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GARDNER'S THEORY OF MULTIPLE INTELLIGENCES IN THE LEARNING PROCESS

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Abstract. The article examines the theory of multiple intelligences in the pedagogical context. The methodology is based on the use of the diversity of individual differences and the creation of many ways for their development and learning precisely on their basis. Eight types of intelligence are characterized: verbal-linguistic, logical-mathematical, visual-spatial, rhythmic-musical, bodily-kinesthetic, naturalistic, interpersonal and personal. It is emphasized that the main principle of the learning process should be built to enable children to gain experience that would require the involvement of different types of intelligence. The main thing is to give children the opportunity to get to know and learn anything in the way that is most convenient for them.
Key words: multiple intelligences, individuality, abilities, learning, thinking.

Introduction

Professor Howard Gardner is the author of the theory of multiple intelligences. Even in the last century, he began to fight against the prejudice that IQ is the only true indicator of our intelligence. It used to be assumed that the higher the number, the smarter the person. However, modern science says that this is not entirely true.

H. Gardner has been researching the human brain for several years. He studied the characteristics of brains damaged by a stroke or accident, the brains of gifted people, mentally retarded people, and representatives of different ethnic cultures.

According to the results of these studies, the scientist changed the idea of intelligence as the only once and for all determining innate abilities and problem-solving skills. Gardner suggested that intelligence is concentrated in different areas of the brain that interact with each other, or work independently of each other and can be developed in the presence of suitable conditions.

Main part

What is the peculiarity of Howard Gardner's research compared to other theories in this direction? We express the opinion that it was thanks to the application of multifactoriality and interdisciplinarity as the main methodological approaches that Gardner reached fruitful conclusions in the study of intelligence. Interdisciplinarity was easily given to Howard thanks to many years of specialization in several subject areas simultaneously, namely pedagogy, neuropsychology, cultural studies, sociology, and neurobiology.

Howard Gardner's theory of multiple intelligences has many critics. It is interesting that the author himself suggested several scientists to investigate the weak points of the theory.

The main comments relate to the insufficient verification of the theory of multiple intelligences for effectiveness, the criteria for defining individual types of intelligence, and the terminology itself.

Regarding the use of the term *"intelligence"*, the author acknowledges the similarity in his interpretation of the concepts of *"ability"*, *"gift"*: "I am quite confident that if I had written a book called "Seven Talents" it would not have received the attention that "Frames of Mind" received".

Twenty years after the publication of the first edition of the book "Frames of Mind: The Theory of Multiple Intelligences", the scientist thought about adding an eighth type of intelligence to this list – naturalistic.

There are 8 types of intelligence.

Verbal-linguistic intelligence. Children with this type of intelligence like to read, write, tell, and memorize words. On the lessons, you can use reading, exercises aimed at perceiving words aurally and visually, letters, discussing and debating.

Logical-mathematical intelligence. Children love to solve problems, ask questions, work with numbers, and experiment. It is suggested to analyze the data, use logic, tables and graphs, and build the facts in a logical order.

Visual-spatial intelligence. Children quickly learn from visual images. They are good at extracting information from maps, diagrams, and they like puzzles. Colored pictures or graphic symbols, work with computer graphics, making models, products, etc. are used for teaching.

Rhythmic-musical intelligence. Children like to listen to music, play a musical instrument, sing, and learn foreign languages more easily, as they easily catch and copy the melody of the language. You can teach while listening to music, use music to regulate your mood, accompany the educational material with poems, songs, and rhymes.

Bodily-kinesthetic intelligence. The child solves tasks, creates and conveys ideas and emotions with the help of body movements. You can memorize information by superimposing it on movements, take frequent breaks in class to play, do some physical exercises, and use role-playing in learning.

Naturalistic intelligence. Children like to observe and discover differences in living conditions in different countries. They are interested in folk traditions. You can motivate them to describe the appearance of people and the habits of animals, use illustrations of natural phenomena, animal and plant life on the lessons.

Interpersonal intelligence. Children work well in cooperation, have leadership and diplomatic skills. They are organizers of extracurricular parties, quizzes, etc.

Personal intelligence. Children with this type of intelligence better understand their own emotions, goals and intentions, inner world. They have a heightened sense of self-worth, like to work alone. We offer individual tasks, discussion of what has been done, detailed analysis of mistakes, keeping a diary, and individual assignments.

A person with a developed verbal-linguistic intelligence knows how to: perceive oral speech and react to it; imitate the pronunciation; listen, read, write and discuss; make use of printed materials (journalism, poetry, prose, fiction, etc.); create new linguistic forms, original written works, and, in addition, deliver oral speeches, etc.

Gardner suggests using riddles to awaken verbal-linguistic intelligence. Howard describes logical-mathematical intelligence as covering three broad, interrelated fields, namely: mathematics, natural sciences and logic. It can serve as an integration focal point for many subjects.

Thus, strategies are proposed that integrate mathematical and logical thinking in language teaching: creation of sequential chains; analogies; studying words, parts of speech, sentence members or any other information with the help of cards, *for example,* rectangular cards – nouns; oval – adjectives, triangular – other parts of the speech, etc.

Various geometric shapes are a good visual mnemonic tool in the educational process: creating collages from geometric shapes of different sizes, colors and shapes, capable of artistically reflecting the structure of a sentence; cutting out of paper various shapes to represent the subject, predicate, adjuncts, meanings and circumstances for sentence construction. Visual-spatial intelligence does not require knowledge of the language, words, sentences, speech, books.

Instead, it has a language of color, shape, design, texture, pattern, image, picture and symbol. "Visualists" often have difficulties with language, especially with memorization. Recently, a lot of attention has been paid to visual forms of note-taking, which include the creation of conceptual maps or mind maps.

For students with visual-spatial thinking, concepts become understandable in context or in comparison with other concepts. Repetition does not play a major role in this type of intelligence. Bodily-kinesthetic intelligence is the "knowledge" of one's body, which is connected with understanding the movement of muscles, joints, or tendons.

Types of activities within the limits of kinesthetic intelligence that can be applied to teaching language and literature are role-playing, imitation, physical exercises, live sculpting, live skits.

Musical intelligence is knowing how to use music and rhythm to achieve a state that helps creatively solve various situations. In foreign didactics, simple chants are widely used for studying any topics (*for example,* famous jazz chants). It is impossible to overestimate the impact of a well-chosen piece of music on children's perception of a literary, especially lyrical, work.

Interpersonal intelligence is a way of knowing that can be expressed in the formula "person – person", and it must rely on all other types of intelligence for its expression.

Working in groups, in pairs, conducting role-playing games, interviews – practicing the language material in different communication situations contributes to its deeper and stronger assimilation. We believe that the study of the influence of the method of cooperative learning (by David Spencer) on the process of learning language and literature and its application in practical didactics is currently relevant.

Like interpersonal intelligence, personal intelligence needs the participation of all other types of intelligence for its expression and thus integrates and synthesizes all other ways of acquiring knowledge. In our opinion, this type of intelligence is the most involved in such a type of speech activity as writing.

Personal creative use of writing can be applied in such alternative tasks as writing (composing) a script for a radio or television program, slogans or leaflets, advertisements, announcements, labels, credits, titles for screen shots, information leaflets, poems, etc.

Conclusions

"Multiple intelligences should not be an educational goal."

The use of the theory of multiple intelligences helps to organize an educational process that will take into account different learning styles, which requires the involvement of different types of intelligence, to get to know and learn something in the way and way that is closest to him and convenient.

This will help to motivate the child to learn and gain the necessary experience.

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