare, as these factors do not depend on the teacher. In this scientific work we would like to consider the learning styles, which are based on perception channels. The teacher can completely control the consideration of these factors during preparation for the lesson. While compiling the tasks and exercises, and preparing the lecture material we shouldn’t consider our own perception channel, but the perception channels of our students.
For instance, the learners with a dominating visual learning style acquire a new piece of information by seeing. For these learners the significant parameters are brightness, size, colour, its intensity, power, clearness, contrast ratio, texture, shape, and symmetry. The visual learner acquires the new material better, if he sees graphs, tables, pictures, photos and films along with explanation. He remembers what he sees. Unlike audial learners, the visuals never get distracted because of noise. The visual learners have good imagination; they work well with drawings and models. The use of computer technologies provide for success of explanation of the new material. The presence of handouts is of great importance, too. Moreover, the beautiful design of the handouts plays a significant role for visuals.

The following types of exercises may be suggested for the visual learners: writing exercises, cards, which are decorated beautifully and brightly, searching for something in the course book or copybook, reviewing, making a conclusion, working with educational and controlling computer programs, writing the answers to the questions with a help of a projector and/or a computer, etc.

The learners, who have audial perception channel, use hearing to get and process a new piece of information. The most significant parameters for these learners are pitch of a tone or sound, speed, volume, rhythm, timbre, and resonance. The explanation of a new material shouldn’t be monotonous, but expressive and emphatic. The audial learners easily get distracted because of noise. They need audio feedback and a dialogue on the lessons. They often say what they are doing. They need to pronounce and discuss a new piece of information in order to remember it. The audials perceive handouts badly. The teacher may prepare an audio recording or a video with a sound. The following types of exercises are good for the audial learners: reading the task to the teacher, composing something and telling it to others, explaining something to a friend, asking to come to the board and dictate something, eliciting the main ideas, and proving them, analyzing, comparing, contrasting the facts and phenomena.

The kinesthetic learners use movements and emotions in acquiring a new piece of information. The most significant parameters for them are intensity and duration of the action and attention. They need to do, repeat the action by hands in order to remember something new. In case there is a piece of reference information the kinesthetic learner needs to write it with his own hand. In case there is an order of actions, this kind of a learner needs to do them step by step. The presence of concrete steps is very important for these learners. “Just a story” does not have sense for them. Computer science teacher may suggest these students to do research, find several ways of solving a problem, or tasks with concrete instructions for performance. The kinesthetic learner finds it difficult to listen and watch for a long time. Usually he begins to repeat the teacher’s actions, sitting at the computer.

The following types of exercises are good for the kinesthetic learners: rearrangement of cards, drawing, modeling, counting objects, doing research, finding several ways of solution, tasks with concrete instructions for performance, asking for a definition, statement of a law and its consequences, hypothesizing [Libin 1998: 112].

We have held a survey among the students in order to identify the dominating type of information perception. About 400 students participated in the survey. As a result (in the diagram), we have found out that the dominating type of perception is kinesthetic. The kinesthetic type is typical to the representatives of technical, engineering, ICT specialties, as they need developed abstract thinking, and they need to make their own conclusion to acquire and reproduce a piece of information. However, considering the dominating type does not mean that the teacher can forget about other students. Teaching the students with other types of perception is also very important. That’s why we have analyzed and made the following recommendations.
Figure 1 - The diagram, reflecting the types of information perception of the students of technical specialties.

For the student of each type there are special verbal signs, which attract his attention. While preparing for presentation of a new material, we should consider the peculiarities of all types, and try to use verbal signs attracting the attention of all students. One of the key words for the visuals is “Look..”: look at the graph, look, how interaction is going on, look at the screen, look at the book. For audials the verbal sign is “Listen..”: listen to the difference between something, and now listen to the description of the drawing, listen, what a scientist says about it. Verbal signs for kinesthetic learners are “Try, imagine”: try to draw the scheme in the copybook, try to interrelate these ideas, and make a conclusion, imagine how it happens in practice.

While preparing for the tutorial, and stating the task, we should also remember the verbal signs, which ease students’ work. For the visual it is “Describe”: describe all possible ways, give a description of the scheme, describe the events. For the audial it is “Tell..”: tell, what you have remembered, tell, how it happens, tell, how you have come to the result. For the kinesthetic it is “Give an example…”: give an example of interaction, give a practical example, try to make your own scheme. All recommendations can be generalized, and given in the following table:

<table>
<thead>
<tr>
<th>Learning style</th>
<th>Presentation of a new material</th>
<th>Presentation of the material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual</td>
<td>Look, …</td>
<td>Describe…</td>
</tr>
<tr>
<td>Audial</td>
<td>Listen, …</td>
<td>Tell…</td>
</tr>
<tr>
<td>Kinesthetic</td>
<td>Try, imagine…</td>
<td>Give an example…</td>
</tr>
</tbody>
</table>

In order to involve all students these verbal signs can be used in stating one task. For example, “Carefully study this table, compile a brief description of the problem. Prepare a message about one of the provisions given in the table using additional sources. While preparing use the material studied before, and your experience. Try to make a scheme based on the data in the table”. Thus, every student will pay more attention to the part that is more comprehensible for him. While doing all points in the exercise in some degree he will develop far and wide.

The standard presentation does not allow covering all students, as it is not oriented to kinesthetic learners – there is no possibility for constant action. One of the successful solutions is to use an interactive board or a computer. The use of an interactive board/computer is as follows:
- visual: the text is written, it is possible to include graphs, pictures, video, and drawings
- audial: written text is read aloud, it is possible to include audio recordings and video
- kinesthetic: it is possible to make the text move, compile new tables, search for information.

Thus, we see that the efficient realization of individual styles of learners in credit-based education needs the use of individual and individually differentiated tasks, multilevel educational...
programs, technical teaching means, and intellectual systems, as the purposes of the teachers are both transmission of information and maximum involvement of the learners. The use of learner-centred approach will help us to achieve high results.

References: