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CHAPTER 1

REALITY TECHNOLOGIES AND ITS USE IN EDUCATION

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INTRODUCTION

With the technological advances experienced today, learning environments are enriched and the integration of technology into education is increasing. Technology offers multimedia environments that appeal to many senses, and it is accepted that the inclusion of senses in learning environments strengthens learning (Erbaş & Demirer, 2014). In line with this situation, using technological tools in learning process is important for the new generation that growing with technology. Because students want to learn their lessons by using technological devices that they can learn with pleasure (Topraklıkoğlu, 2018). Technology, which is an integral part of teaching environments, enables students to think about the problem and interact, thus enabling them to create a unique way of thinking. Parallel to this, the use of interactive boards, dynamic software, web 2.0 tools, multimedia (video, animation, sound, etc.), educational games in learning and teaching environments have become widespread, the technologies have been developed that interaction opportunities are provided to students in concepts and situations that do not have the opportunity to interact, and will facilitate the concretization of abstract concepts. Augmented reality and virtual reality technologies, which have recently gained importance, can be given as examples of these technologies. Augmented Reality (AR) was conceptually introduced by Tom Caudell and emerged as a term used to determine the components of aircraft circuits (Türksoy, 2019). The most accepted definition of AR as a technology that combines the real world and the virtual world was made by Azuma (1997). Tablet computers and smart phones, which are used as an intermediary device in combining the virtual world and the real world, have been effective in increasing the awareness of this technology. It can be said that the Pokemon Go game created by Nintendo, which contributed to the popularization of AR developed for smartphones all over the world, was released in 2016. This technology later began to be used in the medical world, clothing companies, advertisements and as educational material. Unlike virtual reality, AR is isolating people from the outside world (Furht, 2011).

“VR is the technology that enables three-dimensional objects created in the computer environment to interact with technological tools in people’s minds in a real environment” (Burdea & Coiffet, 2003). VR first emerged in 1962 with a device called Sensorama developed by Heilig (Kock, 2008). Heilig presented users with a separate reality independent of the real world, with sensorama created by combining visual, auditory and tactile elements. The fact that VR devices are large and costly has been a problem in their widespread use. With the development of technology, low-cost Google cardboard (VR glasses) etc., developed by Google in the mid-2000s. increased recognition with the help of devices. Although it is

stated that its popularity has increased, its high cost and the fact that it is a device customized only for this purpose has created a significant obstacle in the spread of VR devices. Moreover, it takes a long time to develop suitable software for content and forces developers to become experts in design and coding (Osuna, Gutiérrez-Castillo, Llorente-Cejudo, & Ortiz, 2019).

As time progresses, it is thought that the use of reality technologies will become widespread in the field of education, as in many other fields and systems, and studies on this field will gain importance. In this section, definitions of reality technologies, case studies for their use in education, and consequences are shared thanks to the information in the literature.

1. THE CONCEPT OF REALITY

Throughout the history of philosophy, there have been many discussions and thoughts on the perceptual reality of the world. Situations such as the desires of thinkers in the past to reach the truth and what the physical world really is have caused them to put forward different thoughts and theories. As in the past, the concept of reality is at the forefront of the issues that the world of philosophy focuses on today. The reality of the perceived world in the dynamism of daily life is not questioned. In the course of daily life, people do not doubt this reality and do not take a philosophical approach. Regardless of primitive and modern people, individuals rely on the information they have obtained through their senses to perceive and make sense of reality. Over the course of time, people have begun to question the possibility that the real world they experience through their perceptual ways can be an illusion. Starting with this questioning, many theories and philosophical thoughts have been put forward until today (Özköylü, 2018: 7).

1.1. The Concept of Reality in the 20th Century

As a result of the cultural changes experienced by societies in the historical process, their structures and perspectives on reality can often differ. In ancient times, an important change has been experienced by replacing the dogmatic view of reality with the perspectives that put the mind and science in the foreground in modern society. As a result of the rapid change and development in communication and information technologies in the postmodern period, the concept of reality is completely transformed (Dilek, 2020: 19). In the past years, the concept of reality has been reduced by perceptions and senses, but today, with technological advances, the concept of reality becomes a situation consisting of data (Özköylü, 2018: 13).

Information systems continue to develop together with the internet and mass media, and as a result of this development, endless image stacks

are formed. The frequent use of signs, in which the differences between the concepts of reality and image are completely destroyed, lead to the fascination of communities and the aesthetic view of reality (Featherstone, 2013:123,175). As a result of this situation, society loses its sense of concrete reality. To summarize the situation and serve as an example, Umberto Eco's statement "Disneyland shows us that technology can offer more reality than nature can offer" may be mentioned (Urry, 2015:223).

Due to the conditions of the postmodern period, individual hedonism came to the fore and the formation of a consumer society brought along many technological developments that will help to question the concept of reality. As a result of this situation, at a conference held in June 2016, Elon Musk conveyed the idea that "The probability of us living in basic reality is one in a billion" Elon Musk has stated that the games will not be different from reality in the future, considering the speed of progress of today's technology. In particular, the increase in platform diversity will play a significant role in the reinterpretation of reality. Augmented, virtual and mixed reality concepts, which have a very important position in information systems and spread to new areas of use, carry reality phenomena to a different dimension (Dilek, 2020: 20).

2. VIRTUAL REALITY

The English equivalent of the concept used in Turkish as "Sanal Gerçeklik" is Virtual Reality (VR). According to the Turkish Language Association, the equivalent of the word "sanal" does not exist in reality, but is defined as a hypothetical and imaginary concept designed in the mind. In fact, the origin of the concept of virtual comes from the word Virtualis in Latin (TDK, 2021).

2.1. Definition of Virtual Reality

In the most general perspective, virtual reality is defined as the user's perception and interaction of this environment with his senses, with the support of special technologies worn on the body, in a real world's three dimensional simulation design created in a computer environment (Jost et al., 2019; Schwind et al., 2019). Virtual reality is expressed as an environment where users can get sensory responses similar to those in the real world as a consequence of being in the virtual world, interacting with and walking around with objects by disconnecting from the real world (Kayapa, 2010). It is stated that the definition of virtual reality is a complex task (Jowallah et al., 2018). Although definitions diverse, most create digital representations of a three-dimensional object or environment (Kavanagh et al., 2017) and emphasize multi-sensory experiences (Jowallah et al., 2018). In addition, virtual reality technology allows communication via text or speech

(Ludlow, 2015) and offers real-time interactive feedback opportunities thanks to computer-generated graphic images (Majid & Shamsudin, 2019).

Virtual reality differs from other multimedia with some of its features. One of these features is expressed as immersion by Kamińska et al (2019). Thanks to the immersion feature, which allows the user to experience the virtual reality environment physically, emotionally and cognitively, the user is completely involved in the virtual reality environment (Kamińska et al., 2019). Another feature is called navigation (Armougum et al., 2019). Users can perform tasks in applications by experiencing the navigation action similar to real life (Armougum et al., 2019). Interaction is another feature of virtual reality (Shudayfat, 2014). In the virtual reality environment, users have the opportunity to interact with objects and environments just like in real life (Shudayfat, 2014). Thanks to these features, the feeling of users as if they are in the virtual world is called the feeling of being (Servotte et al., 2020). Immersion, mutual effect and participation are the three core items that represent virtual reality (Majid & Shamsudin, 2019).

The psychologically present sense of presence is about the concept of immersion in virtual reality. Although these terms are used interchangeably in the literature, while immersion is a individual experience and the reason why users feel more psychologically present in the virtual world, while immersion is the result of multiple impressions (Dede, 2009; Mikropoulos & Natsis, 2011). The sense of presence is a highly subjective experience, as different people's perceptions are different. (Checa & Bustillo, 2020). Users experience a sense of presence in immersive virtual reality environments that can provide new experiences and interaction methods, and they can become participants in an alternative world thanks to the sense of being in a virtual world as a separate entity (Mikropoulos & Natsis, 2011). There are diverse immersion experiences that come with different technologies. Desktop computers or print books, for example, provide a lower level of immersion experience than immersive virtual reality using HMDs (Parong & Mayer, 2021). The live experience in immersive virtual reality is closer to reality than the experiences provided by desktop and traditional computer games. (Kwon, 2019).

2.2. Historical Development of Virtual Reality Technology

The basis of the concept and technologies of virtual reality, which entered our lives in the 2010s and we are increasingly familiar with with its technological developments, goes back to very old times, contrary to popular belief. The emergence of virtual reality systems, which can be sufficient in terms of technical and hardware, emerged in the 1960s when computer technology provided with valid opportunities for users. Many concepts virtual reality systems, which were revealed in the same years,

cannot reach the last user due to the production price and purchasing fees. Because of the lack of success in reaching the public, these systems have served as training simulations for military and scientific organizations for a long time. At the present time, with the use of virtual reality technology on mobile devices, virtual reality systems are now becoming a technology that can be accessed by everyone (Kılıç, 2020: 19). Understanding the development of virtual reality systems over time, which has a long history, provides a chance to make inferences about the course and future of virtual reality technology.

The first tests of today's virtual reality glasses were developed by Ivan Sutherland. In his work in 1968, he developed a glasses-type system that will cover both eyes separately, placed in the human head region, and provided the virtual environment. These glasses are known as head mounted display (HMD) in the literature. In the first trials, this system was supported from the ceiling during head mounting due to its weight (Boas, 2013). Binocular omni-orientation monitor (BOOM) was invented in the "Fake Space Labs" laboratory in 1989 (Maksatbekova, 2019). Owing to the fact that it is a product used as a head-mounted screen, it was desired to be commercialized in a short time (Sherman & Craig, 2018).

The development of digital technological tools provides the opportunity to transmit objects over long distances, to exchange ideas and information over long distances, and to reproduce an infinite number of copies (Şekerci, 2017). For this reason, after the 1990s, different studies were carried out in parallel both in the west and in the east, and HMDs, the most known type of virtual reality glasses today, were developed.

2.3. Types of Virtual Reality Technology

Virtual reality technology differs according to the hardware features used. By evaluating the hardware differences in the systems; Four different categories can be created: mobile, console, computer and independent virtual reality systems. These are mobile technology-based virtual reality systems, console-based virtual reality systems, computer-based virtual reality and standalone virtual reality systems, respectively.

The most basic feature of mobile technology-based virtual reality systems is that they can be used by placing smart phones in a virtual reality headset. Due to the way it is used, it can be said that mobile phones act as both a viewer and a data source. Today, with the ability of smartphones to support 360-degree images and three-dimensional graphics, their features and usage areas are increasing. With all the features they provide, smartphones are at a sufficient point to provide data for mobile virtual reality systems, which are extremely light and user-friendly.

With the opening of any virtual reality application within the smart-phone, the image on the screen of the mobile device is divided into two so that it can be displayed simultaneously for both eyes and placed in the compartment on the device. In some systems, it is provided with the perspective of interaction with the virtual environment, while in others, a controller is included in the system. Although the quality it offers is much lower than computer and independent virtual reality systems, such systems are becoming a technology that can be accessed by all segments due to their cheap prices and the availability of smart phones (Akman, 2019: 14).

Among the Sony PlayStation and Microsoft Xbox brands, which hold a large part of the game console market, Sony has been the company that has decided to invest in VR systems today. An official study and production news of Xbox VR systems has not been announced yet. In computer-based virtual reality systems, the data is processed and transmitted by the computer to the internal screens inside the headset. Not every computer can operate computer-based virtual reality systems, only computers with sufficient hardware can provide data flow for display devices. Due to the fact that computer technology has come to a developed and powerful point today, these systems can provide extremely realistic virtual experiences to their users (Akman, 2019: 14).

Independent virtual reality systems can perform data production and data processing within itself without the need for any external system (Akman, 2019: 15). Since the device is not connected to any place, the cables that will restrict the movements of the users are not included in the system structure. It has a very comfortable structure in terms of installation and transportation, as there are only a viewer head and two controllers among the stand-alone systems. Therefore, users can use these systems in a mobile way.

2.4. The Future of Virtual Reality

Although virtual reality (VR) hasn't reached the level it promised for years, virtual reality statistics show that technology has made great leaps and bounds and its near future is fascinating to behold (Gilbert N. 2021)

The market size of virtual reality HMDs was \$5.5 billion in 2019 and is expected to reach \$18.6 billion by 2026, with a CAGR of 22.3%. (Valuates, 2021).

Shipments of virtual and augmented reality head-worn sets totaled 5.5 million units globally in 2020 and are expected to reach 11 million copies in 2021 and 43.5 million copies by 2025 (Statista, 2020). Another report from Research and Markets evaluated the virtual reality market at \$6.1 billion in 2020 and is projected to reach \$20.9 billion in 2025 with an annual growth rate of 27.9% (Research & Markets, 2020), quoted by Gilbert, 2021).

On the other hand, according to Tredinnick, technologically speaking, virtual reality headsets are expected to provide users with a higher level of precision, lighter weight and more freedom of movement. It is expected that the accessories used to feel the realism of virtual reality at the highest level will become more widespread. In short, all technological developments should be implemented by virtual reality as much as possible and users' ability to distinguish between real and virtual should be minimized. (Tredinnick, 2018).

3. AUGMENTED REALITY

The concept of augmented reality, which combines the real world and the virtual world in a single point and offers users a different experience, is frequently encountered in different areas today as a new technology. Studies on augmented reality technologies have started to gain momentum since the 90s and this technology has been tried to be defined. Despite all the definitions and studies, there are many definitions and discussions in the literature about the concept of Augmented reality in our day (Kuzgun, 2019: 8)

3.1. Definition of Augmented Reality

Augmented reality is mostly composed of reading an embedded target through a camera or imaging device, and combining the image produced on the computer virtually and the image of the real world in software (Özarslan, 2011).

It can be said that Augmented reality technology is the state of virtual reality technology that has reached a different dimension. Augmented reality is a variant of virtual reality, but it has differences (Azuma, 1997):

- Virtual reality is to isolate the user from the real world, that is, puts the user in an unreal environment.

- Augmented reality allows the user to see the real world with virtual objects that are articulated or combined with the real world.

Augmented reality is taking digital or computer-generated information, whether images, sound, video, and tactile or tactile sensations, and superimposing them in a real-time environment (Kipper & Rampolla, 2012).

3.2. Historical Development of Augmented Reality Technology

When we look at the literature, the development of virtual reality technology is actually considered the basis of augmented reality technology. Since the beginning of augmented reality dates back to Sutherland's

work in 1968, which used optical transparent head-up displays or HMDs to present 3D graphics, he had touched on this topic earlier when explaining virtual reality. Therefore, when explaining virtual reality technology development, we can say that the basics of augmented reality technology were also commented on until the 1990s, but for the first time in the early 1990s, Tom Caudell, a former Boeing researcher, first used “augmented reality” to describe the process of augmenting the real world with virtual data. used the term “reality” (Lee, 2012).

The first use of the concepts of VR and AR, which are expressed as reality technologies, as today’s equivalents took place in the 1990s. While the concept of VR was first used by an American computer scientist named Jaron Lanier in 1989, the concept of AR, with its current definition, was first used by an engineer employee of Boeing, one of the American aviation companies, named Tom Caudell (Atasoy, 2018, p.41). While the first application in the AR field was carried out by air force personnel named L. B. Rosenborg, the first scientific research on AR technology was carried out by a researcher named Ronal Azuma in 1997 (Tuğtekin, 2014).

With the effect of these rapid developments in technology, AR began to be used extensively in mobile applications after the 2000s. One of the first studies to apply AR in the mobile environment is the mobile AR application named “ARQuake” created by Bruce Thomas (Thomas, vd., 2002). This developed game called ARQuake is actually the version of the FPS (First Person Shooter) mobile game called Quake, which was released in 1996, equipped with AR technologies. (Piekarski & Thomas, 2002).

As of 2015, more successful and innovative devices started to be produced in the field of AR technologies. One of them is the device named “HoloLens”, which is the first holographic computer introduced by Microsoft. HoloLens has taken AR technology to a higher level and has many advanced features. At the beginning of these features, it works with the Windows 10 operating system and can be controlled with voice instructions (Gümüş, 2015).

At the present time, it is seen that AR technology, whose use is increasing in fields such as education, health and engineering, has become widespread and developed. In line with this situation, it is thought that reality technologies will take more place in our lives in the future.

3.3. Types of Augmented Reality Technology

Augmented reality is grouped under two headings: location-based and image-based (Cheng and Tsai, 2013). Picture-based augmented reality applications consist of three parts: a book with pictures, a device that converts the image in the book to digital, and a screen that transfers this

converted image (Yılmaz, 2014, p.12). Picture-based augmented reality is the presentation of two-dimensional images, pictures and animations in three-dimensional virtual world through applications.

Location-based augmented reality applications benefit from GPS features and wireless local area network features of location identification devices (Yılmaz, 2014, p.13). They are augmented reality applications that are created by processing virtual data on the real image and the location of the user is detected.

3.4. The Future of Augmented Reality Technology

To date, various advanced augmented reality applications have been developed mostly for location-based information, social networking services and entertainment. However, augmented reality tools will continue to be developed as new technology for other purposes such as education and training becomes more advanced and advanced than ever before (Lee, 2012).

Augmented reality technology is seen in many areas today. In order to increase these areas, research and development studies for mobile applications such as virtual retina viewers, holograms, and smart glasses are continuing. Today, it has been revealed that AR has paved the way for more advanced device and applied development in line with computer-human interaction and it will be used in a more integrated way into our normal lives. (Altınpulluk and Perakende, 2015).

Although there are classified areas where augmented reality technology is used, applications using this technology can now provide services to users in more than one area. Today, it can be said that the sharp lines between the fields where augmented reality technology is used are becoming increasingly blurred. Considering the convenience provided by applications serving more than one area to users, it can be said that we will encounter augmented reality applications serving more than one area more frequently in the near future (Bozyer, 2019: 46).

4. USE OF AUGMENTED AND VIRTUAL REALITY TECHNOLOGIES IN EDUCATION

Today, the desire to make learning environments more interesting for learners and to increase the impact and quality of education has led educators to re-evaluate their basic principles and enrich their learning environments with new technologies (Kellner, 2002). With the inclusion of technology in the learning process, it has become possible to use new methods and techniques (Babur, 2016). The motivations, learning needs, expectations, wishes and behaviors of the students of our age differ from the previous generations (Baysan, 2015; Furió, vd., 2013). Changes arising

from generational differences in students, which are an important component of education and training environments, have been one of the factors that lead the education system to change. Today's learners, called the Z generation, have more technology dominance compared to previous generations and can reach information in a shorter time by using technology (Prensky, 2001).

This generation of students, who are intertwined with technology and many digital games, want to have similar experiences in the educational environment, and their curiosity about technology makes it important to support the course materials to be presented to these students with new technologies (Bulun vd., 2004). Studies on the determination of the effects of VR and AR on education and training issues have gained momentum in the field of education in recent years (Dunleavy & Dede, 2014). When the literature is examined, some researchers have conducted their studies on the benefits, uses, and limitations of applications supported by these technologies (Azuma et al., 2001; Dunleavy & Dede, 2014; Wu, Lee, Chang, & Liang, 2013; Yuen et al. 2011), the effect on students' academic success. (Cai et al., 2013), the effect of class participation (Kerawalla et al. 2006) are some of the subjects studied. There are studies emphasizing that subjects can be handled with a different understanding with VR and AR, it allows for collaborative learning, and it contributes to the adjustment of individuals' learning according to their own learning speed (Elford, 2013; Yuen et al., 2011). With these technologies, students can gain natural experiences (O'Brien & Toms, 2005) and increase their success, motivation and class participation (Kerawalla, et al., 2006) due to learning in an environment that attracts their attention and interest (Chiang, Yang, & Hwang, 2014) and they can continue their learning in an interactive environment where they learn while having fun (Abdüsselam & Karal, 2012). Moreover, it is stated that it can be used in situations that may be difficult and dangerous for students, and it facilitates the work of teachers (Shelton & Hedley, 2002) by helping to teach difficult subjects by embodying abstract events or concepts. With the use of applications supported by these technologies in education, the process is supported by ensuring that students' educational work continues in out-of-school environments (Cheng & Tsai, 2013). VR and AR are a method that provides permanent learning by making it easier for students to make sense of the relationships between events, and increases communication by providing interaction between groups with their applications (Ivanova & Ivanov, 2011). In addition, with these technologies, interaction in educational environments can increase, and the learning environment and learning styles can become richer. In addition, AR supported learning environments show students objects as real and contribute to effective learning (Altun & Büyükduman, 2007).

4.1. Use of Reality Technologies in Turkish Education

Augmented reality application was used in the study of Özbek and Ak (2020) on the use of punctuation marks with 87 primary school 4th grade students. The study was carried out in three groups for three weeks. Students' motivation for practice and their success in using punctuation marks were investigated. There was a important difference in the pretest and posttest results within the groups, and there was no big difference between the students in the experimental group and the students in the control group in terms of achievement and motivation for practice.

An augmented reality-based syllable combining application was developed by Altıntaş and Türksoy (2021). The core problem of the search is the question of how to make an effective multimodal teaching material that will provide students with reading skills. In the designed application, teaching material was prepared based on mobile learning theory, constructivist learning theory, multi-modality theory and Gestalt theory perceptual organization laws. In this context, an interactive syllable combining application including visual, auditory and kinesthetic elements based on augmented reality has been developed.

4.2. Use of Reality Technologies in Language Education

When the literature on the use of virtual reality technology in foreign language education is examined, it is seen that there are positive effects in various aspects. Using virtual reality in foreign language education can be effective, thanks to the simulation of the environment in which the foreign language is spoken (Can & Simsek, 2016). Students interacting with avatars using artificial intelligence in virtual reality applications designed for foreign language education are exposed to language (Tromp et al., 2018). In addition, it is stated that foreign language teaching in real environment and teaching in virtual reality environment are similar to each other. For example, Gijssels et al. (2016) emphasized that the loudness and speaking speed of individuals in virtual reality applications are similar to their real-life speech in their study. In another study, it was stated that the interaction with avatars in virtual reality and the interaction with real-life people are very similar (Heyselaar et al., 2017).

The study by Tandoğan (2019) was carried out at Gazi University School of Foreign Languages with 67 students. In this study, experimental and control groups were formed on learning the words that are called special-purpose in the field of engineering. While the experimental group students learned vocabulary with ARCS-based mobile augmented reality application, the control group learned without this application. In the research, it was concluded that the students forming the experimental group

made a significant difference in motivation and performance. As a result of the interviews with the students, it was concluded that the students had positive attitudes towards augmented reality.

4.3. Use of Reality Technologies in Preschool Education

In the study of Cascales (2013), the use of AR technology in preschool education affects children's communication skills positively; It is seen in the study conducted by Compos and Pessanha (2011), that the educational game designed based on AR technology motivates children to work collaboratively. It has also been stated in the related studies in the literature that AR technology attracts the attention and motivation of children studying in the pre-school period (Di Serio et al., 2013; Yilmaz et al., 2016).

Lorusso et al., (2020) showed that the system can be used successfully to strengthen social skills in group activities as a result of the study carried out on the remedial activities of semi-immersive virtual reality technologies in preschool children.

Shoshani, A. (2023) reported that virtual reality games can strengthen and sustain pro-social behaviors with virtual reality technology in a study conducted on pro-social behaviors in preschool children.

4.4. Use of Reality Technologies in Gifted Education

Türksoy, E., and Karabulut, R. (2020) stated that teachers reported positive attitudes and opinions towards digital reality technologies in a study conducted with teachers on the use of reality technologies in Science and Art Centers.

It was stated that especially augmented reality technology is better known conceptually by teachers and its use by teachers will have a positive effect on gifted students.

It is seen that gamification and simulation-based teaching in virtual environments have an important place in the studies. It is stated by researchers that such learning environments are significant for the progress of creativity in gifted students (Manuel & Freiman, 2017).

4.5. Use of Reality Technologies in Education of Individuals with Special Needs

Bai et al. (2013) worked with 12 autistic pre-school students between the ages of 4 and 7 in their study. While the do-believe game used in the study was played with augmented reality technology, the frequency of playing the game and the duration of playing the game were investigated. The data collected in the study were collected through interviews

with parents, observations and questionnaires. As a result of the study, it was concluded that students with autism who play games using augmented reality play more often and for longer periods of time than those who do not play games with augmented reality. The results of Denizli Gülboy, H. (2022) study on the effect of augmented reality technology on science concept teaching in children with autism spectrum disorder showed that the systematic teaching offered with the The AR application, which helps individuals with ASD to say the names of their internal organs, has also been effective in teaching the skills of using the AR mobile application. In the research conducted by Altun and Kahveci (2019) on the effect of virtual reality-based teaching materials on problem solving skills of students with learning disabilities, the fact that teaching through virtual reality platforms supports the maintenance of attention by concentrating on a certain point and that it includes fun applications, provides an advantage in terms of the number of correct answers given to geometry problems has been reported to increase.

4.6. Use of Reality Technologies in Mathematics and Geometry Education

Quintero et al. (2015) designed and created an augmented reality application related to mathematics learning in their study. This app has various mathematical functions including parabolic, circular and sine forms. In 2013, a pilot study was made with engineering students. In the study, it was stated that besides traditional mathematics learning, the augmented reality application encouraged students' spatial visualization skills.

In the study carried out by Taşci (2023), it was concluded that teaching geometry with augmented reality applications had a positive effect on the development of students' geometric thinking levels and spatial abilities, and in addition, statistically contributed positively to their academic success.

4.7. Use of Reality Technologies in Geography Education

Kerawalla et al. (2006) worked with 133 5th grade students and 3 teachers in a primary school in England. Augmented reality technology related to Earth, Sun, day and night learning was used in the study. The first reactions of teachers and students were observed without mentioning the augmented reality technology. Interviews were held with students and teachers. It was concluded that the students' motivation and interest in the lesson increased.

In the study carried out by Gedik (2020) on the use of virtual reality technology in the teaching of the subject of climates, it was found that the

interest and desire of the students about the climates taught with virtual reality technology increased and their requests for class participation improved.

4.8. Use of Reality Technologies in Science Education

Yıldırım (2020) conducted his thesis study titled “The Effect of Augmented Reality Applications in Science Teaching on the Academic Achievement and Permanence of 6th Grade Students” with a total of 50 students as the experimental and control group. The experimental group was supported with augmented reality applications, while the control group was taught with science textbooks. As a consequence of the research, it has been found that augmented reality increases permanence and academic success. A total of 56 students, including experimental and control groups, participated in the study named “Augmented reality for teaching science: Students problem solving skill, motivation and learning outcomes” by As-tuti, Masykuri, and Suranto (2019). It was concluded that there was an increase in problem solving skills and motivation in the science lesson in the experimental group students who used augmented reality.

As a result of the study on the permanence and success of the science lesson, the teaching method supported by online material and augmented reality conducted by Türksoy (2019), it was concluded that it allowed deep learning, increased the interest and motivation levels of the students and was effective in increasing the success of the students.

CONCLUSION

In this section called Reality Technologies and Its Use in Education, some of the current studies on the definitions, development and use of the concepts of augmented reality and virtual reality in education systems are given. The rapid progress of technology and the great steps it has taken towards its integration into daily life increase the importance of these technologies. Reality technologies gain importance in the fields of medicine, health, military and architecture, as well as in the field of education with each passing year. Among the main reasons for this situation are the fact that the use of reality technologies in the education of new generation children and students is more interesting and extraordinary than traditional methods, and it allows individuals to experience situations that they cannot experience in daily life. Augmented reality and virtual reality technologies can be more advantageous than traditional methods in acquiring abstract concepts to students. In addition to the existing advantages of reality technologies, it is thought that these advantages will increase in line with the constantly experienced technological developments and the use of these technologies in education will become increasingly important.

Considering the use of reality technologies in the world, it can be seen that its use in the field of education is newer than other fields and has gained momentum in recent years. Studies have been carried out on the use of reality technologies within the scope of many fields such as Pre-school education, special education, science education, language education, mathematics education etc. However, the literature on the use of reality technologies in the field of education has not yet reached the necessary maturity in the face of the pace of technology. Among the reasons for this situation, it is thought that some of the K-12 education system stakeholders have limited knowledge of reality technologies, the cost of the necessary environment and materials for virtual reality technology, and the fact that activity and application libraries for reality technologies have not yet been created. In line with these situations, it is thought that encouraging the use of reality technologies in the field of education, carrying out national and international studies, creating application and activity libraries for different education stages or different types of education together with interdisciplinary studies will contribute to the relevant literature.

REFERENCES

- Abdüsselam, M. S., ve Karal, H. (2012). Fizik öğretiminde artırılmış gerçeklik ortamlarının öğrenci akademik başarısı üzerine etkisi: 11. Sınıf manyetizma konusu örneği. *Eğitim ve Öğretim Araştırmaları Dergisi*, 1(4), 170-181. ISSN: 2146-9199
- Akman, E. (2019). *İlkokul Matematik Dersi Kesirler Konusunda Geliştirilen Sanal Gerçeklik Uygulamasının Farklı Değişkenler Açısından Etkisinin İncelenmesi*, Doktora Tezi, dan. Doç. Dr. Recep Çakır, Amasya Üniversitesi, Sosyal Bilimler Enstitüsü, Temel Eğitim Anabilim Dalı, Amasya.
- Altınpulluk, H., ve Kesim, M. (2015). Geçmişten günümüze artırılmış gerçeklik uygulamalarında gerçekleşen paradigma değişimleri. *Akademik Bilişim Kongresi*, 4(6).
- Altun, H., ve Kahveci, G. (2019). Sanal Gerçeklik Tabanlı Öğretim Materyalinin Öğrenme Güçlüğü Olan Öğrencilerde Geometriye Dayalı Problem Çözme Üzerine Etkililiği. *Necatibey Eğitim Fakültesi Elektronik Fen ve Matematik Eğitimi Dergisi*, 13(1), 460-482. DOI: 10.17522/balikesirnef.562047
- Altun, S., ve Büyükduman, F. İ. (2007). Yapılandırmacı Öğretim Tasarımı Uygulamasına İlişkin Öğrenci ve Öğretmen Görüşleri Bir Örnek Olay İncelemesi. *Kuram ve Uygulamada Eğitim Bilimleri*, 7(1), 7-39. ISSN: 1303-0485
- Armougum, A., Orriols, E., Gaston-Bellegarde, A., Joie-La Marle, C. ve Piolino, P. (2019). Virtual reality: A new method to investigate cognitive load during navigation. *Journal of Environmental Psychology*, 65, 101338. DOI: j. jenvp.2019.101338
- Astuti, F. N., Suranto, S., & Masykuri, M. (2019). Augmented reality for teaching science: Students problem solving skill, motivation and learning outcomes. *Jurnal Pendidikan Biologi Indonesia*, 5(2), 305-312.
- Atasoy, S. N. (2018). *Afiş Tasarımlarında Artırılmış Gerçeklik Uygulamaları*. Sanatta yeterlik tezi, Hacettepe Üniversitesi, Ankara.
- Azuma, R., Baillet, Y., Behringer, R., Feiner, S., Julier, S., & MacIntyre, B. (2001). Recent advances in augmented reality. *IEEE computer graphics and applications*, 21(6), 34-47.
- Azuma, R. T. (1997). A survey of augmented reality. *Presence: teleoperators & virtual environments*, 6(4), 355-385.
- Babur, A. (2016). *Artırılmış gerçeklik, benzetim ve gerçek nesne kullanımının öğrenme başarılarına, motivasyonlarına ve psikomotor performanslarına etkisi*. Doktora Tezi, Sakarya Üniversitesi, Eğitim Bilimleri Enstitüsü, Sakarya.
- Bai Z., Blackwell A. F. and Coulouris G. (2013). Through the Looking Glass: Pretend Play for Children with Autism. *IEEE International Symposium on Mixed and Augmented Reality*, Adelaide, Australia, 1-4 October.
- Baysan, E. (2015). *Artırılmış gerçeklik kitap kullanımının öğrencilerin akademik*

başarısına etkisi ve ortamla ilgili öğrenci görüşleri, Yüksek Lisans Tezi. Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.

- Boas, Y. (2013). "Overview of virtual reality technologies". *Interactive Multimedia Conference*, ss. 2.
- Bozyer, Z. (2019). *Endüstride Artırılmış Gerçeklik Uygulamaları ve İnsan-Bilgisayar Etkileşimi Perspektifinden Değerlendirilmesi*, Doktora Tezi, dan. Prof. Dr. Alpaslan Fırlı, Kocaeli Üniversitesi, Fen Bilimleri Enstitüsü, Endüstri Mühendisliği Anabilim Dalı, Kocaeli.
- Bulun M., Gülnar B., and Güran M. S. (2004). Eğitimde mobil teknolojiler, *The Turkish Online Journal of Educational Technology*, 3(2), 165-169. ISSN: 1303-6521
- Burdea, G. C. & Coiffet, P. (2003). Virtual reality technology. *John Wiley & Sons*.
- Cai, S., Chiang, F. K., and Wang, X. (2013). Using the augmented reality 3D technique for a convex imaging experiment in a physics course. *International Journal of Engineering Education*, 29(4), 856-865.
- Campos, P., and Pessanha, S. (2011, July). Designing augmented reality tangible interfaces for kindergarten children. *In International Conference on Virtual and Mixed Reality* (pp. 12-19). Springer, Berlin, Heidelberg.
- Can, T., and Simsek, I. (2016). Eğitimde Yeni Teknolojiler: Sanal Gerçeklik. İçinde A. İşman, H. F. Odabaşı ve B. Akkoyunlu (Ed.), Eğitim Teknolojileri Okumaları 2016 (Salmat Basım Yayıncılık Ambalaj). Ankara: Ayrıntı Yayınları.
- Cascales, A., Pérez-López, D., and Contero, M. (2013). Study on parent's acceptance of the augmented reality use for preschool education. *Procedia Computer Science*, 25, 420-427. doi: 10.1016/j.procs.2013.11.053
- Checa, D., & Bustillo, A. (2020). A review of immersive virtual reality serious games to enhance learning and training. *Multimedia Tools and Applications*, 79(9-10), 5501- 5527. <https://doi.org/10.1007/s11042-019-08348-9>
- Cheng, K. H., & Tsai, C. C. (2013). Affordances of augmented reality in science learning: Suggestions for future research. *Journal of science education and technology*, 22(4), 449-462. <https://doi.org/10.1007/s10956-012-9405-9>
- Chiang, T. H., Yang, S. J., & Hwang, G. J. (2014). An augmented reality-based mobile learning system to improve students' learning achievements and motivations in natural science inquiry activities. *Journal of Educational Technology & Society*, 17(4), 352-365.
- Dede, C. (2009). Immersive interfaces for engagement and learning. *Science*, 323(5910), 66-69. DOI: 10.1126/science.1167311
- Denizli Gülboy, H. (2022). *Otizm spektrum bozukluğu olan öğrencilere fen konularının öğretiminde artırılmış gerçeklik uygulamasının etkililiği*. Yüksek Lisans Tezi, Eskişehir Osmangazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Eskişehir.

- Di Serio, Á., Ibáñez, M. B., ve Kloos, C. D. (2013). Impact of an augmented reality system on students' motivation for a visual art course. *Computers & Education*, 68, 586-596. <https://doi.org/10.1016/j.compedu.2012.03.002>
- Dilek, N. K. (2020). *Turizm Sektöründe Sanal Gerçeklik Teknolojisinin Kullanımına ve Etkisine Yönelik Keşifsel Bir Araştırma*, Doktora Tezi, dan. Prof. Dr. Fisun İstanbullu Dinçer, İstanbul Üniversitesi Sosyal Bilimler Enstitüsü, Turizm İşletmeciliği Anabilim Dalı, İstanbul.
- Dunleavy, M. and Dede, C. (2014). Augmented reality teaching and learning. In *Handbook of research on educational communications and technology*. Springer New York
- Elford, M. D. (2013). *Using tele-coaching to increase behavior-specific praise delivered by secondary teachers in an augmented reality learning environment*. Doktora Tezi. University of Kansas, ABD.
- Erbaş, Ç., and Demirel, V. (2014). Eğitimde artırılmış gerçeklik uygulamaları: Google Glass örneği. *Journal of Instructional Technologies & Teacher Education*, 3(2), 8-16.
- Featherstone, M. (2013) *Postmodernizm ve Tüketim Kültürü*, (çev. Mehmet Küçük), İstanbul: Ayrıntı Yayınları.
- Furht, B. (Ed.). (2011). *Handbook of augmented reality*. Springer Science & Business Media
- Furió, D., González-Gancedo, S., Juan, M. C., Seguí, I., ve Rando, N. (2013). Evaluation of learning outcomes using an educational iPhone game vs. traditional game. *Computers & Education*, 64, 1-23. <https://doi.org/10.1016/j.compedu.2012.12.001>
- Gedik, R. (2020). Sanal gerçeklik teknolojisinin ortaokul sosyal bilgiler dersi iklimler konusunda kullanılması üzerine öğrenci görüşleri. *Journal of Innovative Research in Social Studies*, 3(1), 33-53.
- Gijssels, T., Casasanto, L. S., Jasmin, K., Hagoort, P., and Casasanto, D. (2016). Speech accommodation without priming: The case of pitch. *Discourse Processes*, 53(4), 233-251. <https://doi.org/10.1080/0163853X.2015.1023965>
- Gilbert, N. (2021). Number of gamers worldwide 2021/2022: Demographics, statistics, and predictions. *FinancesOnline*, <https://financesonline.com/number-of-gamers-worldwide/> last accessed Dec.
- Gülşen, A. and Türksoy, E. (2021). Artırılmış Gerçeklik Tabanlı Hece Birleştirme Uygulaması Geliştirilmesi: Tasarım Tabanlı Araştırma. *19th International Primary Teacher Education Symposium* içinde (ss. 562-563). 12-14 Kasım, Türkiye.
- Gümüş, F. (2015). HoloLens Nedir [Çevrim-içi: <https://www.muhendisbeyinler.net/holens-nedir/>], Erişim tarihi: 6.01.2023
- Heyselaar, E., Hagoort, P., and Segaert, K. (2017). How social opinion influences syntactic processing—An investigation using virtual reality. *PLoS*

One, 12(4), e0174405. <https://doi.org/10.1371/journal.pone.0174405>

- Ivanova, M. and Ivanov, G., 2011. Enhancement of learning and teaching in computer graphics through marker augmented reality technology. *International Journal on New Computer Architectures and Their Applications*, 1(1), 176-184.
- Jost, P., Cobb, S. and Hämmerle, I. (2019). Reality-based interaction affecting mental workload in virtual reality mental arithmetic training. *Behaviour & Information Technology*, 1-17.
- Jowallah, R., Bennett, L., & Bastedo, K. (2018). Leveraging the Affordances of Virtual Reality Systems within K-12 Education: Responding to Future Innovations. *FDLA Journal*, 15(2).
- Kamińska, D., Sapiński, T., Wiak, S., Tikk, T., Haamer, R. E., Avots, E., and ark. (2019). Virtual Reality and Its Applications in Education: Survey. *Information*, 10(10), 318. <https://doi.org/10.3390/info10100318>
- Kavanagh, S., Luxton-Reilly, A., Wuensche, B., & Plimmer, B. (2017). A Systematic Review of Virtual Reality in Education. *Themes in Science and Technology Education*, 10(2), 85-119.
- Kayapa, N. (2010). *Gerçek ve sanal gerçeklik ortamları arasındaki algısal farklılıklarda görselleştirmeye ilişkin özelliklerin araştırılması*. Doktora Tezi. Yıldız Teknik Üniversitesi Fen Bilimleri Enstitüsü, İstanbul.
- Kellner, D. (2002). Yeni Teknolojiler/Yeni Okur-Yazarlıklar: Yeni Binyılda Eğitimin Yeniden Yapılandırılması. *Kuram ve Uygulamada Eğitim Bilimleri*, 2(1), 105- 132.
- Kerawalla, L., Luckin, R., Seljeflot, S. and Woolard, A. (2006). “Making it real”: exploring the potential of augmented reality for teaching primary school science. *Virtual Reality*, 10(34): 163-174. <https://doi.org/10.1007/s10055-006-0036-4>
- Kılıç, T. (2020). *Sanal Gerçeklik Teknolojisinin İç Mimarlık Eğitiminde Kullanılmasına Yönelik Bir Eğitim Modeli Önerisi*, Doktora Tezi, dan. Doc. Dr. Damla Altuncu, Mimar Sinan Güzel Sanatlar Üniversitesi, Fen Bilimleri Enstitüsü, İç Mimarlık Anabilim Dalı, İstanbul.
- Kipper, G., and Rampolla, J. (2012). *Augmented reality: An emerging technologies guide to AR*. Elsevier.
- Kock, N. (2008). “E-collaboration and e-commerce in virtual worlds: The potential of Second Life and World of Warcraft” . *International Journal of e-Collaboration*. 4 (3): 1–13.
- Kuzgun, H. (2019). *Artırılmış Gerçeklik Teknolojisinin Okul Öncesi Dönemde Kullanımı: Durum Çalışması*, Yüksek Lisans Tezi, dan. Dr. Fatih Özdiñç, Afyon Kocatepe Üniversitesi, Fen Bilimleri Enstitüsü, Bilgisayar Anabilim Dalı, Afyonkarahisar.
- Kwon, C. (2019). Verification of the possibility and effectiveness of experiential

- learning using HMD-based immersive VR technologies. *Virtual Reality*, 23(1), 101–118. <https://doi.org/10.1007/s10055-018-0364-1>
- Lee, K. (2012). “Augmented Reality in Education and Training”. *TechTrends*. 56(2): 13–21.
- Lorusso, M. L., Travellini, S., Giorgetti, M., Negrini, P., Reni, G., & Biffi, E. (2020). Semi-immersive virtual reality as a tool to improve cognitive and social abilities in preschool children. *Applied Sciences*, 10(8), 2948. <https://doi.org/10.3390/app10082948>
- Ludlow, B. L. (2015). Virtual Reality: Emerging Applications and Future Directions. *Rural Special Education Quarterly*, 34(3), 3–10.
- Majid, F. A., and Shamsudin, N. M. (2019). Identifying factors affecting acceptance of virtual reality in classrooms based on Technology Acceptance Model (TAM). *Asian Journal of University Education*, 15(2), 52–60.
- Maksatbekova, A., (2019). *Sanal Gerçeklik Oyunlarının Dayanımlmaz Çekiciliği: Zihnen, Bedenen ve Ruhen*. Yüksek Lisans Tezi, Anadolu Üniversitesi Sosyal Bilimler Enstitüsü, Eskişehir.
- Manuel, D., and Freiman, V. (2017). Differentiating instruction using a virtual environment: A study of mathematical problem posing among gifted and talented learners. *Global Education Review*, 4(1).
- Mikropoulos, T. ve Natsis, A. (2011). Educational virtual environments: A ten-year review of empirical research (1999–2009). *Science Direct*, 56(3), 769–780. <https://doi.org/10.1016/j.compedu.2010.10.020>
- O’Brien, H. L., & Toms, E. G. (2005). Engagement as process in human-computer interactions. *Proceedings of the Association for Information Science and Technology*, 42(1), 14504201233.
- Osuna, J. B., Gutiérrez-Castillo, J., Llorente-Cejudo, M., ve Ortiz, R. V. (2019). Difficulties in the Incorporation of Augmented Reality in University Education: Visions from the Experts. *Journal of New Approaches in Educational Research (NAER Journal)*, 8(2), 126–141. <https://doi.org/10.7821/naer.2019.7.409>
- Özarslan, Y. (2011). Öğrenen içerik etkileşiminin genişletilmiş gerçeklik ile zenginleştirilmesi. 5. *In International Computer & Instructional Technologies Symposium (ICITS 2011)*, (pp. 22-24).
- Özbek, F, Ak, Ş. (2020). İlkokul 4. Sınıf Türkçe Dersinde Artırılmış Gerçeklik Uygulaması: Başarı ve Motivasyona Etkisi. *Kastamonu Eğitim Dergisi*, 28 (4), 1668- 1679. DOI: 10.24106/kefdergi.4003
- Özköylü, Ö. (2018). *Sanal Gerçeklik ve Kullanım Alanları: Sayısal Oyun Örneği*. Yüksek Lisans Tezi, dan. Prof. Dr. Levend Kılıç, Anadolu Üniversitesi, Sosyal Bilimler Enstitüsü, Sinema Televizyon Anabilim Dalı, Eskişehir.
- Parong, J., and Mayer, R. E. (2021). Cognitive and affective processes for learning science in immersive virtual reality. *Journal of Computer Assisted Learning*, 37(1), 226–241. DOI: 10.1111/jcal.12482

- Piekarski, W., and Thomas, B. (2002). ARQuake: the outdoor augmented reality gaming system. *Communications of the ACM*, 45 (1), 36-38.
- Prensky, M. (2001). Digital natives, digital immigrants. *On The Horizon*, 9(5), 1-6. ISSN: 1074-8121
- Quintero E., Salinas P., Gonzalez-Mendivil E. and Ramirez H. (2015). Augmented Reality App for Calculus: A Proposal for the Development of Spatial Visualization, *Procedia Computer Science*, 2015,75,301-305. doi: 10.1016/j.procs.2015.12.251
- Schwind, V., Leusmann, J., & Henze, N. (2019). Understanding Visual-Haptic Integration of Avatar Hands Using a Fitts' Law Task in Virtual Reality. *In Proceedings of Mensch Und Computer 2019* (pp. 211-222). <https://doi.org/10.1145/3340764.3340769>
- Servotte, J.-C., Goosse, M., Campbell, S. H., Dardenne, N., Pilote, B., Simoneau, I. L., and diğerleri (2020). Virtual reality experience: Immersion, sense of presence, and cybersickness. *Clinical Simulation in Nursing*, 38, 35-43. <https://doi.org/10.1016/j.ecns.2019.09.006>
- Shelton, B. E. and Hedley, N. R. (2002). Using augmented reality for teaching earthsun relationships to undergraduate geography students. *Augmented Reality Toolkit, The First IEEE International Workshop*, 8-21.
- Sherman, W. R., Craig, A. B. (2018). *Understanding Virtual Reality: Interface, Application, and Design (Second Edition)*. Cambridge, MA: Morgan Kaufmann.
- Shoshani, A. (2023). From virtual to prosocial reality: The effects of prosocial virtual reality games on preschool Children's prosocial tendencies in real life environments. *Computers in Human Behavior*, 139, 107546. <https://doi.org/10.1016/j.chb.2022.107546>
- Shudayfat, E. A. (2014). *Teaching and learning in 3D multiuser virtual environments*. (PhD Thesis), University Politehnica of Bucharest, Bucharest.
- Şekerci, C. (2017). Sanal Gerçeklik Kavramının Tarihçesi. *Uluslararası Sosyal Araştırmalar Dergisi* Cilt: 10 Sayı: 54.
- Tandoğan, B. (2019). *Özel amaçlı İngilizce öğretiminde artırılmış gerçeklik ile zenginleştirilmiş arcs model tabanlı öğretim materyallerinin öğrencilerin kelime başarısına ve motivasyonuna etkisinin incelenmesi*. Yüksek Lisans Tezi, Orta Doğu Teknik Üniversitesi Fen Bilimleri Enstitüsü, Ankara.
- Taşci, G. (2023). *Matematik derslerinde artırılmış gerçeklikle ilgili uygulamaların öğrencilerin geometrik düşünme düzeylerinin ve uzamsal yeteneklerinin gelişimine etkisi*. Yüksek Lisans Tezi, Atatürk Üniversitesi, Eğitim Bilimleri Enstitüsü, Erzurum.
- Thomas, B., Close, B., Donoghue, J., Squires, J., De Bondi, P., and Piekarski, W. (2002). First person indoor/outdoor augmented reality application: ARQuake. *Personal and Ubiquitous Computing*, 6 (1), 75-86.
- Topraklıkoğlu, K. (2018). *Üç boyutlu modellemenin kullanıldığı artırılmış gerçek-*

lik etkinlikleri ile geometri öğretimi. Yüksek lisans tezi, Balıkesir Üniversitesi, Fen Bilimleri Enstitüsü, Balıkesir.

- Tredinnick, L. (2018). Virtual realities in the business world. *Business Information Review*, 35(1), 39-42. <https://doi.org/10.1177/0266382118762257>
- Tromp, J., Peeters, D., Meyer, A. S., & Hagoort, P. (2018). The combined use of virtual reality and EEG to study language processing in naturalistic environments. *Behavior Research Methods*, 50(2), 862-869. <https://doi.org/10.3758/s13428-017-0911-9>
- Tuğtekin, U. (5-7 Şubat 2014). UFUXAR- Augmented Reality Projesi [Bildiri]. XVI. Akademik Bilişim Konferansı, Mersin.
- Türk Dil Kurumu. (2021). <https://www.tdk.gov.tr/> “sanal”
- Türksoy, E. and Karabulut, R. (2020). Dijital Gerçeklik Teknolojilerinin Bileşenlerde Uygulanabilirliğine Yönelik Öğretmen Görüşleri. *Neşehir Hacı Bektaş Veli Üniversitesi SBE Dergisi*, 10(2), 436-452. DOI: 10.30783/nevsosbilen.657167
- Türksoy, E. (2019). *Artırılmış gerçeklik ve çevrim içi materyallerle bütünleştirilen öğretim yöntemlerinin, fen dersindeki başarı ve kalıcılığa etkisi: Karma desen.* Doktora Tezi, Burdur Mehmet Akif Ersoy Üniversitesi, Eğitim Bilimleri Enstitüsü.
- Urry, J. (2015). *Mekanları Tüketmek*, (çev. Rahmi G. Ögdül), İstanbul: Ayrıntı Yayınları.
- Valuates Reports, (2021). *Global Virtual Reality and Augmented Reality in Retail Market Size, Status and Forecast 2021-2027.* Erişim Adresi: <https://reports.valuates.com/market-reports/QYRE-Auto-13W7553/global-virtual-reality-and-augmented-reality-in-retail>
- Wu, H. K., Lee, S. W. Y., Chang, H. Y., and Liang, J. C. (2013). Current status, opportunities and challenges of augmented reality in education. *Computers & Education*, 62, 41-49. <https://doi.org/10.1016/j.compedu.2012.10.024>
- Yıldırım, İ., (2020). *Fen Eğitiminde Artırılmış Gerçeklik Uygulamalarının 6.sınıf Öğrencilerinin Akademik Başarılarına ve Kalıcılığa Etkisi.* Yüksek Lisans Tezi. Osmangazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Eskişehir.
- Yılmaz, M. R. (2014). *Artırılmış gerçeklik teknolojisiyle 3 boyutlu hikâye canlandırmanın hikâye kurgulama becerisine ve yaratıcılığa etkisi.* Doktora Tezi, Atatürk Üniversitesi, Eğitim Bilimleri Enstitüsü, Erzurum.
- Yılmaz, R. M., Kucuk, S., and Goktas, Y. (2017). Are augmented reality picture books magic or real for preschool children aged five to six? *British Journal of Educational Technology*, 48(3), 824- 841. doi:10.1111/bjet.12452
- Yuen, S., Yaoyuneyong, G. and Johnson, E. (2011). Augmented reality: An overview and five directions for AR in education. *Journal of Educational Technology Development and Exchange*, 4(1), 119-140. DOI: 10.18785/jet-de.0401.10

CHAPTER 2

THE PLACE OF THE USE OF DIGITAL STORYTELLING IN EDUCATIONAL SCIENCES¹

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1. Introduction

In our world, which has now entered the 21st century, population growth is accelerating, technology is gradually advancing, and human development is becoming increasingly vital. Education is one of the most crucial determinants of human development. On the other hand, education brings the needs of people and society to the forefront. However, these needs are never static and continue to increase in light of recent developments. To ensure that the education systems and teaching of the twenty-first century leave a lasting mark, it is necessary to organize the systems and environments in which individuals exist. For this reason, it has become essential to use student-centered systems and tools in education that integrate technology that can demonstrate student performance by maximizing the use of their cognitive abilities in the learning process (Harris, Marcus, & McLaren 2001). As a result of this circumstance, the use of Information and Communication Technologies (ICT) in education has increased over the past few years, and this increase has led to changes in student character, needs, and expectations that are consistent with 21st century skills (Ivankovic, Spiranec, & Miljko, 2013). With this shift, the importance of information and communication technologies is emphasized, as the focus in education shifts from learning to teaching. Consequently, individuals who learned to learn were encouraged to think and produce knowledge throughout their lives and began to apply knowledge in novel ways (Erişti, 2010). Similarly, effective teaching requires supporting students in all three learning domains and minimizing learning barriers associated with these domains (Rose & Strangman, 2007; Rose, 2001). In order to accomplish this, the use of ICT tools in inclusive education has become crucial.

The digital story approach, which is one of the ICT tools that enables the creation of an interactive application platform, also enables the organization of an active participation research process. Because, within the framework of the digital story approach, various skills and competencies, such as technology use proficiency, versatile literacy skills, a multicultural perspective, critical thinking skills, problem-solving skills, and the ability to present different points of view, are applied (Lambert, 2007). Therefore, the digital story approach enables researchers to conduct multifaceted, project-based, resource-rich, globally interactive research. Today, digital stories are created by combining current multimedia opportunities that are informative, entertaining, educational, or based on the sharing of experiences (Barret, 2006).

Digital storytelling is the presentation of an original story in a flexible, multi-channel, and imaginative manner by incorporating diverse elements such as illustration, voiceover, and the addition of video content (Robin, 2008). According to another definition, digital storytelling is based on the

presentation of multimedia tools such as visual images, audio, and video with a story being created to provide in-depth information about a subject, to remind, and to share feelings and thoughts (Gils, 2005; Meadows, 2003). Although there are numerous definitions of the digital storytelling process, from digital storytelling and personal stories to interactive story applications, it encompasses a wide range of concepts, from web-based story approaches to digital short film production.

In an educational setting, the process of digital storytelling creates a research environment in which participants reflect on their own experiences. While individuals are digitally structuring a story, they are aware of the learning process and are activating their intuition and creative potential as they determine the story's components, types, and approaches. While developing the story, individuals focus on the significance and personal significance of the research; while processing the story and transforming it into a product, they reconstruct the significance of the research process and interpret it in light of their personal expectations; and while reconstructing the story, they actually reflect on, interpret, and evaluate their own situation in the research process (Frazel, 2008, 2010; Ohler, 2008). The fact that digital story components allow for flexible interaction with research participants also paves the way for technological advancements and participant skills to become an asset during the research procedure. In this way, educators can gain a deeper understanding of their students' interests, needs, expectations, and competencies, and guide the learning process more effectively within the scope of these factors. Based on this background, the goal of the research is to draw conclusions by looking at the place of digital storytelling in education. Digital storytelling is one of the tools of information and communication technologies (ICT) that have been used in research on many different topics in recent years.

2. Theoretical Explanations and Related Research

2.1. The Concept of Digital Storytelling

Transferring traditional stories to computers in modern ways using today's technological possibilities is defined as digital storytelling (Matthews, 2008). The length of digital stories is between 2-12 minutes, and the success of the stories is directly proportional to the harmony of the digital elements used in preparation and their effect on the listener (Ceylan & First, 2013). Again, Lambert (2003) recommends the use of 250-375 words and less than 20 images in terms of the efficiency of the prepared digital story.

For the success of the created digital stories, multimedia elements must be integrated with each other. Today's technology makes this necessity possible and offers students the opportunity to create their own stories.

In particular, the opportunities provided by the internet give students the opportunity to develop their own thoughts (Chung, 2007). Students have the opportunity to share their feelings and thoughts on a topic through digital stories they create with multimedia elements. In this way, they can communicate with the environment and exchange information and news.

Although the concept of digital story first emerged in the 1980s, it is a method that has been used by teachers and students since then. There are two institutions pioneering the spread of digital stories. The first of these institutions is pioneered by Joe Lambert. The name of this institution located in California is Center of Digital Storytelling.

The first studies on digital storytelling were made in the late 1980s under the leadership of Joe Lambert and Dana Atchley. These studies, which do not aim to gain financial gain, were carried out at the Digital Storytelling Center. With the participation of Nina Mullen, the Digital Media Center was opened in San Francisco in 1994. In 1998, the same institution was renovated in Berkeley as the Center of Digital Storytelling. This center provides training to people who want to create their digital stories. These people are informed about software issues that need to be known while preparing digital stories, and story components are introduced (Bull & Kajder, 2004).

The second organization related to digital storytelling is The Educational Uses of Digital Storytelling. This institution was founded by Bernard Robin at the University of Houston. Bernard Robin conducted studies on the use of digital stories in the field of education in this center (Bull & Kajder, 2004). In addition to the work done by these two centers, digital stories of historical stories told by people living in the country of Wales were also made (Garrety, 2008). These studies have played an important role in the introduction of the digital storytelling method.

Another source that pioneered the recognition and dissemination of the digital story method is Joe Lambert's 2003 book *Digital Storytelling: Capture Lives, Creating Communities*. Lambert provides information on how to create digital stories in this book.

2.2. The Typed of Digital Storytelling

Digital stories are divided into three categories based on their significance (Robin, 2006). These classifications are as follows:

Personal Experiences: The digital story was created primarily for the purpose of telling personal stories. In his stories, the author can discuss his personal experiences as well as significant emotions and events in life. These narratives are extremely useful in the field of education because they

expose creators and audiences to lives, cultures, and values other than their own. Globalization, multiculturalism, and racism, which are crucial issues of our time, can be mentioned in such digital stories, and the opportunity to exchange ideas by discussing these issues can be provided. Through viewing and discussing the story, students can form a bond. (Demirer, 2013). Again, through these narratives, students are afforded the opportunity to express their feelings and thoughts to their classmates and engage in a dialogue with them about issues they deem significant.

The purpose of informative and instructive stories is to educate the audience on a particular subject. This topic is presented to the audience by narrating it with appropriate sound, image, and music. In this type of digital story, the information or topics intended to be taught are embodied because they are presented alongside digital elements. The purpose of informational stories is to provide students with a broad spectrum of knowledge in fields ranging from medical education to the arts, and from mathematics to science. A digital story could provide information on the principles of geometry and the operation of a tool, for instance (Demirer, 2013). With this type of narrative, the information to be taught is presented to the students alongside digital elements.

Examining Historical Occurrences These narratives examine historical occurrences. During the creation of digital historical narratives, audio and visual elements are utilized to convey the historical event (Göçen, 2014). An effective digital story combines impressive audio and visual elements to make the audience feel as though they are experiencing the historical event. It is believed that this method, which can be used for good learning beyond memorizing difficult-to-remember historical events, can provide an effective education.

2.3. The Elements of Digital Storytelling

Lambert (2003) and Robin (2006) state that 7 elements should be considered while preparing digital stories. These items and their descriptions are as follows:

Perspective: It is the element that covers the main point of the prepared digital story and the point of view of the story writer. Expressing the purpose clearly in the prepared story and shaping the perspective of the story around the author's point of view will make this story effective (Göçen, 2014). Lambert (2003) stated that although the stories are forgotten, the point of view of the story is remembered. Therefore, the story to be prepared should be suitable for the intended purpose, and this story should guide the audience to the author's point of view. A digital story maker who wants to achieve this should ask questions about why he chose the subject,

what his purpose is in the story, what message the story gives to the audience, and prepare his digital stories in line with the answers he receives. A story prepared in this way will have achieved its purpose (Göçen, 2014). As it is seen, it is seen that an effective mental process must be prepared in order to reach the desired goal in a teaching with digital stories.

Striking Question: The author's starting the digital story with a remarkable question will arouse the curiosity of the people who will watch this story, draw their attention to the story, and keep this attention and curiosity alive. This question we mentioned can be expressed clearly at the beginning of the story, and it can be embedded in the story so that the audience and listener can better pay attention to the story. In addition, this question can be answered in the development and conclusion part of the digital story (Ciğerci, 2015). The striking question in digital stories is the one that keeps the audience's interest and attention in the story and is answered at the end of the story. The audience is curious about the answer the whole time they watch the story, and in this way, they get the answer they expect at the end of the story they watch carefully (Göçen, 2014). It is thought that the digital story, which is organized around an effective striking question, will keep the attention of the audience high from the beginning to the end.

Emotional Content: The purpose of digital stories is not just to inform the audience directly. It is to make them enjoy by using technological opportunities, sometimes by making them laugh and sometimes sad. Along with the striking question, the emotional content is of great importance in conveying the message. While arranging the emotional content, the characteristics of the community in which the digital story will be presented should be considered (Ciğerci, 2015). Again, this element affects the bond between the digital story and its audience. That's why the most effective of digital stories are those that arouse emotions with the audience (Bull & Kajder, 2004). Having an awareness of the contrasting and complex nature of a story's emotional content not only helps us get the gist of the story, but also dictates what emotions should be included and in what order for the audience to understand the story. Because ensuring that the emotions in the story are owned by the audience will enable the audience to connect to the story more deeply. (Lambert, 2003). One of the ways to ensure that the emotion desired in the digital story reaches the target audience is to know the audience well and to have information about their emotional characteristics. These features should be taken into account when preparing stories.

Audio: A good voiceover is one of the important elements of a digital story. According to the subject of the digital story and the message to be given, the storyteller should make adjustments in his voice such as lowering, raising, softening and thickening. These changes made by the narrator in his voice help to attract the attention of the audience and to convey what

he wants to convey more easily (Ciğerci, 2015). After the written digital story is voiced, it is presented to the audience. This element distinguishes the traditional story from the digital story and also increases the effectiveness of the digital story (Göçen, 2014). Bull and Kajder (2004) state that the audio element has the greatest importance in increasing the effectiveness of digital stories. In addition, the adjustments made by the voice of the narrator of the digital story express that there is a personalized way to convey the purpose of the story to the audience.

Music: Music and sounds added in accordance with the content in digital stories make the digital story more qualified in terms of emotion and emphasis (Lambert, 2003). Digital stories can be more attractive and entertaining through music that is selected and added in accordance with the subject and message in the content of digital stories. In addition, these music and sounds are very important in giving the audience the emotion of the digital story. However, these music and effects used should not get in the way of the narrator of the story (Ciğerci, 2015). The music and sounds used in digital storytelling add depth to the story and make the story more emotional and emphatic (Karakoyun, 2014). Music, which is an element related to the digital aspect of the prepared stories, decorates and supports the story when added to the story (Göçen, 2014). It is thought that the musical element used in the preparation of the digital story will contribute to the better internalization of the emotion desired to be given in the story by the audience.

Rhythm: The rhythm element, which is accepted as the secret of the success of the prepared digital story, is related to the speed of the story flow. Since the rhythm in the digital story will affect the audience's watching and following the story, the rhythm should be suitable for the digital story (Göçen, 2014). Since the rhythm element in digital stories is important at the point of attracting the attention of the audience, the speed of the story can be changed at appropriate intervals and thus the attention of the audience can be kept alive. While a slow rhythm in digital stories gives the audience a feeling of relaxation, divergence, and more comfort than necessary, a fast rhythm gives similar feelings such as excitement, anger, and action (Lambert, 2003). For this, the rhythm of digital stories should neither be slow enough to cause the audience to get bored nor fast enough to follow. In fact, different speeds should be given according to different emotions in a story (Göçen, 2014). The rhythm element, which is evaluated according to the different emotions in the story, will make the story more watchable and listenable. The rhythm element also has a relationship with the economy element. Inexperienced storytellers aim to tell multiple scenarios in a few-minute digital story. In stories prepared in this way, due attention cannot be paid to the rhythm element. In this respect, the rhythm

element is about deciding which parts of the scenarios will be included in digital stories or not. With the analyzes made in this way, the rhythm of the story emerges spontaneously (Bull & Kajder, 2004). The rhythm element, which has an important role in the effectiveness of digital stories, indicates which points should be given at what speed in the story about the subject.

Economy: The most important problem in a digital story is the economy (Lambert, 2003). The economy element is about how to use other elements in digital stories. Visual and auditory elements and words used excessively in a digital story can cause the audience to be distracted, bored and have difficulty in following. An effective digital story requires using all elements efficiently. Excessive use of items distracts the story from its purpose (Göçen, 2014). The most difficult element for those who prepare digital stories is the economy. Effective digital stories can be created with visual and audio elements used in the required numbers by avoiding redundancies. Digital stories that contain every detail of the subject to be told and that are created too long for this reason are not expressed as qualified stories. Digital stories should be free of unnecessary elements and should be 2-5 minutes long, to outline the subject to be told (Bull & Kajder, 2004). Otherwise, the audience will be drowned in details and it will be difficult to achieve the targeted learning.

These seven elements that make up digital storytelling are divided into two groups. In the writing phase of this grouping, there are content, striking questions, point of view and economy elements, while in the production phase, there are rhythm, sound and music elements (Bull & Kajder, 2004). Digital story elements are examined in two dimensions. Point of view, emotional content, and striking question elements constitute the story dimension, rhythm, music and sound digital dimension of the digital story. The economy element, on the other hand, takes place in both dimensions (Göçen, 2014).

Traditional story elements and digital storytelling elements are closely related. However, digital stories are created with visual and auditory elements. The purpose of preparing a digital story is to combine the stories told orally with visual elements to provide a better understanding and learning of the story (Center for Digital Storytelling, n.d.).

2.4. Process of Digital Storytelling

Researchers working on digital storytelling have divided the digital storytelling process into some stages. Lambert (2003) listed the process in his book on digital storytelling as follows: Determining the point of view, determining the emotions, determining the moment, seeing the story, listening to the story, combining the story and sharing the story. The Uni-

versity of Houston, which conducts research on digital story and its use in education, has determined the process of digital storytelling as 4 stages.

Stage 1: At this stage, the narrator determines the variables of the story. The first step is to determine the subject of the story. After the subject is determined, appropriate pictures, photographs, etc. are selected. Collecting sources, the narrator thinks about the purpose of the story. He seeks answers about the purpose of his story, such as informing, questioning or persuading.

Stage 2: In this section, the narrator creates the appropriate text, audio and related content for his story. The narrator transfers the audio and text to the photo story program. If the storyteller deems it necessary, it can reduce or increase the content at this stage.

Stage 3: The story, whose purpose, text and who will voice the story are decided, after these processes are completed, the story is recorded and finalized.

Stage 4: After the story is recorded in different computer programs (movie maker, Windows media player), the narrator presents the digital story he has prepared to the audience and receives feedback about the story.

Göçen (2014) summarized the digital storytelling process in nine steps in his study. These steps are as follows:

Determining the subject and purpose, creating the text of the story, choosing the visuals, creating the storyboard, adding the visuals with the program, voice-over, adding music to the background, editing the digital story, sharing the digital story.

3. The Place of Digital Storytelling in Education in the Context of Teachers and Students

In the age we live in, new methods and approaches have taken the place of classical education methods. Unlike the past, these approaches do not give information directly to the student. Today, the student is in an active position. With today's methods, students are expected to interpret, make sense of, and associate information with daily life. One of the methods that can teach students in this way is storytelling. This method, which came to the fore with the courses given to teachers in the 70s in Scotland, changed its dimension as a storytelling method in the 80s (Göçen, 2014). Digital storytelling has added a new dimension to traditional storytelling.

Developments in science and technology have affected all areas of life, as well as serious changes in the field of education and it continues to do so. These changes are seen on different arguments of education such

as methods and techniques, approaches and materials used in education. There has been a transition from materials such as paper and pencil, which are considered indispensable in education, to an environment where education is made with computers (Göçen, 2014). Because in an education to be given to today's digital generations, the attention of students can only be gathered with these tools and they are tried to be kept alive. The digital story method is a method that can be used to provide a permanent and efficient education to today's digital generation, to include them in this education with an active participation, to maintain continuity and vitality in education and training, and to bring students together with the features that the century we live in is expected from the grown generation.

When the costs of the tools (computer, sound recorder, camera) used to prepare digital stories are compared to today, it is seen that the costs have decreased and the access to the relevant tools has become easier. When these tools, which are easy to acquire, are combined with software that is also low in cost, but extremely important for the digital storytelling method, it is ensured that even inexperienced users are individuals who can produce in this field. With the creation of this environment in the classroom environment, the use of digital storytelling method in education increases, thus enabling students and teachers to acquire new achievements (Robin, 2008).

A student-centered education model is aimed, which will enable the student to become active with the digital story method. Likewise, Barret (2009) states that the digital storytelling method increases student participation in the education environment, provides deep and project-based learning, and integrates technology into the teaching environment.

The advantages of the digital storytelling method in education can be listed as follows (Van Gils, 2005):

Provides diversity in education: This feature is the most obvious advantage of the digital storytelling method. This method offers more variety than the classical education method. This application is an application that children and students will want to do over and over again by having fun, without letting them get bored by repeating the same things.

Individualization: The biggest advantage of the digital story is to individualize education. This method can be adjusted according to the education level that the person needs. This method gives the opportunity to test students' skills at the right level with scenarios in which certain language skills of secondary school students are included. While teaching the alphabets to the students, it is recommended to use this method by choosing the characters they want in the story. The digital story method will encourage students to think about their favorite topic. This will make them more ex-

cited. Because people want to continue doing the work they are excited about while doing.

Arouses interest: The third advantage of the digital story method is that it arouses students' interest and attention. Reading a very good book gives excitement to people and almost finds themselves in the book. This method also enables to present subjects, applications, explanations to students in a striking and exciting way.

Presents real-life situations, environments: Another advantage of the digital story method is creating real-life situations easily and inexpensively. As an example, a doctor-patient relationship can be presented to students with the method of narration with shared roles. With this method, the behaviors that can be done against a developing situation in any environment are shown.

Provides active learning: Digital storytelling involves students in learning with digital learning environments. The aspect that makes this method important is that it makes the student active, not passive.

Howell and Howell (2003) listed the benefits of creating digital stories as follows:

- Students can share their feelings, thoughts, experiences and cultures with others in a fun way through digital stories.
- Students can realize their own learning with digital stories.
- Digital stories make students autonomous and active learners.
- In the digital story process, students' language skills improve and their proficiency in using digital tools increases.
- Students critically examine media in the process of creating digital stories.
- Digital stories increase students' motivation to learn.
- Digital stories help students become creative writers.
- Especially the language of young students develops in subjects such as writing, fluent speaking and critical reading in the process of creating digital stories.

When the relevant literature is examined, it is seen that the digital storytelling method activates the student in education. Contrary to traditional education methods, students are made curious about learning, and they can construct the information they have learned, thus a deep and meaningful learning takes place. Students have the opportunity to share what they have learned with others by using digital media tools. For this, the student uses

the technology, which most of them already know how to use well, for education in an educational environment that is more meaningful and beneficial for him due to the period we live in. Education done in this way is a situation desired by the constructivist approach (Demirer, 2013).

Educators who do research and work on the digital story method provide information that this method is effective. These effects can be divided into two as on the student and on the teacher.

3.1. Digital Storytelling and Teacher

Digital storytelling, which is an active method, is used by teachers in classroom environments. In order for teachers to use this method efficiently, they need to know the features and stages of the method and decide when to use this method in the lesson. It is necessary to decide on which of the introduction, development and conclusion sections of the course will be used in a digital story prepared for the course content (Göçen, 2014).

Digital stories prepared on a new subject can be presented by the teachers in the introduction part of the lesson in order to draw attention to the subject (Demirer, 2013). If stories of this nature are presented with this timing, processes such as observing, associating and giving examples that help to make learning permanent will be provided. Digital stories prepared in order to complete the processes such as concluding, summarizing, and giving feedback about the lecture are shown at the end of the course. (Göçen, 2014). In order for digital stories to have the desired effect on students, it should be decided in which part of the lesson and for what purpose they will be used. With the use of digital stories in this way, it will be possible to benefit from digital stories at the desired rate.

Although the student has a more active role than the teacher in the digital story method, the teacher also has the same active role as his students. In the digital story process, the teacher should help the student and support the progress of their storytelling skills (Miller, 2009). Before the digital story method is used in the classroom environment, it should be decided whether the role of story preparation will be given to the teacher or the student (Robin, 2008).

By presenting the digital stories prepared by the teacher in the classroom, it provides the opportunity to discuss the topics that make up the content of the stories, and gives the opportunity to better understand the abstract issues. Again, with this method, subjects that are difficult for students can be explained more easily (Robin, 2006). Teachers can present the subjects they want to tell with their main lines through digital stories and make the narration interesting.

Teachers should help students with the skills expected from students during digital story work (Ohler, 2008). In this study process, students are required to have knowledge on subjects such as preparing written text, vocalizing the text, and adjusting the visuals in accordance with these studies (Banaszewski, 2005). In order for students to gain these skills, they should be given the necessary support and sufficient time should be given for this. Bringing these components together is a time-consuming process. A teacher, who will introduce his students to the digital storytelling method for the first time, should give the students enough time to understand the target subject and acquire the necessary skills, and should also offer the students the opportunity to experiment with the study. Because, as in understanding every newly taught subject and method, time and help are needed to learn this method (Robin, 2006). In the digital story method, it is necessary to give enough attention to the storytelling part and to have previously acquired the technology skills to be used in order to carry out the study. In this way, a healthier study will be possible (Behmer et al., 2006). Expecting students who do not have the necessary skills to do digital story work will cause them to stay away from this work.

The digital story method helps to create processes and environments such as problem solving, peer education and collaboration, as predicted by the constructivist approach (Smeda et al., 2010). Again, this method provides the opportunity for teachers to provide education and training in line with the constructivist approach by providing learning environments by doing and experiencing (Yang & Wu, 2012). The digital story method will help the people of today's information age to become qualified individuals who will enable them to acquire the skills they expect.

3.2. Digital Storytelling and Student

This method provides the student with the opportunity to both write a story and to actively participate in the education environment by combining the story he wrote with multimedia elements (Göçen, 2014). Most of the studies on digital story show that this method increases students' interest in the lesson, increases their motivation, helps students learn the subjects that are called difficult, increases cooperation, and makes the information to be presented more meaningful (Van Gils, 2005). With this method, the student writes a scenario to convey his knowledge about a subject he has learned, and contributes to his meaningful learning by giving the student an active task in this way.

The digital story method can be an effective tool for students to create their own stories. It is an impressive and motivating method for the digital generation in today's classrooms. In the digital story process, students have the opportunity to reveal their entrepreneurial aspects and hidden talents

while creating their own stories. Narrators learn to make effective use of the internet and libraries while doing research on the subject. In addition, students who participate in the digital storytelling process develop their communication skills by creating narratives, asking questions, and organizing their thoughts by explaining their thoughts (Robin, 2008). With the digital storytelling method, students both gain new skills and can communicate with their peers and surroundings by creating and presenting their own stories.

In addition, students who publish their digital stories on the web have the opportunity to see the stories prepared by their peers. Emotional intelligence and social learning of students who have the opportunity to watch and examine the stories of their peers improve. The digital story method also encourages various forms of learning such as group work and collaboration by sharing personal success and experiences of students (Robin, 2008). Students who prepare digital stories are in the position of instructors for other students watching their stories. This position helps students to transfer their knowledge to others, which increases cooperation and also increases students' self-confidence (Miller, 2009). The digital story method gives the opportunity to be a teacher for someone else as well as being a student.

Students and teachers who challenge their imaginations through digital stories can present the information they have acquired to their environment. This method contributes to the development of the creative aspects of students who try to solve existing problems with methods (Ohler, 2008). Active participation of students in the digital story method helps them acquire skills called 21st century skills (Jakes & Brennan, 2005). Robin (2006) states that with the digital storytelling method, students gain five of the 21st century skills.

Digital Literacy: The ability to talk, communicate and gather information on ever-expanding and evolving topics and societies.

Global Literacy: The ability to read, interpret, respond to, and relate the given message with a global perspective, to another appropriate topic.

Technology Literacy: The ability to leverage computer and other technologies to improve production, learning, and performance.

Visual Literacy: The ability to communicate, produce and understand through visuals in an environment.

Information Literacy: The ability to reach information, evaluate and synthesize the information obtained.

Robin (2006) also stated that students who participate in the digital

storytelling process, who create their own stories in the digital environment, have research skills, writing skills, organizing skills, technology use skills, presentation skills, mutual conversations, exchange of views, group working skills, problem solving skills. states that skills such as the ability to evaluate the work of others develop.

The digital story method gives students the opportunity to create their own stories, and this way increases their motivation. This method is an effective method that can be used to increase success as it provides opportunities such as teaching new information to students and restructuring information by finding new ideas (Burmak, 2004). They are made to watch digital stories on any topic by the relevant persons or teachers, and then they can be asked to create digital stories in which they can tell their own thoughts on any topic. Interest, desire and attention can be increased with this method for today's digital generation (Robin, 2006). In studies on digital storytelling, it is seen that the digital storytelling method is more advantageous in this regard when the benefits obtained from the traditional storytelling method are compared with the benefits obtained from the digital storytelling method (Ohler, 2008). In the digital story method, there are digital elements that are extremely important for today's digital generation and it gives the opportunity to make changes on them. The digital story method improves students' cooperation skills, provides them with real-life experiences, supports the development of their decision-making abilities, and this method increases their participation in the course (Behmer et al. 2006). Through the digital story method, students can use the information they have learned in other areas, which increases their motivation (Smeda et al., 2010). The digital story method increases the motivation of students by providing them with the opportunity to personalize their learning experiences (Miller, 2009). A more enjoyable and permanent learning can be achieved in an educational environment where motivation is provided.

Students who want to create digital stories have to use some computer programs to prepare a story with multimedia elements. Students have to learn to use different computer software to transfer the images they have obtained with tools such as recording cameras and scanners to digital media, to make voiceovers, add music and add effects to the work. This contributes to the development of students' technology literacy skills (Robin, 2006).

Conclusion

In the digital age we live in, content produced using information and communication technologies has become a part of daily life. Thanks to the developments in these technologies, every individual who has a mobile device equipped with basic features and an internet connection has become

able to produce professional quality text, audio, video, photos, animations, etc., at any time and anywhere. Although these technologies provide great convenience to users in content production, how to design and produce content using ICTs and how to use the produced content in the best way requires high-level design and management skills. In particular, ICTs to be used in educational environments play a very important role in increasing the interest of students, ensuring their motivation and providing effective and meaningful learning from the context. Based on this context, in the studies conducted in different countries examined within the scope of the purpose of the research, the effectiveness of the use of digital storytelling, which is one of the ICT tools, in educational environments for different purposes, and the obstacles to its implementation in inclusive education were examined. Inferences from these studies; It is thought that the applications of digital storytelling in inclusive education can be important in terms of emphasizing both the motivating aspects and the missing aspects for educators, relevant stakeholders and those who want to do research on this subject.

Teachers can best interpret students' relationships with their peers by observing their achievements, playing skills and styles, and communication skills. In addition, by encouraging parents to participate in education, teachers can get information about their children from them, share various resources and time with them to improve children's education, so that children can reach the best possible learning. In a study by Park (2019) in which digital storytelling was used in the education of English for Speakers of Other Languages (ESOL) education teacher candidates to gain and develop reflective thinking skills through activities, interactive blended learning experience and language, culture, education and It has been determined that factors such as technology contribute to pre-service teachers to be more qualified teachers in the future. In the compilation research conducted by Greene, Burke, & McKenna (2018), it was found that the use of digital media environments such as digital storytelling and photography-audio of young people with different language, culture, race and life practices is important in the development of reflective thinking skills and communication skills among young people. they have stated.

Digital storytelling, which is one of the ICT tools, emerges as a new technology that supports learning by discovery and doing-experience in the field of education and encourages learning equally. In this sense, the use of digital storytelling applications in education can be an effective way for individuals who learn better through visual and concrete experiences. Although new, digital storytelling applications can be used effectively in the education of students who have deficiencies in social interaction and communication skills or who have different special needs. In addition,

digital storytelling applications will create a unique learning environment suitable for various learning styles, and learners will be able to receive individualized education at their own pace. From this point of view, it can be said that digital storytelling applications in inclusive education can be used as an effective tool in differentiating teaching according to the learning characteristics of the students, and thus all students will get the most benefit from the education, regardless of their differences.

In recent years, the increase in the number of academic studies dealing with digital storytelling in the field of educational sciences and the diversification of the source countries where academic studies are produced have provided the expansion and enrichment of the related literature.

REFERENCES

- Banaszewski, M.T.(2005). Digital storytelling. Supporting digital literacy in-grades 4-
- Barret, H.C. (2009). How to Create Simple Digital Stories. <http://electrni.cportfolios.com/digistory/howto.html>.
- Barrett, H. (2006). Researching and evaluating digital storytelling as a deep learning tool. In C. Crawford (Ed.), *Proceedings of society for information technology and teacher education international conference* (pp. 647-654). Chesapeake, VA: AACH.
- Behmer, S., Schmidt, D. & Schmidt, J. (2006). Everyone has a story tell: Examining digital storytelling in the classroom. In C. Crawford wt al. (Eds.), *Proceeding of Society for Information Technology & Teacher International Conference 2006*(pp.655-662) Chesapeake, VA.AACE.
- Bull, G., & Kajder, S. (2004). Digital storytelling in the language arts classroom. *Learning & Leading with Technology*, 32(4), 46-49.
- Burmak, L. (2004). Visual presentations that prompt, flash & transform. *Media and Methods*, 40(6),4-5.
- Center for Digital Storytelling (CDS) (n.d.). <http://storycenter.org/wevideo-press-release/>
- Ceylan, B., & Birinci, G. (2013). Teknopedogojik Eğitimde çoklu Ortam Uygulamaları. Yurdakul, I.K. (Ed.) Teknopedogojik eğitime daylı öğretim teknolojileri ve materyal tasarımı (ss.131-159). Ankara: Anı Yayıncılık.
- Chung, S. K. (2007). Art education technology: Digital Storytelling. *Art Education*, (602), 17- 22.
- Ciğerci, M. (2015). İlkokul dördüncü sınıf Türkçe dersinde dinleme becerilerinin geliştirilmesinde dijital hikayelerin kullanılması (Yayımlanmamış Doktora Tezi). Anadolu Üniversitesi Eğitim Bilimleri Enstitüsü, Eskişehir.
- Demirer, V. (2013). İlköğretimde e-öyküleme kullanımı ve etkileri (Yayımlanmamış Doktora Tezi). Necmettin Erbakan Üniversitesi Eğitim Bilimleri Enstitüsü, Konya.
- Erişti, B. (2010). Eğitimde dönüşümler. H. F. Odabaşı (Ed.), *Bilgi ve İletişim Teknolojileri Işığında Dönüşümler içinde* (s. 1-112). Ankara: Nobel Yayın Dağıtım.
- Florian, L. (2015). Conceptualising inclusive pedagogy: the inclusive pedagogical approach in action. In J.M. Deppele, T. Loreman, R. Smith, L. Florian (Eds.) *Inclusive pedagogy across the curriculum* (pp.11-24). London: Emerald Group Publishing Limited.
- Frazel, M. (2010). *Digital storytelling guide for educators* (1st ed.). Eugene, Or: International Society for Technology in Education.
- Garrety, C. (2008). Digital storytelling: An emerging tool for student and teacher

- learning. Ames (Unpublished Doctora dissertation). Universty of IA.lowa State Universty.
- Gils, F. (2005). Potential applications of digital storytelling in education. In *3rd Twente Student Conference on IT* (pp.17-18), University of Twente Faculty of Electrical Engineering, Mathematics and Computer Science, Ensched.
- Göçen, G. (2014). Dijital hikayeyönteminin öğrencilerin akademik başarıları ile öğrenme ve ders çalışma stratejilerine etkisi (Yayımlanmamış Yüksek Lisans Tezi). Muğla Sıtkı Koçman Üniversitesi, Muğla.
- Greene, S., Burke, K. J., & McKenna, M. K. (2018). A review of research connecting digital storytelling, photovoice, and civic engagement. *Review of Educational Research*, 88(6), 844-878.
- Harris, K., Marcus R., & McLaren K. (2001). Curriculum Material* Supporting Problem Based Teaching. *School Science and Mathematics*, 101(6), 310-315.
- Howell & Howell. (2003). What is your digital story?. *Library Media Connection*, 22(2), 40.
- Ivankovic, A., Spiranec, S., & Miljko, D. (2013). Student's level of ict literacy by study groups on faculty of philosophy, University of Mostar. In *Information & Communication Technology Electronics & Microelectronics (MI-PRO)*, 2013 36th International Convention on (pp. 605-609). IEEE.
- Jakes, D.S. & Brennan, J. (2005). Capturing stories,capturing lives:An Introduction to digital storytelling. <http://bookstread.com/etp/earke.pdf>.
- Karakoyun, F. (2014). Çevrimiçi ortamda oluşturulan dijital öyküleme etkinliklerine ilişkin öğretmen adayları ve ilköğretim öğrencilerinin görüşlerinin incelenmesi. (Yayımlanmamış Doktora Tezi). Anadolu Üniversitesi Eğitim Bilimleri Enstitüsü, Eskişehir.
- Lambert J. (2007).The digital storytelling cookbook. Berkeley, CA: Center for Digital Storytelling/Digital Diner Press.
- Lambert, J. (2003). Digital Storytelling Cookbook and Travelling Companion. (Version 4.0) Digital Diner Press. Berkeley. CA.
- Mattews, G. (2008). *Digital storytelling tips and resources*. Boston: Simmons College.
- Meadows, D. (2003). Digital storytelling. Research-based practise in new media. *Visual Communication*, 2(2), 189-193.
- Miller, E.A. (2009). Digital storytelling (Unpublished master's thesis). Universty of Northern Iowa.
- Ohler, J. (2008). *Digital Storytelling in the Classroom. New Media Pathways to Literacy, Learning, and Creativity*. Thousand Oaks: Corwin Press.
- Park, H. R. (2019). ESOL pre-service teachers' experiences and learning in completing a reflection paper and digital storytelling. *Australasian Journal of*

Educational Technology, 35(4), 63-77.

- Robin, B. (2006). The Educational Uses of Digital Storytelling. C. Crawford vd. (Ed.) Proceedings of Society for Information Technology & Teacher Education International Conference, 2006 (s.709-716). Chesapeake, VA:AACE.
- Robin, B. (2008). Digital storytelling: A powerful technology tool for the 21st century classroom. *Theory into Practice*, 47(3), 222-228.
- Rose, D. H., & Strangman, N. (2007). Universal design for learning: Meeting the challenge of individual learning differences through a neurocognitive perspective. *Universal Access in the Information Society*, 5(4), 381-391.
- Rose, R. (2001). Primary school teacher perceptions of the conditions required to include pupils with special educational needs. *Educational review*, 53(2), 147-156.
- Smeda, N., Dakich, E.& Sharda, N. (2010). Developing a frame work for and vancing e- learning through digital storytelling, in IADIS International Conference e-learning 2010. Ed. Miguel Baptista Nunes and Maggie Mc. Pherson. IADIS International Conference 2010 Freiburg, Germany,26-29 July 2010,169-176.
- Van Gils. F. (2005). Potential applications of digital storytelling in education. Paper presented at the 3rd Twente Student Conference on IT, Enschede June, 2005.
- Yang, Y.-I.C. & Wu. W.- C.I. (2012). Digital Storytelling for Enchancing Student Academic Achievement, Critical Thinking, AND Learning Motivation. A Year- Long Experimental Study. *Computers & Education*, 59(2), 339-352.

CHAPTER 3

APPLICATION OF CLOUD COMPUTING IN THE FIELD OF EDUCATION

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1. Cloud Computing Concept :

Developments in information technologies have led to changes in conventional fixed information processing technologies in the stages of storing, using and converting information into production by individuals and institutions. This situation has led to the emergence of flexible and cost-minimizing technologies. These developments in information technologies have greatly benefited the storage and accessibility of data individually and institutionally and its preferability in backing up information has increased day by day (Yalcinkaya et al., 2019). In today's technology, it is understood that cloud computing systems, which enable the storage and accessibility of personal or corporate data on the internet by individuals and institutions, will continue to be preferred by more users in the future due to their low cost (Kılıc, 2017).

With the development of technology, economic, social and environmental innovations occur. With these innovations, it becomes a necessity for individuals and businesses to keep up with these innovations (Celik et al., 2021). One of these innovations is Cloud Computing. When the literature is examined, different definitions of the concept of Cloud Computing are reached. Cloud computing is a great alternative to create effective information systems without the need to allocate large budgets for infrastructure installation and maintenance (Ercan, 2010). According to Gol (2020), cloud computing is technologies enables all kinds of files such as pictures, documents, music to be uploaded to the cloud and accessed via the internet whenever needed, by using cloud services. In the cloud computing model, the infrastructure established and managed by cloud service providers is leased to individuals and organizations with the “pay-as-you-go” model, and users can work completely target-oriented without any infrastructure concerns. Cloud computing is used in the IT infrastructure that are provided the services to the customer through the internet. It gives the low cost environment for the end user. It is a storage device to stored and maintain the data and application. (Rajeswari & Mohammad, 2019).

Cloud computing technology offers a pay-as-you-go method. Via this method, users pay as much as they use by doing the transactions they want over the internet. In addition to these, cloud computing can quickly deploy the IT service and scale the IT service as needed. While doing these, these technologies provide the opportunity to use the services at very low prices with the logic of pay as you use them (Alsabak, 2020). In this way, service disruptions can be prevented and the vast majority of infrastructure is prevented from being idle even when expectations fall. It can describe the cloud information platform as Google Cloud, which delivers the server infrastructure services used by search engines such as Google, Bing, Yandex, Yahoo and sites such as YouTube to the end user.

1.1. Historical Development of Cloud Computing :

Cloud computing emerged in the 1950s and is based on examples such as the Canadian computer scientist Herb Grosz's assertion *that "stupid terminals all over the world can only be managed by the data center"* and shows how much this technology was needed long ago (Kaya, 2017). John McCarthy continued with the view that John McCarthy advanced in the 1960s: *"one day the computation operations will be on large public networks"*. Cloud technology has evolved since 1950 and up to the present era.

Scientists have developed algorithms to ensure optimum use of infrastructure, platforms and applications so that time-sharing systems can be used more efficiently. Computing requirements In the 1960s and 1970s, organizations procured their transactions with mainframe computers, except for individual transactions (Sisman, 2019).

By the 1980s, terminals, which were in a non-functional state, started to be used as personal computers with the increase in their memory and processor capacities and performance. In the nineties, personal computers communicated over local area networks (LANs), which shared resources and increased performance. As a result of these, institutions and organizations created a system room and kept server computers. In the late 1990s, LANs connected to each other in order to share resources between computers created the Internet (Hanbay and Uzen, 2017).

In the early 2000s, the use of maximum capacity networks everywhere, the cheapening of information technologies, the widespread adoption of virtualization and service-oriented architecture led to a significant growth in cloud computing. The foundations of cloud computing in use today emerged with the modernization of Amazon's data centers. In 2002, Amazon launched Amazon Web Services to market the services it developed. Amazon S3, which was put into service by Amazon Web Services in 2006, was the first example in the context of cloud computing technologies in use today.

In 2007, Apple enabled the development of cloud computing in the mobile field with the release of the iPhone, which can be used over any wireless network. In 2008, in addition to the public cloud, the concept of private cloud emerged, thus cloud platforms became more reliable (Kilic, 2017).

In 2008, Eucalyptus became the first Amazon Web Service-API compliant open source platform for deploying private clouds. In 2009, Google Apps, and in 2010, Microsoft Azure, a cloud computing service platform emerged. In 2011, Hybrid Cloud, a combination of public and private

clouds, and iCloud, Apple's storage service, came into use. In 2012, Google launched Google Drive, leading the free data storage and sharing platform.

Cloud computing technology, which comes to the rescue of employees and companies during the pandemic period and allows working from home relatively smoothly, is expected to reach 482 billion dollars in 2023.

The cloud computing process usually includes the following steps:

- Users request access to a particular resource or service, such as storage space or a particular software application.
- The cloud provider's servers receive the request and determine the available resources to fulfill the request.
- The cloud provider's servers allocate the requested resources and present them to the user over the internet.
- Users interact with the resources and services provided by the cloud provider using their own devices, such as laptops or smartphones, and via web browsers or special software.

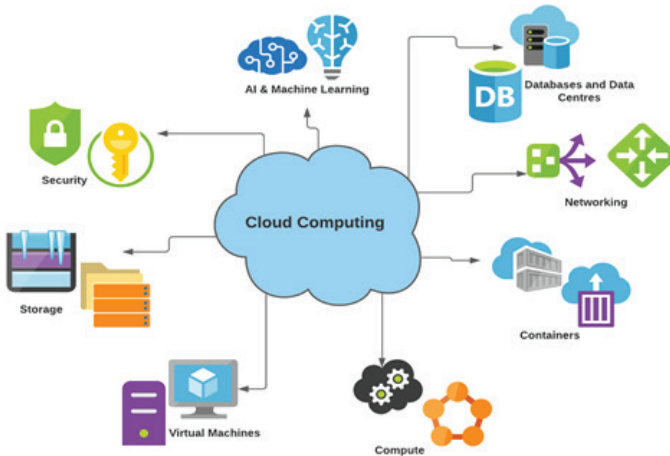


Figure 1. Cloud Computing Working Principle

Source: <https://ostechnix.com/cloud-computing-basics/>

This means that, rather than hosting infrastructure, systems, or programs on your hard drive or on an on-site server, you host them on virtual/online servers that connect to your computer via secure networks.

Cloud computing is widely used in many different and various fields today. Cloud technology, which can also be described as a revolution over

the Internet, gives the opportunity to transmit data effectively and also to protect it. In this direction, finding informatics has an important place in every aspect. Therefore, it is possible to say that it is used in many different areas (Ashraf et al., 2013). These areas;

- Data backup
- Disaster recovery
- Email
- Virtual desktops
- Software development
- Big data analytics
- Web application

2. Features of Cloud Computing :

Big data analysis, social media analysis and data mining applications offered on cloud computing increase efficiency and reduce data hosting costs. In addition, cloud technology accelerates business processes and offers new technologies to maximize profitability. The features of cloud computing technologies that offer all these advantages to their users are listed below:

- The most important feature of cloud computing is that hardware and software are virtualized and service-oriented. For this reason, more and more companies are choosing cloud technology to keep up with digital transformation.
- Cloud computing technology, which eliminates the workload and costs such as hardware renewal, software update, maintenance and storage brought by the servers and data storage applications installed in the company, is the most accurate solution for data storage and processing in the big data era.
- With cloud technology, manual processes such as sizing, configuration or backup are automated, saving cost and time.
- Virtualization technologies play an important role in increasing the uptime of institutions, storing data collected from the cloud and big data securely, and creating business continuity and disaster prevention scenarios.
- Cloud computing is a flexible system where information technology operations can be paid as much as they use with the rental model over the cloud. Thus, IT investments are brought under control and it is possible

to gain competitive advantage by concentrating on the core business line.

- With pay-as-you-go method, you can downgrade or upgrade the hardware as you need it, instead of having a piece of hardware that you won't use.

- In cloud computing, hardware and software applications are always updated to the latest version. Changes made through the basic system image in the update process are automatically reflected on all devices.

- Thanks to redundant systems in cloud computing infrastructures, the probability of data loss and malfunctions in operation is low.

- Cloud storage is secure. Since it is scaled on demand, the required storage space can be obtained when needed.

- Thanks to the multi-server connection via a digital network, all kinds of information can be accessed from anywhere at any time, even with the lowest capacity device.

- Cloud computing reduces the burden of personal computers and a lot of software is provided by cloud server.

- It has an easy-to-use feature with tutorials and guides for the end user.

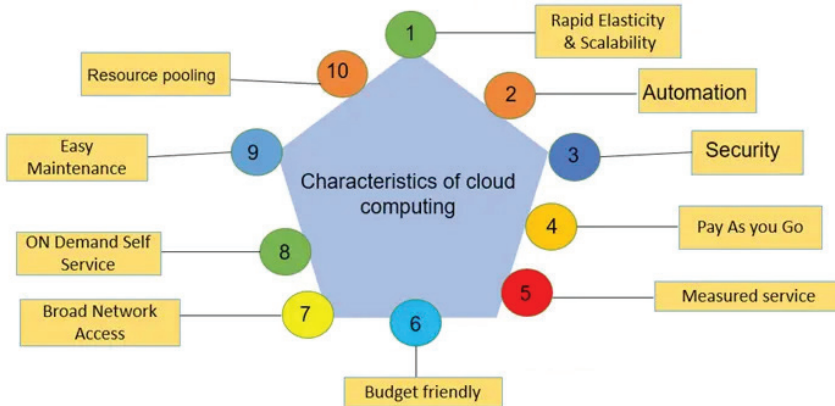


Figure 2. Features of Cloud Computing

Source: <https://www.guru99.com/characteristics-of-cloud-computing.html>

2.2. Cloud Computing Deployment Models :

The cloud deployment model identifies the specific type of cloud environment based on ownership, scale, and access, as well as the cloud's nature and purpose. In terms of usage types, cloud computing is divided into public, private, community, hybrid cloud (hybrid cloud) and multi-cloud.

- **Public Cloud Deployment :**

Public Cloud is the most preferred type because it is intended for all types of users in cloud types. In addition to individual users, organizations also use the advantages of the public cloud and make their applications more effective. For example, applications such as information storage, on-line document sharing, web e-mail services are easily incorporated into the public cloud structure on behalf of organizations in a certain way. Advantages of public clouds; location independence, cost effectiveness, reliability, flexibility, convenience-style cost, and maximum scalability. The disadvantages are low security and less customizability (Rani et al., 2015). The Public Cloud can provide cost-effective solutions for both small and medium-sized businesses. Although there are metered systems based on monthly or pay-as-you-go systems, it generally works with a pay-as-you-go method (Yuksel, 2012).

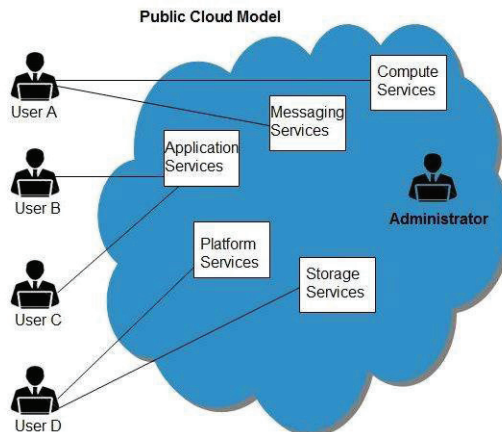


Figure 3. Public Cloud Model

Source: https://www.tutorialspoint.com/cloud_computing/cloud_computing_public_cloud_model.htm

Public Cloud allows systems and services to be easily accessible to general public. The IT giants such as Google, Amazon and Microsoft offer cloud services via Internet.

- **Private Cloud Deployment :**

Private Cloud is the provision of cloud services to the user's organization by private resources within or outside the organization. A private cloud is a cloud platform created and used solely on behalf of the organizational structure (Sevli and Kucuksille, 2012). Private Cloud is suitable for large organizations and institutions that care about data security. The organization creates its own cloud. It uses a closed cloud infrastructure outside

the enterprise, while it uses a shared infrastructure between departments within the organization (Cengiz and Bakirtas, 2019).

The advantages of Private Cloud are higher security and more privacy, greater control, cost and energy efficiency. For organizations and businesses that care about information privacy; the additional security features offered with the Private Cloud Model give serious confidence to the users. It is very useful for organizations that host personal data or perform functions that require confidentiality. The frequency of use in sectors where confidentiality is important, such as the defense industry, draws attention (Sagiroglu, 2019). The disadvantages are limited resources, inflexible pricing and limited scalability.

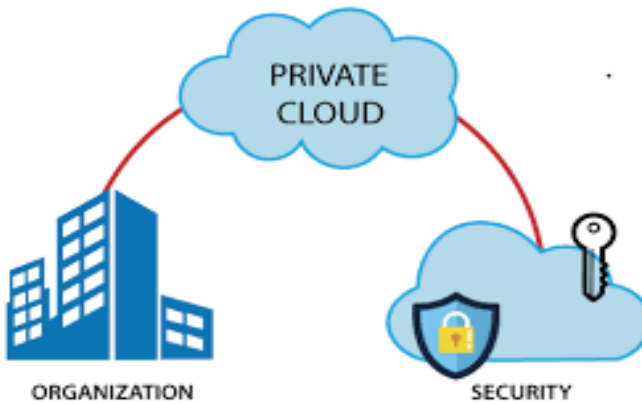


Figure 4. Private Cloud Model

Source: <https://www.javatpoint.com/private-cloud>

- **Community Cloud Deployment :**

The cloud infrastructure in a Community Cloud can be used together by several organizations with common concerns (such as mission, security requirements, policy and compliance issues), and all users have access to applications and data. It is usually managed by organizations in the community or a third party and can be used internally or externally.

The advantages of Community Clouds are that they are more secure than Public Clouds and share resources among various organizations. The disadvantages are that it is less secure than the Private Cloud and requires management policies. Data availability and reliability are still important issues regarding the use of cloud computing in the workplace (Koruyan & Bingöl, 2015). One of the most suitable examples for the community cloud is the e-government system.

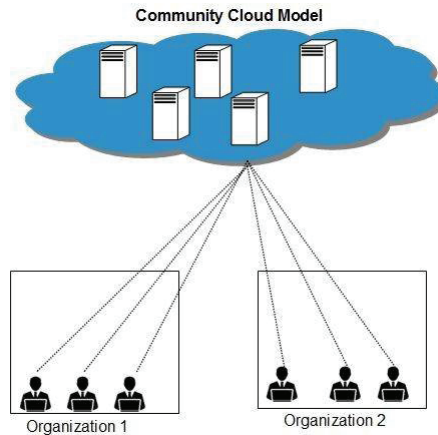


Figure 5. Community Cloud Model

Source: https://www.tutorialspoint.com/cloud_computing/cloud_computing_community_cloud_model.htm

Government organizations or holdings can meet their computing needs by sharing a common cloud infrastructure (Rani, et al., 2015).

- **Hybrid Cloud Deployment :**

This term refers to on-premises, private cloud, and public cloud (for example, Oracle Cloud) services working together seamlessly to support an entire organization. This configuration is flexible depending on the requirements. It can contain custom entities and other applications. In many cases, hybrid cloud computing offers the perfect solution between the advantages of modern cloud technology and the practical limitations of cloud possibilities, such as the factors created by high-performance computing. With the hybrid cloud, organizations get the benefits of all platforms in a flexible environment that can adapt to their specific needs. Advantages of hybrid cloud solutions include:

- More control over resource management
- Deploy apps faster
- Stronger security enforcement and execution
- Flexible scalability and rapid rollout
- Cost and resource optimization

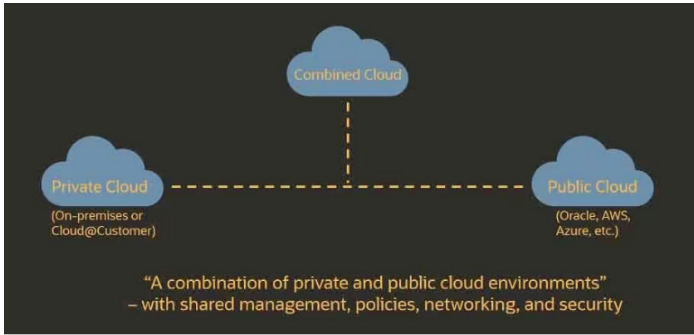


Figure 6. Hybrid Cloud Model

Source: <https://www.oracle.com/tr/cloud/hybrid-cloud/what-is-hybrid-cloud/>

Hybrid Cloud's physical resources are limited. When a cloud consumes all computing and storage resources, it cannot serve customers. This is one of the disadvantages of hybrid cloud.

- **Multi-Cloud Deployment:**

For companies looking to optimize their cloud infrastructure capabilities and spend, multicloud configuration may be the best approach. Multicloud refers to the use of multiple cloud installations from different vendors. Since the standard architecture of most of today's businesses involves using SaaS providers to run traditional business processes, they prefer multi-cloud to reduce costs and avoid problems that can come from a single cloud provider. Multicloud offers many benefits, including:

- Avoid being tied to a vendor for certain services
- More successful demolition repair options
- Easier transition
- Easier scalability and agility
- Ability to take advantage of competitive pricing or emerging competition on services

A powerful provider for multi-cloud needs; It must have the ability to run enterprise workloads while offering flexibility and versatility. This includes running high-performance workloads or specific database or virtualization stacks. Organizations involved in a multi-cloud scenario can optimize service, price, and resources while maintaining flexibility, ensuring data security and interoperability.



Figure 7. Multi Cloud Model

Source: <https://www.globaldots.com/resources/blog/achieving-peak-orchestration-in-a-multi-cloud-environment/>

Multicloud refers to a deployment that depends on cloud services provided by two or more cloud vendors.

Cloud Computing Based Systems (Cloud Services) :

Below is brief information about businesses that offer Cloud Computing services.

- **Microsoft Azure:**

Windows Azure Platform owned by Microsoft, Cloud Computing is a simple, secure and powerful system for creating and managing applications. This system covers IaaS and PaaS service models. Automatically delivers hybrid cloud solutions. Highly flexible for businesses to use has a system. This platform supports different structures such as Windows, Linux, SQL Server, Oracle, C#, Java (Keskin et al., 2020).



Figure 8. Microsoft Azure Cloud Services

Source: <https://securecontenttechnologies.com/managed-it-services/microsoft-products-services>

- **Microsoft One Drive:**

It mainly serves for personal use. Users can use this service with the help of a Microsoft account. With this account, from any point with internet access, You can always connect to One Drive. In this system, where 5GB of space can be used free of charge, additional usage areas are charged (Pasaoglu and Cevheroglu, 2020).



Figure 9. Microsoft One Drive Cloud Services

Source: <https://www.coriniumtech.com/onedrive-files-demand-setup-configuration-use/>

- **Amazon:**

Cloud computing started in 2006 by Amazon.com. platform. It contains many rooted applications and services. Amazon offers many possibilities to platform users. It is a secure cloud services platform that offers computing power, database storage, content delivery, and other functionality to help many businesses thrive and grow. The AWS cloud computing platform was developed by combining infrastructure as a service (IaaS), platform (PaaS), and software (SaaS) offerings. It has generated revenue that has grown steadily in recent years, accounting for 13.5% of Amazon's total revenue. With this revenue it generated, it broke the record of being a \$10 billion business in 2020.



Figure 10. Amazon Web Services

Source: <https://www.webtekno.com/amazon-web-services-aws-nasil-kullanilir-h108034.html>

- **Google Drive:**

Google Drive is the part that acts as an online file storage and synchronization service using cloud computing. It is possible to create documents on Google Drive, share and use platforms that allow group work. Google Drive offers 15GB of space to anyone who creates a Google account, giving its user the opportunity to enjoy storage and other services offered by Drive. It is possible to upload all kinds of file formats to Google Drive from anywhere with internet access and access them from any desired point (Gol, 2020).



Figure 11. Google Drive

Source: <https://www.google.com/intl/pt-BR/drive/download/>

- **Oracles :**

Oracle is the world's second largest software company after Microsoft. For Oracle institutions; it provides technology with high performance, reliability, scalability, availability, security and mobility. Thanks to its public and private cloud support, it gives users the opportunity to choose. Users of the fullest PaaS and IaaS systems offers.



Figure 12. Oracle Cloud System

Source: <https://exitas.be/oracle-cloud-rabbit-hole-part-5/>

- **Dropbox:**

It is a service that allows the user to move and share their files, videos and photos in the easiest way. Two students studying at Massachusetts Institute of Technology in 2007; Dropbox was found as a result of working on multiple computers, tired of sharing work documents by e-mail all the time. These two students are Drew Houston and Arash Ferdowsi. In daily life, there are devices with multiple internet access such as computers, smart phones, tablets. Exchanging data between these devices has become much simpler thanks to Dropbox. Thanks to the folder on the cloud, when a file is uploaded from any device, it is possible to access this file from other devices (Gol, 2020).



Figure 13. Dropbox Cloud System

Source: <https://updraftplus.com/shop/dropbox-folders/>

3. Application of Cloud Computing in The Field of Education :

Cloud-based education applications are a new and flexible solution for accessing data and services, where knowledge and experience can be shared effectively over the web, and which provides the opportunity to collaborate on projects (Li and Chen, 2011). Cloud-based education applications transfer the infrastructure installation, maintenance and management processes that burden educational institutions to the control of cloud service providers thus, it enables educational institutions to tend towards a higher quality education.

Solutions offered by cloud-based education applications and the benefits it provides can be listed as follows (Microsoft Education, 2011).

- It enables students to carry out educational activities, access library content and online resources electronically, without time and place limitations.

- It ensures that student performance and grades are recorded electronically and can be questioned according to the desired criteria.
- Students are given regular feedback and their progress is ensured.
- Collaboration of students, educators and administrators online communities can be created.
- It supports the exchange of ideas and experiences between trainers and administrators.
- It enables students and institution staff to access electronic resources regardless of time and platform.
- Web-based course and class registrations can be made.
- It offers a new way and environment for students to connect with educators and administrators.
- It allows daily or near-term or long-term strategic plans to be designed and presented on the web.

When the studies in the literature on the use of cloud computing in education are examined; Martinez et al. (2015), discussed cloud computing and education in their research. In this content 112 works were selected for the review. As a result cloud computing brings advantages for educational institutions and their IT staff that can be common to other application domains. In this sense, educational institutions can leverage the cost savings of cloud computing by relying on public clouds or consolidating hardware in private clouds.) According to Arpacı et al. (2023) made a cross-cultural comparison on the evaluation of the actual use of cloud computing in higher education. A total of 300 Turkish and 349 Malay undergraduate students were recruited for this study. A multi-group structural equation modeling approach is used to investigate cross-cultural differences. The results showed that the relationship between perceived ease of use and usefulness was positively significant for both countries, but this relationship was stronger for Malaysia.

REFERENCES

- Alsabak, F. M. (2020). *Bulut Bilişim Hizmetlerini Kullanarak Nesnelere İnterneti Tabanlı Bir Uygulamanın Geliştirilmesi*, Yüksek Lisans Tezi (yayımlanmamış), Kastamonu Üniversitesi Fen Bilimleri Enstitüsü Malzeme Bilimi ve Mühendisliği Ana Bilim Dalı, Kastamonu, 10-28.
- Arpaci, I., Masrek, M. N., Al-Sharafi, M. A., & Al-Emran, M. (2023). Evaluating the actual use of cloud computing in higher education through information management factors: A cross-cultural comparison. *Education and Information Technologies*. <https://doi.org/10.1007/s10639-023-11594-y>. [Q1] [IF: 3.666]
- Ashraf, A., Lafond, S., Porres Paltor, I. & Lilius, J. (2013). Cost-Efficient Dynamically Scalable Video Transcoding in Cloud Computing. Turku Centre for Computer Science (TUCS).
- Celik, K. (2021). Bulut Bilişimde Temel Konular. *Uluslararası Batı Karadeniz Sosyal ve Beşerî Bilimler Dergisi*, 5(2), 236-250.
- Cengiz, E. & Bakırtas, H. (2019). İşletme ve Çalışan Özellikleri Açısından Bulut Bilişim Algısı Farklılaşır mı?, *Bilişim Teknolojileri Dergisi* 12 (4), 319-329.
- Ercan, T. (2010) Effective Use of Cloud Computing in Educational Institutions. *Procedia-Social and Behavioral Sciences*, 2, 938-942. <http://dx.doi.org/10.1016/j.sbspro.2010.03.130>
- Gol, M. (2020). *Türkiye'de Küçük ve Orta Boy İşletmelerde Muhasebe Bilgi Sistemi Temelinde Bulut Bilişim Kullanım ve Uygulanabilirliğinin Teknoloji Kabul Modeli Yaklaşımıyla Belirlenmesi*. Doktora Tezi Dumlupınar Üniversitesi, Sosyal Bilimler Enstitüsü, İşletme Ana Bilim Dalı Kütahya, 4-58.
- Hanbay, K. & Uzen, H. (2017). Nesne tespit ve takip metotları: Kapsamlı bir derleme. *Türk Doğa ve Fen Dergisi*, 6 (2) , 40-49 . Retrieved from <https://dergipark.org.tr/tr/pub/tdfd/issue/33022/367257>
- J.A. González-Martínez, M.L. Bote-Lorenzo, E. Gómez-Sánchez, R. Cano-Parra Cloud computing and education: A state-of-the-art survey *Computers & Education*, 80 (2015), pp. 132-151.
- Kaya, A. (2017). Küçük Ve Orta Ölçekli İşletmelerde Bulut Bilişim Farkıyla. Akademik Bakış *Uluslararası Hakemli Sosyal Bilimler Dergisi* , (63) , 259-275. Retrieved from <https://dergipark.org.tr/tr/pub/abuhsbd/issue/35955/403447>
- Kılıc, H. (2017). *Kamuda Bulut Bilişim Kullanımına Yönelik Risk Analizi ve Yönetimi*, Uzmanlık Tezi, (yayımlanmamış) Çevre ve Şehircilik Bakanlığı, Ankara, 4-39.
- Koruyan, K. & Bingöl, F. I. (2015). Bulut Bilişim Hizmet Sağlayıcılarının Veriyi Korumamaları ile İlgili Türk, Avrupa Birliği ve Amerikan Hukukun-

daki Düzenlemeler, *Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 17(3):367-388.

- Li, Z., Chen, C. & Wang, K. (2011). Cloud Computing for Agent-Based Urban Transportation Systems. *Computer Science IEEE Intelligent Systems*.
- Microsoft Education, (2011). Retrieved from: <https://www.microsoft.com/en-us/download/details.aspx?id=19790>
- Pasaoğlu, C. & Cevheroglu, E. (2020). Bulut Bilişim Sistemleri Kapsamında Kişisel Verilerin Şifreleme Yöntemleri ile Korunması. *Bilişim Teknolojileri Dergisi*, 13 (2), 183-195. DOI: 10.17671/gazibtd.55923
- Rani, K., B. & Rani, B., P. (2015). Cloud Computing and Inter-Clouds – Types, Topologies and Research Issues. *Procedia Computer Science 50* DOI:10.1016/j.procs.2015.04.006
- Rajeswari, M., N. & Mohammed, S. (2019). Overview Of Cloud Computing And Its Types. *SSRN Electronic Journal 6(3):61-67*.
- Sagiroglu, S. (2019). Büyük ve Açık Veri Türkiye Uygulamaları. Büyük Veri Uygulamaları Konferansı, BTK Konferans Salonu, 26 Haziran 2019, Ankara. http://bigdatacenter.gazi.edu.tr/wp-content/uploads/BTK_BuyukVeriTurkiye2019.pdf, (19.03.2021).
- Selvi, O. & Kucuksille, E. (2014). Bulut Bilişimin Eğitim Alanında Uygulanması. Süleyman Demirel Üniversitesi *Fen Bilimleri Enstitüsü Dergisi*, 16(3), 248-254. Retrieved from <https://dergipark.org.tr/pub/sdufenbed/issue/20799/222079>
- Sisman, E. K. (2019). *Bulut Bilişim Teknolojisi Yakın Gelecekte Vazgeçilmez Olacaktır*. Yüksek Lisans Tezi, (yayımlanmamış), Beykent Üniversitesi Fen Bilimleri Enstitüsü Bilgisayar Mühendisliği Anabilim Dalı.
- Yalcinkaya, B., Unal, M. A. Y., Yılmaz, B. & Özdemirci, F. (2019). *Bilgi Yönetimi ve Bilgi Güvenliği eBelge- eArşiv- eDevlet- Bulut Bilişim-Büyük Veri- Yapay Zekâ*, Ankara Üniversitesi Yayınları No: 676, 115-168.
- Yuksel, H. (2012). Bulut Bilişim El Kitabı. <https://yukseles.wordpress.com/2012/01/27/bulut-bilisim-el-kitabi/>, 31.01.2015.

CHAPTER 4

PEDAGOGICAL PROFESSIONALISM

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INTRODUCTION

Developing pedagogical professionalism has always been one of the major problems of the given period. However, it is getting more and more attention because of the variety of requirements imposed by the government and society in current conditions and their variance with currently existing educational process in the educational system.

According to the axiological aspect, professionalism is of the same value to both a person and society, as it is impossible to form them as a mature staff without taking into account the connection of the characteristics of this activity with the integrated system in ensuring the preparation of future specialists for the relevant professional activity. This, definitely, can be ensured by the joint implementation of science and practice.

From this point of view, in the content of this monograph, we consider the factors that determine the formation and development of future pedagogues' professionalism in the process of pedagogical practice in the system of professional pedagogical training.

A number of scientific studies have been carried out today by local and foreign scientists on the problem of pedagogical professionalism in the fields of psychology, pedagogy, sociology and other disciplines.

The theoretical foundations of the formation of pedagogical professionalism in the conditions of higher education were conducted in the scientific school of the leading Russian pedagogue Vitaly Aleksandrovich Slastenin within the framework of fundamental projects. It mainly covers the unique areas of research devoted to a wide range of problems related to higher education pedagogy, continuous pedagogical education, professional motivation and its expansion, dynamics of professional development of a teacher and changes in the content of his activity, professional development, self-awareness as a professional.

Today, we face very complex social relations in the teaching profession that show contradictory trends. On the one hand, there are many complaints against teachers, who are responsible for most of the educational problems, according to the results of official evaluations by the state and private evaluations by society. On the other hand, teaching as a social group is more trusted by the population than other professions.

At this point, it is worth noting that in 2010 research conducted by the All-Russian Public Opinion Research Center found that among four selected social professions (journalist, teacher, doctor and military officer), teachers are the most reliable. 68% of the respondents stated this. It is of particular importance that respondents under 34 years of age, and not older people, trust teachers more than others.

Even in the current conditions of increasing educational competition and declining status of many social professions, the profession of pedagogy appears in the public opinion as the owner of the profession: “smart, kind, eternal...”. However, despite the increasing spread of negative information about teachers on the Internet and mass media in recent years, this image has not yet disappeared from the public mind.

So, the image of a teacher is an archetypal image that exists in any society, which appears as a symbol of a person who helps the younger generation to go on their own path of development, entering the world of adults and understanding them.

Due to the fact that the value of the teacher’s social position and its functional role are analyzed in connection with such requirements, the phenomena associated with the personal qualities of a person, the process of studying pedagogical professionalism becomes somewhat difficult. Because of the predominance of the technocratic approach in the current education system, the penetration of unlimited knowledge into it, it is not enough to analyze education in order to ensure the successful socialization of young people with the role of science in solving the social problems of society.

Today, the orientation of the pedagogue to the development of social education has become one of the main conditions of professional activity. From this point of view, pedagogical professionalism is the peak of pedagogical activity as a socio-professional and personal phenomenon. That is, the educational process is the basis and result of this activity.

Russian psychologists - N.V.Kuzmina, A.K.Markova, A.A.Bodalev, A.A.Derkach and E.F.Zeer analyzed the possibilities of improving the qualification of the pedagogue in their scientific researches, and in them, psychological theories and concepts of professional development are explained.

And foreign scientists - R.Burns, M.Woodcock, G.Craig, A.Maslow, D.Myers and G.Allport, in their research, reveal the problems related to the pedagogue’s professional activity by trying to maintain their activity as much as possible within the framework of contradictions between management structures and colleagues.

It is known that modern policy in the field of education is related to all its subjects. However, the pedagogue should be the person most responsible for new demands and innovations.

The radicality of the educational policy, the implementation of endless reforms and the process of modernization weakens the possibilities of improving the educational system. This, in turn, requires social and professional research.

The task of training highly qualified mature personnel is a huge responsibility for pedagogues and psychologists. This requires the strengthening of scientific research in the field of pedagogy and psychology.

This monograph examines the theoretical and social foundations of pedagogical professionalism, the conditions of professional development of a pedagogue in the process of professional pedagogical training. Within the framework of this monograph, modern methodological approaches define the social aspect and relevant context of the research dedicated to professionalism as an integral professional and personal characteristic of a certain quality of activity.

The analysis of the conditions and factors for the development of pedagogical professionalism includes the determination of the essence and development of professional motivation for pedagogical activities, the dynamics of professional development of a pedagogue, and the determination of the stages of maximum success. From this point of view, it is appropriate to study professional self-awareness and professional maturity as the main psychological-pedagogical phenomenon that describes pedagogical professionalism and defines its essence. The issue of professional deformation of the teacher is revealed by the need to understand the difficulties, deforming effects and critical situations, frustrations and crises that almost every professional experience. Here we tried to identify the most typical signs of professional deformation in order to reveal the possibilities of preventing and eliminating such unpleasantness in pedagogical activity.

In general, this monograph covers the psychological and pedagogical foundations of pedagogical professionalism. In the analysis of pedagogical professionalism, it is difficult to imagine without any pedagogical or psychological foundations, because the personality of a professional pedagogue and his professional activity are a whole system. We tried to justify this in the content of this monograph.

I CHAPTER. CONDITIONS AND FACTORS OF DEVELOPMENT OF PEDAGOGICAL PROFESSIONALISM

1.1. Factors affecting the professional development of a teacher

Today, the complexity and scope of the tasks facing continuing education is determined by the ever-increasing demands placed on the pedagogue in the current socio-cultural environment. This, in turn, requires each pedagogue to study professional issues more deeply. In this regard, it is very important that the pedagogue understands himself in the professional process.

Russian psychologist A.K. Markova singles out the following as an integral description of a person in professional self-awareness:

1) a person knows his professional norms, rules, models as standards for understanding his qualities (here the foundations of his profession, professional outlook and the concept of personal work are formed);

2) he perceives these qualities in other people, that is, he compares himself with a certain specialist of medium competence;

3) taking into account the perception and evaluation of oneself as a professional by other people;

4) self-evaluation of certain aspects of himself on cognitive, emotional and behavioral bases;

5) a person can determine his positive qualities and prospects for effective creation of the “I-concept”, evaluate himself positively in general, etc.

Therefore, the development of a pedagogue’s professional activity is based on personal development. Personal development enhances the deepening of perceptions of professional activity and its radical change.

In research in pedagogical and psychological directions, the following stages of professional and pedagogical activity are determined:

1) the process before the emergence of activity - in which the necessary conditions for activity are created;

2) formation process of activity;

3) improvement of existing activities;

4) elimination of activity - this stage can also occur immediately after the second.

However, it should be noted here that qualitative changes that occur at one or another stage of the continuous pedagogical education system do not always adequately reflect the above-mentioned stages of professional and pedagogical activity development.

In the process of professional development, the emergence of crisis moments, which are points of “branching” of the choice of goal-essence for the pedagogue, plays a special role. Because this process occurs due to his age development, various obstacles in the activity, accidental impact and other unexpected situations.

The crisis that interrupts the stage of stable development of the teacher’s professional activity mainly determines the multi-vector nature of this development. If the old “schemas” of the teacher’s professional activity

are preserved in order to solve new problems, the degradation occurs until it completely disappears. If the crisis is solved by the pedagogue in new ways, then there will be increasingly qualitative changes in professional activity. That is, the growth of the pedagogue's professionalism is observed in this process.

In the system of pedagogical education, all problems in the development stages of the pedagogue's professional activity are important.

At this point, it is worth noting that it is necessary to take into account the specificity of the stage of professional development when determining the dynamics of the development of the pedagogue's activity.

It is known that the stage after higher education, which shows the professional identity of a specialist, is determined by the period of adaptation of a young specialist to professional activity. In this regard, the unique feature of pedagogical activity is that the pedagogue is the person who provides the means and conditions for this process. That is, the pedagogue is not a mechanism for transmitting any information, but he is an active co-author of the content presented to learners.

In this regard, the most important task of the pedagogue is to personalize the content of education by enriching it with personal ideas and thoughts, that is, to make it "unique" and personally significant for the learner, and to contribute to the creation of an environment where the child "lives".

1.2. Socialization and professionalization of the pedagogue in the conditions of modernization of education

Today, the successful professional socialization of a specialist is the most important economic process for society, because, as a result of socialization, a person spends his energy and state funds appropriately without excessive mistakes and shortcomings.

To date, special directions of the problems of youth socialization have been studied and analyzed in the science of pedagogy. Since the professional education system is still focused on the development of scientific and pedagogical concepts suitable for new social relations, this process should be called professional socialization.

The system of professional pedagogical education is a place of training and retraining of pedagogues.

The successful professional-pedagogical socialization of the future pedagogue implies the study of the essence, direction, content and management aspects of the process of their entry into the social environment.

This is considered to be a very rich and extensive socio-pedagogical phenomenon, and it is subject to the complex laws of social system activity. It is known that the educational process has the following three clear and mandatory sequences:

- 1) structure;
- 2) interdependence of structural elements;
- 3) functions as a system only when it has the unity of all elements with a single unifying educational goal.

The systematicity of education has a unique fundamental feature due to the fact that it serves to ensure the socialization and professionalization of the pedagogue. Therefore, the system of vocational education should be considered not only with broad pedagogical concepts, but also through the social essence in general and the socio-philosophical concept of the social essence in the individual.

In the last decade, in modern pedagogy, various approaches were based on domestic and foreign researches devoted to the theory of socialization of the individual.

So, today, the problems of youth socialization are the focus of many researchers. In particular, existing psychological and pedagogical research shows that the issues of socialization of the individual remain relevant in connection with the unstable state of society, constant socio-economic crisis and “conflict situations”. This leads to social division of society, that is, social stratification. Due to how painful and unpleasant this situation is reflected today, the task of successfully providing professional socialization of students both theoretically and practically in the process of pedagogical education becomes urgent.

Personal professionalization is the process of formation of a specialist’s personality in certain social and professional conditions. This is achieved as a result of assimilation and internalization of professional experience. In this process, it is understood that a person transforms socio-professional experience into his own values and directions, selectively and consciously introduces the norms and stereotypes of behavior accepted in this specialty into his system of behavior based on a certain mechanism. It can be seen that a person’s professional behavior, moral standards and beliefs are determined by the norms accepted in this community.

The concept of “professionalization” is used in harmony with the concepts of “professional competence” and “professionalism” known in professional psychology.

The term “professional competence” is understood by a person as hav-

ing the ability to competently perform professional tasks during special training and practical activities in the process of acquiring a profession. And the level of professionalism is having a level of skill in a certain type of occupation.

Although the concept of “professionalization” has different interpretations in pedagogy and psychology, it has a common definition. In professional activity, it is aimed at accelerating the process of acquiring the skills necessary to perform a certain task. However, the process of professionalization is not always accompanied by an increase in the knowledge and intellectual level of a specialist. It can be obtained mainly through certification in a vocational training institution, that is, in special training courses that have an appropriate license and are taught individually. Vocational education is limited to inculcating a number of skills necessary for a person to perform initial professional activities.

When clarifying the concept of “professionalization” of a person, it is necessary to approach it not only as a process of professional formation of a person, but also from the perspective of ensuring his professional socialization.

In our opinion, personal professionalization is the process of acquisition of professional knowledge, values, norms and socio-professional skills by the subject of educational activity, which allows to perform a certain social role and professional tasks. In this regard, professionalization covers not only the professional skills of a person, but also the next stages of his professional development. In addition to mastering, it already acquires social and individual experience.

So, professionalization appears as a multifaceted process and is the result of professional socialization covering the most diverse areas of human life - consciousness, communication, activity.

1.3. Professionalism as a systematic characteristic of a professional human personality

It is required to consider the personality of a professional who has undergone sufficient theoretical education and adapted to further practical activities, acquired the necessary professional experience, as professionally provided (connected). In psychological literature, V.A.Bodrov, E.A.Klimov, Yu.P.Povarenkov and N.V.Samoukina have different views on professional personality traits.

In the process of the emergence of professionalism in a person, a unique category of “professional” person is formed, which is different from the human personality, and is not considered professional in this type of activity.

We fully agree with E.A.Klimov's opinion, because he believes that it is necessary to consider professionalism not only as a high level of knowledge, but also as a person's skills and results within the scope of this activity. That is, he does not recommend looking at professionalism as the organization of the human psyche on the basis of a certain system. Likewise, we do not include professionalism in any set of signs. That is, we are based on the concept that professionalism includes only some systematic characteristics of a person. In this way, we consider professionalism as a clearly organized system of components.

V.A.Bodrov, considering the connection of professionalism in the structure of personal "professional orientation", states that professionalism is based on professional experience, professional competence, and professional knowledge that creates a tendency to professional fitness, and it can be imagined in a simplified form like the top of a pyramid.

In the growth rate (dynamics) of the stage of development of professionalism, the following can be distinguished:

a) pre-professionalism period - when a person, even if he has been working for a long time, cannot fully collect true professional qualities, because the results of his activity are not yet high enough;

b) the period of acquiring private professionalism - when a person can demonstrate stable high results only when he becomes a professional. This stage includes a set of consistent alternating situations, each of which is characterized by indicators that meet the requirements of certain internal and external criteria;

c) the period of super professionalism - close to the concept of "acme" - or skill corresponding to the peak of professional success;

d) "post-professionalism" stage - a person can be a "professional of the past", "ex-professional", but he can also be a consultant, teacher, mentor-coach.

Let's briefly consider the cases that describe the changes in the structural structure of professionalism.

A case of extensive development of professionalism, that is, focusing only on increasing the quantity and expanding the scope, without paying attention to the quality. During this state, a person gathers new knowledge, forms new skills and competencies, and to implement them, uses professionally important qualities.

Additional elements are included in the composition of professionalism, but the connections between the new elements are observed to be few and weak. Professional activity at this stage of development is charac-

terized by variable characteristics (efficiency, motivation and satisfaction) and by being a disruptive (fluctuating) process.

A state of intensive development of professionalism. A special “filtering” process takes place during the activity of knowledge formation, in which new elements are introduced. That is, useful and unusable elements that are not needed to ensure the activity are separated, and element relations that are important for the activity at this stage of development are included in the general content.

The new structure of professionalism is characterized not only by the numerical growth of its content, but also by the numerical expansion (strength) of the connections between them. Qualitative changes in the description of the activity, as well as deep changes in the professional himself, as a person and a subject of work happen.

Professional activity acquires a stable (stagnant) character. Professional self-awareness and professional self-evaluation are constantly formed in the specialist. As a result, the individualization of one’s work takes place, and the professional methods that depend only on oneself, i.e., performance of actions, decision-making, motivation of oneself and others, and methods of self-management are refined.

Striving for professionalism, that is, a state of stagnation. This stage is characterized by further “accumulation” of “destructive” elements included in the structure of professionalism. Many of these “destructive” elements are a combination of personal and generalized negative experiences that represent reasonably specific situations, but are uncritically extended later by any professional assignments.

Man does not understand the necessity of connections between elements. In the process of stagnation in the structure of professionalism, only old ties are preserved. Some of these connections begin to break in the absence of the need to activate the elements.

Due to the absence of the subject’s desire for professional development, as well as the lack of activity in this direction, the process of disconnection that occurred in previous connections becomes irreversible. According to the development of the well-known “hypothesis that is accepted without proof” in the system of theories, the connection between the elements faces a crisis, that is, it is broken.

In the studies of V.N.Druzhinin and D.S.Kontorov, it is recognized that long-lasting systems cannot exist without the development of this rule.

This conclusion is correct for the situation under consideration:

- professionalism as a system may not remain stagnant for a long time;
- the state of stagnation will inevitably lead to the decline of professionalism by including all manifestations of both the description of the subject's activity and the professional personality, as well as the levels of performance indicators.

Decline, that is, the stage of degradation of professionalism. At this stage, there is a breakdown of professionalism, a gradual breakdown of its elements, a reversal of actions and a disconnection between elements.

Therefore, one of the main distinguishing features of professional decline is the reduction of the number of elements that form the structural structure of professionalism systems. It should be noted that during the professional decline, the main role belongs to the mental process occurring in the inner world of the professional-person, and his interactions with the professional environment are of a secondary, following character.

It should be noted here that the development of professionalism is determined by the processes of stagnation and degradation. For this reason, we consider it important to note that the processes of stagnation and degradation in it in many cases depend on the person himself, the surrounding environment, his attitude towards people and the character of his ability to use the available resources.

II CHAPTER. PROFESSIONALISM OF A TEACHER AS AN INDICATOR OF HIS READINESS FOR FUTURE ACTIVITY

2.1. Personal and professional self-development of a teacher to achieve a professional level

In modern conditions of modernization of education, much attention is paid to the training of professionals who are able to compete in the labor market, who know their profession well and have qualifications. However, a highly qualified young specialist should not be limited by the knowledge that he acquired in the field of his chosen profession, but should also constantly work on himself and strive for professional development.

Many psychologists who study the professional development of the individual have analyzed the growth of the mental security of labor activity in the professional development of a specialist. In particular, one of the founders of the practical and labor orientation, as well as vocational guidance of psychology, psychologist E.A.Klimov identifies the following five main directions, which represent all the elements that have a mental con-

tent in the professional development of the individual as a subject of labor:

1) "an ever wider and more precise orientation of a person towards the natural, technical, social and informational environment";

2) "labor, i.e. the formation of a professional orientation, in particular, the development of the need for effective socially significant activities ";

3) "assimilation of socially developed methods of action, the use of means of activity and their improvement as their own achievements";

4) "the formation of a stable system of personal qualities (abilities) that allows you to successfully perform activities";

5) "development of self-knowledge ".

Of course, everyone who wants to achieve success must constantly work on himself and develop himself. Self-development affects all spheres of a person's life: his place in society, position, career, love, affection, friendship, hobbies, and so on.

Consequently, successful professional activity is impossible without self-development and striving for personal growth.

In turn, personal growth is striving for the ideal, striving for the best, and increasing self-esteem. In fact, it is an essential part of being successful in any endeavor. This is the work that a person must do for himself and his future.

Personal growth is essential for professional success. This gives people the opportunity to achieve their goals and fulfill their dreams. The gradual personal growth of a young specialist will undoubtedly lead to a change in the content of his professional activity.

The study of the problem of professional self-development in psychology is presented by scientific works on the issues of advanced training, professionalism, professional suitability. The initial research of many Russian psychologists focused on the definition of personality development activity. Therefore, in their studies, a person is studied for his suitability for the profession and successful activity in it.

Studies of professional self-development show that becoming a professional in a certain profession is possible only as a result of a combination of professionalism and personal development. It was also found that the qualities of an active subject in a person's personality are manifested depending on the duration of activity.

Consequently, the formation and manifestation of the qualities of an active subject in a person occurs in the process of his activity. A person can develop himself only through meaningful activity. It follows that a person

develops in the process of successfully mastering professional activity. To become a professional, you need to not only improve your professional skills, but also strive for personal development.

In studies carried out with specialists in various fields, changes in parameters are observed that arise in the process of determining the professional growth of a person. And it showed the importance of the self-development mechanism in the professional growth of a person. This level of achievement as a subject of human activity is traditionally the result of productive labor and is assessed by its nature and compliance with requirements.

So, the profession is a source of existence and a means of personal identity for everyone.

The human psyche plays a key role in achieving a professional level. With a little action, we can develop it or, conversely, destroy it. If we encourage people to act in their stead, we can help ensure their professional growth. Because it gives a person an incentive for self-development.

To ensure a person's professional growth, the following essential qualities must be taken into account:

1. Formation of subjectivity in personality self-development, that is, an attempt to consciously qualitatively change oneself as the main internal mechanism of personality development. In this case, subjectivity is a qualitative indicator of a person's self-development.

2. Professional self-development is a process of dialectically internally conditioned progressive self-transformation associated with the dynamics of qualitative change, which is expressed in a person's labor activity.

The professional development of a person has an individual result, which is one of the broader forms that traditionally differ from professional experience, that is, knowledge, skills and competencies.

It should be noted that it is impossible to distinguish between personal and professional development of a person in the workplace. Because this is the basic need to maximize the content of a person's labor activity. That is, first of all, to be human, to have self-awareness, to reveal their professional abilities and be able to apply them in practice.

The reason why technological and informational changes are occurring in the world today so quickly is that it is impossible to guarantee only well-acquired knowledge in the educational process, their constant and continuous improvement and the effectiveness of subsequent activities. Because in order to reach a professional level, a person needs to constantly update the acquired knowledge and skills in order to be able to analyze the

situation during his career, to track changes in legislation and regulations. Only then we will be able to recognize the results of his professional work. However, pedagogical activity, like other professions, has caused a lot of controversy about this.

It is known that the modern education system is characterized by disappointment, lateness, inaction in teaching, adherence to traditional methods and resistance to change.

It should be noted that any innovation important for the education system is very painfully perceived by the environment. That is, the traditional system of advanced training and retraining of higher education teachers cannot provide full-fledged continuous education. Because each of them is obliged to independently support their professional growth and personal development.

For the purpose of determination of the priority directions of education system in our country, raisings on qualitatively new level of spiritual and moral and intellectual development of younger generation, implementation in teaching and educational process of innovative forms and training methods according to the Presidential decrees of the Republic of Uzbekistan of September 5, 2018 № UP-5538 "About Additional Measures for Enhancement of Management System National Education" and on April 29, 2019 № UP-5712 "About approval of the concept of development of system of national education of the Republic of Uzbekistan till 2030" and also the resolution on January 25, 2021 № PP-4963 "About measures for support of research activities and implementation of system of continuous professional development in the field of national education":

- ✓ high-quality updating of content of system of life-long education, and also preparation, retraining and advanced training of professional personnel;

- ✓ training of highly educated and qualified specialists capable of professional growth and mobility in the context of informatization of society and development of new scientific technologies;

- ✓ regular updating of all aspects of education and organization of the educational process taking into account modern scientific achievements;

- ✓ creating modern information and communication technologies programs and implementing innovative projects in the field of education;

- ✓ improving teaching methods, gradual application of the principles of individualization in the educational process.

In this regard, the modernization of the education system in Uzbekistan imposes special requirements on the level of qualifications of teachers

who are able to create educational programs and textbooks of a new generation, in particular for their continuous professional and personal development.

The task of forming an independent, responsible and socially active personality, capable of successful socialization in society and active adaptation to the labor market, emphasizes the need to constantly educate teachers who have the ability to self-awareness, self-realization, personal and professional growth in determination prospects for their development.

Many scientists note that there are three ways or three possibilities to determine the prospects for the personal and professional development of a teacher. These are: professional adaptation, self-professional development and professional stagnation (crisis of activity or personal decline).

Professional adaptation allows you to adapt to all the requirements of the education system, master all types of activities and role situations. On the other hand, self-professional development allows you to regularly improve, change and, ultimately, fully realize yourself as a professional

According to the famous Russian scientist Vershlovsky, an educator may experience professional stagnation “when he stops in his own development or lives by exploiting stereotypes using old overloads”. As a result, professional activity decreases, ignorance of news increases, and what allows us to remain at the level of demand is completely lost

Personal and professional growth and self-improvement of the entire pedagogical process is one of the factors that ensure the successful work of an educator. Independent acquisition of knowledge is a type of activity that is constantly necessary for the life of a cultured and enlightened person who always accompanies him.

So, the personal and professional development of a teacher is a continuous process that affects all pedagogical activity and reveals its personal and professional potential. Of course, the educator's personal interest in self-improvement plays an important role in this. If an educator tries to deepen his professional knowledge and expand his worldview along with self-development, then his personal and professional growth as a professional will be observed.

The educator cannot be professionally formed and developed without a thorough implementation of the process of independent learning. Here we consider the concept of "independent learning" in two different senses:

- "self-learning", i.e. in the narrow sense - self-study;
- “self-creation”, i.e. in the broadest sense - “self-discovery”, “building own future”.

Stages of personal and professional development of a teacher



The second case shows that the concept of “independent learning” serves as a mechanism that transforms the educator into a creative person. Therefore, the concept of “professional growth” can be called “the search for future path.”

The broader the theoretically substantiated outlook of the educator, the easier it will be for him to find a form of presentation of the material and the most successful method, and the higher his skill will be.

Research conducted today as a subject of pedagogical professional activity emphasize that its potential is a kind of “internal support”. This allows you to create effective conditions for the implementation of adequate pedagogical activity.

Thus, human potential is a high level of awareness of life and time perspectives; It not only ensures the efficient passage of processes such as determining the path to the future and fulfilling dreams, but also improves on the basis of integrated learning. Also, the constant development of a positive attitude towards himself in a modern educator is the only chance for professional success.

The educator’s positive attitude towards himself can be strengthened by the active participation of colleagues in various professional competitions, creative associations and projects of public importance, as well as by achieving public recognition of the results of their work. Thanks to such activities, the teacher will be able to go beyond the framework of specific program activities, expand their special capabilities and receive social confirmation of their abilities and competencies. For this reason, pedagogical activity today is filled with an innovative educational environment that requires an increase in the level of professional growth and the development of personal abilities as a subject of the educational process.

The possibility of continuous personal and professional growth of an educator means the development of skills in analysis, assessment, reflection and forecasting of their actions, as well as the ability to make independent choices in times of uncertainty and responsibility for the results of activities. Therefore, the professional responsibility of the teacher contributes to the consistent achievement of goals and the consolidation of an individual development project. It should be borne in mind that the responsibility of the teacher is largely associated not only with the assimilation of personal content, but also with a sense of satisfaction from their work.

In conclusion, professional development on a regular basis is advisable for the educator in order to achieve a professional level.

2.2. Professionalism of the teacher as a pedagogical credo in the age of innovation

Each person in his life has been many times both in the role of a student and in the role of a teacher. Therefore, the teaching profession is one of the most important in the world. The teacher is the person who guides the child. But now educators are called people who have the appropriate training and are professionally engaged in pedagogical activities, i.e., issues of upbringing, education and training. It is worth paying attention to the word “professionalism”.

Teachers are engaged in pedagogical activity professionally. Professionalism is understood as a special property of people to systematically, efficiently and reliably perform complex activities in a wide variety of conditions.

The concept of “professionalism” reflects such a degree of mastery by a person of the psychological structure of professional activity, which corresponds to the standards and objective requirements existing in society.

At the level of everyday consciousness, people understand that receiving a diploma from a university graduate is not yet a sign of his professionalism. Thus, the presence of a diploma, a certificate confirming the level of his qualifications is a necessary (but not sufficient) condition for the subsequent development of professionalism. A person can acquire this property as a result of special training and long work experience. But he may not acquire it, but only “be listed” as a professional.

Speaking about the fundamental nature of pedagogical education, we mean not only the subject area, but also the psychological and pedagogical area, since they are inseparable in teacher training. The professionalism of a teacher includes, in addition to versatile knowledge, skills and abilities, such important components as experience and professionally significant

personal qualities of a creative plan. In our domestic tradition, education is understood as a dual process of education and upbringing. Forming the readiness of graduates to carry out the tasks of education is one of the primary problems. We know how difficult the moral and ethical atmosphere in society is now. In the conditions of crises and cataclysms that our fatherland experienced more than once, it was the teacher who always became the main stronghold and custodian of the best spiritual values. And today the school is one of the few social institutions in which all citizens of our country receive life lessons.

The beginning of schooling becomes the start of a new development in the development of the child, on which new mutual forms of cooperation with adults and peers arise. The relationship of a student with other people is understood as one of the most important factors in his personal development, the unification of their efforts in order to achieve a common result. The special role of this interaction belongs to the teacher. The teacher contributes to the rapprochement of children, creating an atmosphere for common work, cooperation, mutual understanding. The success and self-realization of the student in the future largely depends on what kind of teacher. The most important component of professionalism is competence (the ability to actual performance of activities).

There are four types of professional competence:

1. Special or activity characterizes the possession of activities at a high professional level and includes not only the availability of special knowledge, but also the ability to apply them in practice.

2. Social characterizes the possession of ways of joint professional activity and cooperation.

3. Personal characterizes the possession of ways of self-expression and self-development. Ability to plan your professional activities, make decisions independently, see the problem.

4. Individual characterizes the possession of self-regulation techniques, readiness for professional growth, the presence of sustainable professional motivation.

In dynamics, four stages of development of professionalism can be distinguished:

Pre-professionalism, when a person is already working, but does not have the full range of qualities of a true professional, and the effectiveness of his work is not high enough. Actually professionalism, when a person becomes a professional, demonstrates consistently high results; this stage includes a set of sequentially changing phases. Super professionalism or

skill -approaching the pinnacle of professional achievement. “Post-professionalism”, when a person can remain a professional in the past, or may turn out to be an adviser, mentor for other specialists.

Given the active role of a person in the process of professionalization, three criteria can be distinguished:

1. Professional productivity characterizes the level of professionalism of a person and the degree of compliance with his social and professional requirements. This criterion characterizes such objective performance indicators as the quantity and quality of products, productivity, and reliability of professional activity.

2. Professional identity characterizes the significance of a profession and professional activity for a person as a means of satisfying his needs and developing his individual resource. It is assessed on the basis of subjective indicators, including satisfaction with work, profession, career, self.

3. Professional maturity indicates a person’s ability to correlate their professional capabilities and needs.

We single out the following components of a teacher’s professional competence:

The motivational-volitional component includes: motives, goals, needs, values, stimulates the creative manifestation of the individual in the profession; implies an interest in professional activities.

Functional is manifested in the form of knowledge about the methods of pedagogical activity necessary for the teacher to design and implement a particular pedagogical technology.

The communicative component of competence includes the ability to clearly and clearly express thoughts, convince, argue, build evidence, make judgments, convey rational and emotional information, establish interpersonal connections, coordinate one’s actions with the actions of colleagues, choose the optimal style communication in various business situations, organize and maintain a dialogue.

The reflexive component is manifested in the ability to consciously control the results of one’s activity and the level of one’s own development, personal achievements; the formation of such qualities and properties as creativity, initiative, focus on cooperation, co-creation, a tendency to introspection. The reflexive component is the regulator of personal achievements, the search for personal meanings in communication with people, self-management, as well as the stimulus of self-knowledge, professional growth, improvement of skills, sense-creating activity and the formation of an individual style of work.

These characteristics of the professional competence of a teacher cannot be considered in isolation, since they are integrative and holistic.

An educational institution can attract an applicant in different ways. It may be the very process of acquiring knowledge and skills, which leads to the expansion of the horizons and life opportunities of the child. It can be a feeling of joy from being in a team from communicating with peers. This may be the excitement of communicating with a teacher, opening up something new for his spiritual world.

It is clear that the teacher is precisely the key figure that occupies the thoughts of the student during the training period and plays an important role in his life.

Daily, entering the class, the teacher or master becomes the object of attention. Teenagers' impressions of an educational institution often remain unchanged for the rest of their lives. Having already turned into parents, they tell their child about a mathematician, a historian and a physical education teacher with the same feelings that were formed back then, in their youth.

The relationship between teacher and student is usually uneven. By the right of the "strong" teacher can always express to the student everything that he thinks about him. But the student almost never succeeds in publicly declaring his "assessment" of the teacher.

The teacher educates first of all with his subject. Therefore, in taking care of updating the content of education, we must not forget the great educational role of such school subjects as the Russian language, literature, history, fine arts, and music. They play the most important role in shaping the system of life values, the central place in which is occupied by patriotism and civic responsibility, spirituality and a high general culture. This is especially important today, when young people are experiencing the aggressive, corrupting influence of base mass culture. But the one who is himself a person will be able to fulfill the high mission of the Teacher, "a prudent and warm-hearted mentor".

The education system has changed dramatically in recent years. It has become variable, teachers work on various programs, including copyright ones; integrated courses new to the school are being introduced; there are variable textbooks; there is an active discussion about profile education (although, as we know, there are still many ambiguities even with the definition of profiles, not to mention their content). Today, the teacher is required to have research skills, the ability to design a modern educational process, the ability to use modern means of solving pedagogical problems, the ability to build the content of the lesson in accordance with the goals.

The implementation of professional functions leads to the formation of three main substructures of the teacher's personality:

- professional orientation;
- professional competence;
- professionally-important personality traits.

Consequently, pedagogy is only half science and half art. Therefore, in the first place is the presence of pedagogical abilities. Success in the upbringing of each person depends on many factors and conditions. The teacher acts as a kind of filter for all educational influences. And the teacher can perform these functions being a versatile educated person. Patience and optimism are the most important professional qualities of a teacher. Another quality is related to pedagogical communication. The effectiveness of pedagogical influence will be largely determined by the volitional properties of the teacher, his perseverance, initiative, determination, determination and independence.

2.3. Formation of virtual academic mobility of future teachers in the context of professional education information

Constant changes in the education system in connection with the socio-economic development of society determine the mobility of the teaching profession. That is, he will adapt to new professional conditions, work with a new generation of various educational standards and recommended educational literature, develop a new fund of assessment tools, modern teaching methods in his activities and the use of pedagogical techniques and information technologies, use educational and Internet resources, tolerance students, effective communication with them, the ability to resolve disputes. These skills will be developed in the process of training future teachers in higher educational institutions and their academic mobility will be formed. This process is for students:

- ✓ Firstly, determining the path of personal action in education;
- ✓ Secondly, it provides students with the opportunity to independently choose from the courses offered by the university that they will need in their future careers.

In the context of public awareness, the problem of the formation of academic mobility of future specialists in the field of higher education is one of the most urgent. Of course, with the help of information and communication technologies or participation in online courses at various higher educational institutions, virtual academic mobility of future specialists can

be created. This is mainly due to the fact that future teachers are focused on professional development. That is, it involves the acquisition of important professional qualities in a university, consisting of certain structures necessary for the professional training of future specialists.

To take a closer look at the concept of "virtual academic mobility", we first focus on the concept of "mobility". This concept is widely used in psychology, sociology and pedagogy. The term "mobility" comes from the Greek word for mobility. In psychology, the concept of "mobility" is defined as "readiness to respond quickly to mobility", "quick onset of action".

The term "mobility" was systematically used in sociological research in the 1920s and was first introduced by the Russian sociologist P. A. Sorokin. As the term is used in a broad sense, it is interpreted in a contextual manner. For example: "professional mobility", "social mobility", "vertical mobility", "academic mobility", "virtual mobility" and so on.

Researchers studying the concept of "academic mobility" allow students to independently form and implement their professional and educational training "in accordance with their aspirations and interests" through the choice of educational direction, scientific and educational modules are considered as a process associated with opportunities provided by universities.

The concept of "academic mobility" of students can also be associated with geographic mobility. This is because it is understood as the process of changing people or groups around one person as a result of moving from one region to another in order to maintain their previous social status. Therefore, the concept of "academic mobility" is defined here as "one of the forms of education associated with the continuation of the educational process of students abroad or transfer to another university in their country".

In this case, in connection with the transfer, the student is limited to the period of re-submission of the application for the completed stage of study and previous subjects, and a certain period - for an additional semester, i.e. before the end of the mobility process, he returns to the base higher educational institute.

Other researchers associate academic mobility of students not only as a social process or exchange of educational goals, but also as an integral quality of personality that is formed in the learning process. In this case, we are trying to give a definition of virtual academic mobility.

Academic mobility of future teachers includes such personal qualities as "changing the learning environment and self-improvement, preparation or adaptation to the learning process".

Virtual academic mobility of a student is formed in the process of distance learning, which is organized via the Internet in partnership with other universities within the framework of the university curriculum. This means that virtual academic mobility is considered as the student's participation in the learning process at another higher educational institution. That is, she will be able to study a particular subject or module using Internet technologies and online courses.

Comparison of student academic mobility with virtual academic mobility is determined by the fact that there is no need to territorially change the educational process due to the fact that information and telecommunication technologies achieve all the benefits of physical and legal mobility.

There are several forms of virtual academic mobility:

- ✓ openness and popularity of education;
- ✓ opportunity to train leading specialists in the country and the world;
- ✓ organization of student activities based on more convenient interactive and multimedia forms of presentation of educational materials;
- ✓ individualization of the educational process;
- ✓ no restrictions on the place and time of training;
- ✓ Ability to teach at several educational institutions at the same time;
- ✓ choosing additional courses that correspond to the professional interests of the student and determining the way on individual learning;
- ✓ possibility of preliminary testing of the programs of the selected university.

It follows that the virtual academic mobility of future teachers is defined, on the one hand, as an important part of the educational process, and on the other, as personal qualities necessary for their professional activities.

In conclusion, the virtual academic mobility of future teachers is determined by the readiness of other educational institutions for self-improvement through the use of educational resources. Thus, virtual academic mobility allows future teachers to master the process of mastering a particular subject or module through the use of modern information and communication technologies and the organization of various educational events through online courses, other training in a virtual learning environment. provides interaction with the subjects of the process and prepares them for independent learning.

III CHAPTER. THE EMERGENCE OF TEACHER PROFESSIONALISM AS A PSYCHOLOGICAL-ACMEOLOGICAL MODEL OF ACTIVITY

3.1. Psychological conditions for personal and professional development of future teachers

In the context of modernization of education, the problem of professional training of competent, competent, competent specialists in the labor market, who know their profession well and have professional competence, is of particular importance. One of the important factors in the implementation of this requirement is that it focuses on the professional self-development of the future specialist.

To the student:

- ✓ good professional training and self-professional development skills;
- ✓ independent work and communication skills to become a mobile specialist;
- ✓ it is important to understand that being able to adapt to new working conditions can make you a successful professional (specialist) in market conditions.

In this regard, there is a problem of improving the theoretical and practical training of future teachers who are able to effectively solve tasks related to the adaptation and socialization of today's youth to the realities of society. The professional development of the future educator requires professional orientation to the implementation of pedagogical activities, the development of reflexive skills and the availability of abilities for self-professional formation.

The analysis of policy documents defining the content of professional training of future teachers shows that today in the content of education in higher education institutions are not clearly focused on self-professional development due to insufficient consideration of specific features of personal and professional development. In addition, although certain experience has been accumulated for in-depth study in the fields of philosophy, psychology and pedagogy, the problem of self-professional development of future teachers has not been studied as a subject of special pedagogical and psychological research. In this regard, the issue of personal and professional development of future teachers is one of the most pressing issues.

The modern pedagogical process is a multifaceted phenomenon that reflects the complexity and contradictions of socio-cultural life, in which

the problems that arise are easily solved under the influence of conventional methods.

The main idea of the problem of professional self-development is to determine the development of the individual by activity. That is, in this case, a person is studied in terms of suitability for their profession and the success of their activities.

So, as a result of the unity of professional and personal development, it is possible to become a professional at a professional level.

Studies of the study of the individual show that the formation and manifestation of the qualities of the subject of active activity is related to the duration of this process.

In this regard, the well-known Russian psychologist A.K.Markova, observing the features of self-development of the individual as a subject of activity, shows that professional activity is a favorable condition for creative development of each specialist.

Of course, the personal-professional development of an individual is a broader concept than the traditionally distinguishable forms of professional experience, i.e. knowledge, skills and competencies.

It is known that the impact of changing attitudes on a person's personal and professional development differs from the goals and results of activities, which is observed in the growth of the concept of "I", self-esteem, personal goal setting, self-perception, change of thinking and work methods.

Therefore, it is necessary to study the personal and professional development of specialists in order to develop special psychological technologies for managing the development of important professional qualities of self.

The profession is a source of existence and a means of personal self-awareness for person.

Russian psychologist A.K.Markova in the process of describing the types of professional competencies highlights the individual competencies of the individual, distinguishing aspects of integrated professional self-development of labor. And professional self-development of that person:

- professional self-awareness, self-acceptance as a professional;
- permanent appointment in the workplace;
- development of self-professional skills,
- interdependence with the profession, ie taking responsibility for one's abilities, personal characteristics and behavioral actions;

- designing professional development, creating a strategy for self-professional growth;
- emphasizes that it allows you to achieve your professional goals and gain a professional position.

It is known that in the context of the revision of the conceptual system of professional views in higher education, the identification of psychological and pedagogical factors that stimulate self-awareness, self-improvement and personal-professional development of future teachers is one of the most pressing issues today.

Today, educational goals in higher education are interpreted by generalized notions of learning activities as an integral system, such as the formation of students' skills of independent acquisition of professional knowledge, and the notion of having ways of working through mastering a holistic description of educational material. For this reason, in recent years, the psychology of higher education has focused on the development of psychological tools to accelerate personal and professional development in conditions that "mimic" a person's future employment. That is, in this case, it is intended to create conditions for the joint organization of labor activity with the learning movement of the learner. In particular, in the research of Russian psychologists A.A.Verbitsky and G.N.Ilina, the concept of self-development of a professional person is considered "a necessary condition for the formation of important professional qualities that ensure dynamic adaptation to the changing social environment and activities".

The importance of a person's personal-professional development is determined by the task of regulating this process. Because a person makes this or that decision taking into account his subjective attitude to different aspects of the surrounding reality. Also, the scope of this decision includes the attitude of man as a subject of social relations to himself and to others in general. The level of professional maturity of a person is reflected in the ability to make their own decisions and make conscious choices in complex situations.

It is well known that a person who chooses a profession independently, based on the system of attitudes and values, based on social requirements, adapts to working conditions more quickly and easily, and feels satisfied with his work. In this regard, the problem of personal and professional development of the individual is one of the current problems of the psychology of higher education.

In many cases, the problem of self-development has been studied in the context of general psychological problems. In particular, Russian psychologists A.G.Kovalev and I.N.Semenov studied the issues of self-man-

agement, L.I.Ruvinsky studied self-education, G.N.Ilina studied the issues of professional self-development of students of technical higher education institutions. However, in general, an effective system of personal and professional development of the future specialist remains one of the future issues of higher education psychology.

The issues of independent professional development of the teacher in connection with the personal self-development of the future specialist is one of the most important criteria for the humanization of the pedagogical process in the educational institution.

As a means of professional education at the Pedagogical University, each process that creates the spiritual and moral environment of this educational institution has a special place. For example: the system of interaction between students, pedagogical communication methods, communicative universal learning activities, joint research and other creative activities, as well as informal communication of teachers with students, etc. If the spiritual aspects of this relationship are strictly maintained in the teaching of all disciplines at the university, then the personal and professional self-development of teachers and students will be a decisive factor.

It should be noted that the criteria for the development of this educational institution is provided in the case of active personal self-development of the subject of the educational process.

The professional self-development of a future specialist is a holistic, timely, widespread, multi-component, personal and professionally important process focused on the goals of the activity. It also helps to the prospective specialist:

- constant strive for self-transformation;
- consciously manage their professional development:
- choose the goals, ways and means of forming an individual style of professional activity that allows for self-improvement;
- understand self-awareness and best practices as a means of self-awareness and self-improvement.

It is obvious that the process of preparing future teachers for self-professional development takes place when certain *external* and *internal conditions* are created.

The process of realizing the readiness for self-professional development on the basis of a carefully designed program is a leading *external condition*. That is, it includes: targeted, meaningful, organizational-functional, diagnostic directions.

Targeted direction of self-professional development of future teachers is realized through their professional self-development, self-awareness and professional self-improvement, which contributes to the creation of an individual style of professional activity.

A meaningful direction of self-professional development of future teachers forms a system of professional knowledge based on the practical skills necessary for professional self-development and its implementation.

Organizational and practical direction of self-professional development of future teachers includes forms, methods and tools aimed at improving the level of preparation for professional self-development.

The diagnostic direction of self-professional development of future teachers is a set of diagnostics that allows to measure the level of readiness for professional self-development using author's programs and reflects its growth.

The process of shaping the readiness of the future teacher for professional development is **an internal condition**.

The following criteria are provided for future teachers:

- professional orientation of the person;
- ability to implement professional self-development;
- preparation for self-professional development based on the development of reflexive skills.

Indicators of readiness of future teachers for professional self-development are:

- the need for professional self-development;
- volume of knowledge and skills in the field of professional self-development;
- need for professional knowledge, skills and competencies;
- design their personal and professional development and achieve their professional goals,
- the ability to evaluate their own actions in the process of targeted professional development;
- ability to direct their professional development in the right direction.

In conclusion, professional self-development is a multifaceted personal and professionally important process that is a means of self-improvement and professional achievement that allows an individual to form an individual work style and help them understand their independent activities. Therefore, in the process of professional training of future teachers in high-

er education institutions, it is expedient to create the content of education, taking into account the specifics of personal and professional development, and clearly direct them to this process.

3.2. Formation of teacher professionalism as an integration psychological event in the context of globalization of education

It is known that pedagogical activity, like other professions, changes in the course of historical development. In the current conditions of modernization of education, some teachers take new socio-cultural forms, others do not undergo significant changes, while others may suffer from existing changes in society or leave their profession and change their profession, not at all withstanding it. However, as a result of the teacher's constant work on himself, striving for independent personal and professional development, over time, he achieves the achievement of great social significance - professionalism.

Today there are various pedagogical-psychological, philosophical-sociological approaches to the study of the concept of "professionalism", but the formation of pedagogical professionalism as an integrative psychological phenomenon has not been studied.

In all the studies studied, the concept of "professionalism" is often characterized by the effectiveness or high level of human productivity. In particular, K.K. Platonov studied the high level of individual productivity, medium and low levels of productivity. He calls high productivity "professionalism." That is, high productivity, ensuring the development of the personality and the preservation of his health as a specialist, is characterized by a pronounced expression of such positive socially significant qualities as productivity, tension, courage and determination, accuracy of assumptions and assumptions, reliability, etc., organization, stability and experience.

According to the theory of the psychologist A.A. Derkach, *professionalism of activity* is a description of the quality indicators of the subject of labor, which is based on deep professional skills and competencies of a person, various knowledge and skills that ensure productivity, including creative solutions, high and sustainable efficiency, reflecting the possession of modern methods of solving professional problems and modern algorithms that encourage demonstration.

Personal professionalism is a description of the qualitative indicators of the subject of labor, which manifests itself in personal, professional and professionally important qualities aimed at the gradual development of a specialist, high development of acmeological invariants of professionalism, deep creativity, movement and aspirations, motivation and values.

Thus, personality and professionalism of activity are two sides of the same phenomenon, which are in dialectical unity. That is, it is a purposeful separation of the content of various acmeological technologies used in the process of solving practical problems related to the development of professionalism. However, some manifestations of this dialectical unity may dominate at different stages of the d

The peculiarity of pedagogical activity in modern conditions of socio-cultural changes is that the teacher is not only a mechanism for setting tasks for students in the educational process, but also a co-author who actively creates this content with them. The main task is to direct the content of education towards the individual, to turn it into a personal value for the student, that is, to create an atmosphere that will act as “ours”. This, in turn, requires the teacher to actively enter the system of values and develop creative thinking, form the image of "I" as a subject of active activity, focus on self-expression and self-expression. Total.

Pedagogical professionalism:

- ✓ first of all, the ability to measure the results of one's work and justify the process that affects the achievement of quality indicators in activities;
- ✓ secondly, it is defined by the metrics of creativity at different levels that ensure its success in the work process.

At the same time, it is important to clearly show the teacher's ability to check the quality of practical activity, mainly as a leading sign of professionalism. Of course, the problem of forming a professional teacher is explained by the fact that it begins with the ability to analyze the results of one's activity. The teacher first rises from analyzing the effectiveness of problem solving to understanding and analyzing tactical tasks, and then from understanding and predicting strategic pedagogical tasks. Thus, the teacher constantly restores his activity and corrects the form of its results.

All units of measurement that determine the level of pedagogical professionalism are in harmony with the following qualities of a teacher-coach: inspiration, dear friend, intellectual, coach, speaker, organizer, teacher, psychologist, sociologist, technologist, etc.

The following criteria of pedagogical professionalism are distinguished:

- ✓ subjective (individual spiritual institutions associated with the level of education of a person);
- ✓ objective coverage of important professional qualities (tolerance, kindness, sensitivity, composure, gentleness, compassion, kindness).

Pedagogical professionalism is defined as an integrated vocational ed-

education, whose professional growth and skills determine all areas of pedagogical activity.

The content of pedagogical professionalism is a generalization of scientific knowledge, skills, abilities, directions, spiritual and moral qualities of a person, the main motives and high results of pedagogical activity, as well as the fulfillment of subjective and social roles.

Thus, pedagogical professionalism as a subject of pedagogical activity is a characteristic that reflects the quality of the teacher's personality, high professional competence and readiness to effectively solve pedagogical problems. Also, the teacher consists of *practical structures*.

The motivational and value structure determines the focus of pedagogical professionalism on the chosen professional and pedagogical activity, reflecting the spiritual and moral content. This structure includes a set of ideas about the professional and creative activity of a teacher, the definition and achievement of an independent goal, his professionalism (professional "I-concept") and the need for creativity.

The cognitive structure is mainly formed in the process of vocational education and is an independent acquisition of knowledge by a teacher and, to a certain extent, the development of his knowledge.

The practical structure of the activity includes a set of effective professional skills, ways to achieve high results of pedagogical activity and the presence of perfect algorithms.

The Professional Component Model consists of the following components:

- a set of human qualities, i.e. personal orientation, attitude to the environment, originality of creative aspects, intellectual and individual operator qualities (dexterity, dexterity, business acumen, willingness to act, efficiency), sensitivity, striving for professional results, imagine your place in a team of colleagues;
- practical actions at a professional level (motor skills, i.e., active movement of an organ, skill, skill, qualifications);
- to understand their activities at a professional level based on their inner feelings (to receive, create and process information about the profession, professional understanding, professional knowledge, skills and abilities);
- awareness, professionalism, professional knowledge, experience and culture at a professional level (professional orientation in the field of scientific and theoretical knowledge, professional knowledge in the field of science);

- human psychodynamics, i.e. the state of cognitive self-awareness in extreme conditions of life (the intensity of experiences, the speed of their transition from one state to another, workload and difficulties in this professional sphere);

- in the process of performing professional tasks, depending on the requirements of the job, such as understanding your age and gender.

Personality structure at the professional level: personality motivation (orientation and its types); personality traits (abilities, character and its qualities, psychological process and mental states); holistic description of the personality (self-awareness, individual style, creativity as creative potential).

It should be noted that in professional self-awareness as an integrative description of a personality:

1) a person's understanding of professional norms, rules and an expert model as a standard for understanding the available qualities, that is, based on the scientific and theoretical foundations of the profession and the concept of personal activity;

2) understanding of these qualities by other people, i.e. comparing oneself with some professionally qualified specialists;

3) professional self-knowledge, assessment and fixation of the expectations of other people;

4) a person's self-assessment of his individual characteristics in terms of educational, pedagogical and spiritual characteristics;

5) self-determination by a person of positive qualities, positive creation of the "I-concept" in the future and positive self-esteem.

There is an increase in the effectiveness of pedagogical professional activity as a process of personal development. Personal development contributes to a change in professional activity and a deepening of ideas about it. The change in professional activity, its organization at a new qualitative level will lead to the professional growth of the teacher in the future.

Thus, pedagogical professionalism presupposes an integrative psychological phenomenon that characterizes its essence. By participating in the educational and professional process, and then in the professional activity of a teacher, primarily as a future specialist, he not only creates exactly the same ideas about his profession and personal capabilities, but also actively develops them. He also develops as a person, forming an attitude towards himself as a subject of professional activity and as an active participant in it.

REFERENCES

1. Aakre, B. M., Ito, T., & Kato, T. (2014). Pedagogical Professionalism and Professionalization in Norway and Japan.
2. Alemdag, E., & Cagiltay, K. (2018). A systematic review of eye tracking research on multimedia learning. *Computers & Education*, 125, 413-428. <https://doi.org/10.1016/j.compedu.2018.06.023>
3. Andrews, D., & Abawi, L. (2017). Three-dimensional pedagogy: A new professionalism in educational contexts. *Improving Schools*, 20(1), 76-94.
4. Anh, P.T.K. (2019). Some theoretical issues about teacher assessment need to be trained to meet the requirements of general education innovation. *Journal of Educational Sciences*, Hanoi National University of Education, Vietnam, 64(1), 185-194.
5. Attwell, G. (1997). New roles for vocational education and training teachers and trainers in Europe: a new framework for their education. *Journal of European Industrial Training*, 21, 256-265.
6. Baumert, J. & Kunter, M. (2006). Stichwort: Professionelle Kompetenz von Lehrkräften [Keyword: teachers' professional competence]. *Zeitschrift für Erziehungswissenschaft*, 9 (4), 469-520. Hillsdale: Erlbaum.
7. Bayarystanova, E., Arenova, A., & Nurmuhametova, R. (2014). Education system management and professional competence of managers. *Procedia-Social and Behavioral Sciences*, 140, 427-431. <https://doi.org/10.1016/j.sbspro.2014.04.448>
8. Campbell, L. (2019). Pedagogical bricolage and teacher agency: Towards a culture of creative professionalism. *Educational Philosophy and Theory*, 51(1), 31-40.
9. Cochran-Smith, M. (2005). Teacher educators as researchers: multiple perspectives. *Teaching and Teacher Education*, 21, 219-225.
10. Collins, A., Brown, J.S. & Newman, S.E. (1989). Cognitive Apprenticeship: Teaching The Crafts of Reading, Writing and Mathematics. In L.B. Resnick (Eds.), *Knowing, Learning And Instruction. Essays In Honour Of Robert Glaser* (453-494).
11. Dalli, C. (2008). Pedagogy, knowledge and collaboration: towards a ground-up perspective on professionalism. *European Early Childhood Education Research Journal*, 16(2), 171-185.
12. Edmond, N., & Hayler, M. (2013). On either side of the teacher: perspectives on professionalism in education. *Journal of Education for Teaching*, 39(2), 209- 221.
13. Ginaya, G., Kanca, I. N., & Sri Astuti, N. N. (2020). Designing problem-based learning (PBL) model for tourism vocational education in 4.0 industry. *International Journal of Linguistics, Literature and Culture*, 6(1), 14- 23. <https://doi.org/10.21744/ijllc.v6n1.808>

14. Guerriero, S. (ed.) (2017), *Pedagogical Knowledge and the Changing Nature of the Teaching Profession*, Educational Research and Innovation, OECD Publishing, Paris.
15. Finch, J. (1987). The Vignette Technique in Survey Research. *Sociology*, 21 (1), 105-114.
16. Hatton, N. & Smith, D. (1995). Reflection in teacher education: towards definition and implementation. *Teacher and Teacher Education*, 11 (1), 33-49.
17. Hattie, J. (2003). Teachers make a difference: What is the research evidence? Paper presented at the Australian Council for Educational Research Annual Conference on Building Teacher Quality, Melbourne (Australia).
18. Huong, H.T. L. (2019). Proposing a number of professional capabilities of teacher 4.0 for education students. *Journal of Educational Sciences*, Hanoi National University of Education, Vietnam, 64(2A), 38-49.
19. Jeffries, C. & Maeder, D.W. (2004). Using vignettes to build and assess teacher understanding of instructional strategies. *The Professional Educator*, 1 & 2, 17-28.
20. Ingvarson, L. C. (2001). Strengthening the profession: A comparison of recent reforms in the USA and the UK. In *Australian College of Education Seminar Series*.
21. Klieme, E., Artelt, C., Hartig, J., Jude, N., Köller, O., Prenzel, M., Schneider, W. & Stanat, P. (2010). PISA 2009 – Bilanz nach einem Jahrzehnt [PISA 2009 – 10 years after]. Münster: Waxmann.
22. Kolb, D.A. (1984). *Experiential learning. Experience as the source of learning and development*. Englewood Cliffs: Prentice-Hall.
23. Khanh, M.Q. & Phuong, N.N. (2017). Pedagogical professionalism improvement for lecturers in bachelor's degrees in Educational Psychology and Education at higher education institutions. Scientific conference, Vietnam.
24. Khanh, M.Q. (2020). Current status of forming pedagogical professionalism for undergraduates in Hanoi National University of Education, *Journal of Educational Sciences*, Hanoi National University of Education, Vietnam, 65(4), 48-59.
25. Khanh, M.Q. etc. (2019). Theoretical issues in the formation of pedagogical professionalism for students at Vietnam's National University of Education nowadays" Science and technology project at the university level, code SPHN 16-02.
26. Lapuzina, O., Romanov, Y., & Lisachuk, L. (2018). Professional Ethics as an Important Part of Engineer Training in Technical Higher Education Institutions.
27. Latini, N., Bråten, I., & Salmerón, L. (2020). Does reading medium affect processing and integration of textual and pictorial information? A multimedia eye-tracking study. *Contemporary Educational Psychology*, 62, 101870.

28. Lauer mann, F. (2017). Teacher motivation, responsibility, pedagogical knowledge and professionalism: A new era for research.
29. Lauer mann, F., & König 7HDFKHUV· SURIHVVLQRQDO FRPSHWH-QFH DQG wellbeing: Understanding the links between general pedagogical knowledge, self-efficacy and burnout. *Learning and Instruction*, 45, 9-19. <https://doi.org/10.1016/j.learninstruc.2016.06.006>
30. Lukman, Abdulhak, I., & Wahyudin, D. (2016). Learning model development WR LPSURYH VWXGHQWV· RUDO FRPPXQLFDWLRQ VNLOO D UHVHDUFK DQG GHYHORSPHQW study on english as a foreign language (EFL) subject in all junior high schools in north of lombok, west nusa tenggara province). *International Journal of Linguistics, Literature and Culture*, 2(2), 147-166.
31. Messner, H. & Reusser, K. (2000). Die berufliche Entwicklung von Lehrpersonen als lebenslanger Prozess. *Beiträge zur Lehrerbildung*, 18(2), 157-171.
32. Mulder, R.H., Messmann, G. & Gruber, H. (2009). Professionelle Entwicklung von Lehrenden als Verbindung von Professionalität und professionellem Handeln [Professional development of teachers as a combination of professionalism and professional actions].
33. In O. Zlatkin-Troitschanskaia, K. Beck, D. Sembill, R. Nickolaus & R.H. Mulder (Hrsg.), *Lehrprofessionalität. Bedingungen, Genese, Wirkungen und ihre Messung* (S. 401-409). Weinheim: Beltz.
34. Osyka, G., & Stadnik, N. (2021). Conditions for the development of psychological and pedagogical competence of teachers of vocational (professional and technical) education. *Linguistics and Culture Review*, 5(S3), 678-696. <https://doi.org/10.21744/lingcure.v5nS3.1552>
35. Salaeva M.S. Psychological conditions for personal and professional development of future teachers. // Washington DC, USA *International Journal of Engineering and Information Systems (IJEAIS)*. ISSN: 2643-640X. With Impact Factor: 3.2. Vol.5 Issue 3, March - 2021.- P.231-233.
36. Salaeva M.S. Personal and professional self-development of a teacher to achieve a professional level. // Washington DC, USA *International Journal of Engineering and Information Systems (IJEAIS)* ISSN: 2643-640X. With Impact Factor: 3.2. Vol.5 Issue 3, March - 2021.- P. 234-237.
37. Salaeva M.S. Formation of teacher professionalism as an integration psychological event in the context of globalization of education // Washington DC, USA *International Journal of Trend in Scientific Research Development (IJTSRD)*. Innovative Development of Modern Research. With Impact Factor: 6.410. E-ISSN 2456-6470. Special Issue – IDMR. April 2021.- P.114-116.
38. Salaeva M.S. Formation of teacher professionalism as an integration psychological event in the context of globalization of education // Hindiston. *International Journal of Trend in Scientific Research and Develop-*

- ment (IJTSRD) eISSN: 2456-6470 Impakt faktor: 6.005. Special Issue – IDMR2021. April 2021. - P.109-111. Available Online @ <https://www.ijtsrd.com>
39. Salaeva M.S., Djumabayeva M. Formation of virtual academic mobility of future teachers in the context of education information // *International Multidisciplinary Scientific Journal (IMSJ)* ISSN: 2091-573X. With Impact Factor: 3.2. Volume 1. Issue 1, June 2021.- P. 36-37. Google scholarship <https://www.sciencepublish.org/>
 40. Salaeva M.S. Formation of virtual academic mobility of future teachers in the context of education information // “Образование и наука в XXI веке” международный научно-образовательный электронный журнал. ISSN: 2658-7998. Выпуск №15 (том 3) (июнь, 2021). - С.480-484.
 41. Sauer, S. (in progress). Die Erfassung pädagogischer Professionalität von Lehrenden – Konstruktion und Überprüfung eines Messinstruments [Acquisition of paedagogical professionalism of teachers – construction and validation of an instrument]. Dissertation. Universität Regensburg.
 42. Schön, D. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.
 43. Smyrnova, T. A., Bilova, N. K., Lynenko, A. F., Osadchaya, T. V., & Levytiska, I. M. (2021). The axiological approach to the training of students of pedagogical universities. *Linguistics and Culture Review*, 5(S4), 171-182. <https://doi.org/10.21744/lingcure.v5nS4.1570>
 44. Sriprakash, A. (2010). Child-centred education and the promise of democratic learning: Pedagogic messages in rural Indian primary schools. *International Journal of Educational Development*, 30(3), 297-304. <https://doi.org/10.1016/j.ijedudev.2009.11.010>
 45. Suryasa, I.W., Sudipa, I.N., Puspani, I.A.M., Netra, I.M. (2019). Translation procedure of happy emotion of english into indonesian in k&E2§a text. *Journal of Language Teaching and Research*, 10(4), 738-746
 46. Shulman, L.S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57, 1-22.
 47. Voitovska, O., Tolochko, S., & Ridei, N. (2019). Professional and Pedagogical Professionalism.
 48. Yang, F. Y., Chang, C. Y., Chien, W. R., Chien, Y. T., & Tseng, Y. H. (2013). Tracking learners’ visual attention during a multimedia presentation in a real classroom. *Computers & Education*, 62, 208-220. <https://doi.org/10.1016/j.compedu.2012.10.009>
 49. Zulfija, M., Indira, O., & Elmira, U. (2013). The professional competence of teachers in inclusive education. *Procedia-social and behavioral sciences*, 89, 549-554. <https://doi.org/10.1016/j.sbspro.2013.08.892>

CHAPTER 5

FAMILY PEDAGOGY-AS A SCIENCE

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The goals and objectives of the subject of family pedagogy. The role of family and society in the upbringing of a perfect person based on its continuity in upbringing, continuity, is a holistic legal process. Family pedagogy serves in the perfect fulfillment of the priority tasks of society in the field of individual education in an important state policy, education and education is the activity of the parents who test and put into practice the procedures and rules for commonly raising children.

Family pedagogy is a teaching discipline to be able to work on oneself, to apply selected motor methods and see the result, and to have the art of upbringing.

Family pedagogy follows:

- * applies to the modern level of demand and educational laws of Education;
- * The content of upbringing in the family;
- * methods and tools used in raising children in the family;
- * The combination of raising children in the family with the spiritual development of humanity;
- * vs. following the skills and culture of raising children in the family.

The purpose of family pedagogy:

- focuses on the study of the state, and laws of problems related to family education.

The tasks of family education are as follows:

1. Solving problems related to family education.
2. Raising a perfect person who meets the priority requirements of the state in increasing the effectiveness of Family Education.
3. Adherence to pedagogical principles in the appropriate use of national values in family education.
4. The use of achievements of Science and technology in family education.
5. Study of advanced successful work experiences in families.
6. Formation of cooperation of parents with pedagogical specialists.

The connection of family pedagogy with other sciences. More than a dozen disciplines are engaged in the study of various aspects of the family, including pedagogy, psychology, medicine, ethnography, population studies, demography, social geography, sociology, economic science, statistics, jurisprudence, history of pedagogy, social pedagogy, pedagogical

skills, pedagogical conflictology, etc.

History of pedagogy to provide information about the social, spiritual, and educational development of education and upbringing in the development of personality, to study the issues of education and upbringing in the past, technology, and the creative development of high ideas and experiences in the school system, to study pedagogical ideas in the works of great thinker scientists in the process of education as long as a person exists, such concepts as education, upbringing, information that ensure his spiritual development are present in every social structure, which makes it possible to master achievements in pedagogical science in connection with the rebirth and development of the history of thinking.

“*Social pedagogy*” is a science that studies the issues of solving the laws of socialization of a person, social problems associated with minors (including pedagogical neglect, child drinking, minors, crime, drug addiction, and prostitution) from a pedagogical point of view, creating technologies for the effective organization of social pedagogical activity. In the organization of Family Education, a rational approach to eliminating the negative qualities that are noticeable in their personality, the science of “social pedagogy” is important in informing parents about the “transitional period”-the peculiarities of adolescence, the pedagogical deviation observed in the behavior of adolescents during this period, the ways of proper upbringing of adolescents, forms, methods, tools, as well as the pedagogical Moreover, this science arms parents with theoretical and practical knowledge on the protection of parents from negative social vices such as pedagogical neglect, child drinking, minors, crime, drug addiction, and prostitution, and the successful formation of healthy lifestyle skills in minors.

“*Pedagogical skill*” is a science that studies the issues of methodologically correct, effective organization of the pedagogical process in the future pedagogical (teachers), the rational establishment of teacher-student relations, and preparation of future specialists for the organization of professional activities. The foundations of this science, along with enriching the pedagogical knowledge of parents, contribute to the development of skills and abilities in them to organize interpersonal, in particular, relationships between family members with high skill. Awareness of parents from the basics of pedagogical skills eliminates any conflict in the organization of family education, ensuring that social relations between themselves and their children are based on affection and mutual assistance. The use of the possibilities of science leads to the correct choice by parents of the style of communication (authoritarian, liberal, and democratic relations with children. In addition, the fact that in the conditions of the family, children acquire knowledge and master certain spiritual and moral qualities increases

the efficiency of family education by the fact that parents have cognitive abilities, abilities, communication, communicative influence, pedagogical techniques, speech techniques, reflection, relaxation, at the same time organizational skills that illuminate the essence of pedagogical skill

“*Pedagogical conflictology*” is a science that studies the development and implementation of methods, tools, and technologies for the enrichment of conflicts of a positive nature, their targeted use, ways, principles, form, method, elimination of conflicts of a negative nature, based on the study of the causes of the origin of pedagogical conflicts. Since parents will be aware of the essence of pedagogical conflicts, they will be able to correctly assess the conflicts that arise between family members, use conflicts of a positive nature to increase the effectiveness of family education, and identify conflicts of a negative nature in time and establish measures to quickly eliminate them. At the same time, the science of “pedagogical conflictology” helps parents to establish family relationships without negative conflicts. Having parents’ knowledge of conflicts also serves to teach children to take the right approach to conflicts that occur in the children’s community. There will be situations when children will not be able to independently resolve conflicts that have arisen in the children’s team. In these cases, parents provide them with practical assistance. If their knowledge of the essence of conflicts is sufficient, then the instructions that they give to children also guarantee positive results.

The science of family pedagogy requires knowledge of the content, general laws, and methods of upbringing given in the family in the upbringing of the growing younger generation as a harmonious person. The science of family pedagogy relies on its laws as part of the science of general pedagogy.

Research methods of the science of family pedagogy. The scientific research methods of the science of family pedagogy are used by scientific researchers in the study of family problems. When studying family problems, sources are initially referred to, and on this basis, the following research techniques are used:

1. *Method of studying literature.* This method provides for the study of national and universal values in the process of studying literature on the subject of family pedagogy, works of thinkers and educators, psychologist scientists, literature on the economy, politics and spirituality of the state, works of writers on family education, treatises and articles, the study of fiction and mass literature.

2. *Observation method.* The method of observation begins after the study of the literature. The method of observation constitutes a goal related to family education by foreseeing it. The observation method is planned in

advance, its program is drawn up. This determines the speed of observation, number, address, time, time of observation of the situation, and the period of recording materials.

The observation method is divided into two types according to the term:

1. Short-term observation method.
2. Long-term observation method.

The short-term observation method implies a certain conclusion from changes in the daily activity of the object.

The method of long-term observation differs in that it is carried out on the basis of a goal, plan, and program, and a certain scientific, final conclusion is reached. This requires the use of video recording, television, and other technical means at the end of the observation. The correct use of the observation method increases the effectiveness of the educational process and directs the observer to a new creative activity.

3. *The method of conversation* is the process of obtaining information from them by asking verbal questions to certain responsible persons to study some aspect or phenomenon of the subject on which the study is being carried out. Questions to be asked are required to have a logical, meaningful, orderly, and clear expression within the subject. Depending on the structure of the question, the table is structured and the result is determined. In the process of the interview method, it is also advisable to use the interview method. Correct, logically high answers or ambiguous answers in the conversation are recorded in a dictaphone and analyzed at the end of the conversation.

4. *The method of questionnaire questions* is characterized by the mass collection of written answers. The development of questionnaire questions is a complex scientific process. The reliability of the research results is determined by the content of the questionnaires, the form of the questions asked, and the number of completed questionnaire questions. Typically, questionnaire questions should be structured in such a way that the questionnaire data is supported on electron computing devices and allows you to work with methods of Mathematical Statistics. If in the method of questionnaire questions, documents are analyzed in such a way with sufficient accuracy, it will greatly help to determine the causal links of pedagogical teams in their real activities.

5. *The method of the pedagogical experiment* is considered the basis of scientific and pedagogical research, with the help of which the reliability of scientific views is controlled. With the help of this method, the relation-

ship and relationship between certain elements of pedagogical systems is determined. The method of the pedagogical experiment is conducted in two different ways:

- 1) natural experiment method.
- 2) method of laboratory experiment.

In the method of *natural experimentation*, new study plans, programs textbooks, etc. are checked, without breaking the usual study schedule.

A specially created method in connection with the regular change in the conditions of the pedagogical process is *the method of pedagogical experiment*. In this case, the experimenter observes the process that he organized in order to study the pedagogical process, and he intervenes in the pedagogical process, creating certain conditions for the teacher's activity with the educators. In the method of pedagogical experiment, it is important to clearly determine the initial data, specific conditions, and methods of teaching or the resources to be studied, as well as to comprehensively take into account the results of the experiment.

The method of laboratory experiment is a strict form of scientific prohibition, in which a certain aspect of it is distinguished from a very broad pedagogical context. It then implies the creation of artificial conditions that allow the results to be precisely controlled and replaced by variable quantities. The pedagogical experiment is carried out at the following stages:

- 1) planning the experiment.
- 2) experimenting.
- 3) comment on the results.

Planning an experiment involves determining the purpose and task of the experiment, determining the factors affecting the result of the experiment and the amount of their level, determining the number of necessary observations, determining the procedure for conducting the experiment, and checking the results obtained. The organization and conduct of the experiment are carried out strictly following the established plan and involve the collection and processing of data at the stage of interpreting the results.

When experimenting, the following conditions must be observed:

- 1) ensuring that the number of controllers and the number of experiments is optimal;
- 2) selection according to the reliability of research methods;
- 3) taking into account the significance of statistical analysis.

Improving the efficiency and quality of various methods is achieved

using methods of Mathematical Statistics, as well as the results of an experiment with the help of computing and solving devices.

6. *Methodology for the practical application of the results of scientific research.* In the results of the study, the most important aspect will be the application of its results in practice. Nowadays, new scientific knowledge is gaining momentum. But it's no secret that there are difficulties in putting them into practice. These difficulties set before the science of family pedagogy the tasks of eliminating the inconsistency between the active possibilities of their use with the growing knowledge of the methods of improving the educational process in the family.

7. *Teaching family tree, method of analysis when examining pedagogical phenomena and facts, and a perfect and in-depth study of the history of the origin of the family is required.* When analyzing information about the family by the researcher, the "Law On Education" should be followed.

8. *The method of studying the creative abilities of children in the family* - in this method, the study, and analysis of the creativity of children in the family as well as their diverse activities is one of the effective methods of pedagogical research. When identifying gifted children, their mental abilities, noble moral appearance, aesthetic tastes, curiosity, and curiosity are studied. The science of family pedagogy should serve to know in depth the sources and factors of children's creativity and to show the right ways to further develop and improve them.

9. A great contribution to the development of science and culture, education, and education through systematic study of *methods and data of statistical data analysis* with a specific purpose.

HISTORY OF THE DEVELOPMENT OF THE SCIENCE OF FAMILY PEDAGOGY ABROAD

Views of ancient Greek and Roman thinkers on the upbringing of the family. By later periods of historical development, the primitive communal system was occupied by a new social system, the slavery system. At the time of the emergence of first-class societies in the Ancient East, material and spiritual culture began to be founded. This can be seen by us, in the development of the culture of the peoples of ancient Greece and Rome.

By the beginning of the 3rd millennium BC, the next period, the buds of ancient Greek culture began to appear, which had a strong influence on the cultural development of the Universal. The high level of development of this culture was the reason for the rise of the culture of neighboring countries, especially ancient Rome.

The ancient Greek culture amazes people so far with its grandeur, elegance, and breadth of the scope it covers. The culture created by the ancient Greeks showed how wide and inexhaustible human thinking is. It caused the formation of many types and genres of Modern Art and literature.

Greek culture was formed as an expression of the feelings, aspirations, dreams, and mental states of people of that time. The owners of the great Greek thinking created works of an ideological and artistic level, praising such qualities as patriotism, courage, human power, and belligerence, which were considered an eternal problem for mankind, and condemned such things as inferiority, cowardice, and trade.

The ancient Greek culture reached such a peak of human artistic thought that the peoples of all of Europe viewed the culture of these people as a benchmark in the development of their culture. Even in the Middle Ages, when religious fanaticism reigned, European culture gained strength from ancient Greek culture.

In the Renaissance, however, the European peoples of antiquity the word” antiquity “was derived from the Latin word, which means” ancient”. They fought against fanaticism and prejudice, which overwhelmed all of Europe with the help of their culture.

To get a more complete picture of the stages of development of ancient Greek culture, it is important to study it by periodization. Because, at each historical and cultural stage, it is noticeable that cultural riches are created that are different from each other, rich in content, and ideologically perfect.

Reflection of family education in the works of thinkers of the European Renaissance. The rapid development of schools and culture in Greece provided an opportunity for the birth of the theory of pedagogy as well. The theory of pedagogy was founded by Socrates, Plato, Aristotle, and Democritus scientists and philosophers. With their views, they made a huge contribution to the development of Education. Below we will briefly talk about these philosopher scientists.

Plato’s view of moral concepts as immutable and stable, as well as their absolutism, served to defend the ideas of the immutability of the political structure of society and to idealize the slave state. As a result, Plato’s ethics seem attractive in the eyes of the aristocracy. They saw in his ethics the perception and defender of their way of life.

The merits of Aristotle, the largest idealist-philosopher and scientist of ancient Greece, who was a disciple of Plato, brought up Alexander the great, in the creation and development of the theory of pedagogy, are enormous.

Aristotle lived in Aristotle (384-322 BC). Being a disciple of Plato, he brought up Alexander the Great and is considered a major idealist-philosopher and scientist of ancient Greece.

According to Aristotle, the state has one supreme goal in common, and if it is, the state must ensure that all citizens are brought up in the same way, which is said to be the work of the state and not the task of private initiative. It studies the youth years of a person in three ways: the period under 7 years of age; the period from 7 to 14 years of age (the beginning of physical puberty) and the period from the beginning of puberty to 21 years of age. In his opinion, dividing into such periods will be suitable for nature. Aristotle assures that boys should attend a public school from the age of 7. Telling children that mental education should be given, he insists that the boys should first be put into the hands of the teachers of physical training. In doing so, he says that children should not be overly tired and recommends that they do the light exercise until their body is strengthened.

Aristotle views physical, moral, and mental education as interconnected. At the time of primary education, in addition to physical education, it is worth noting separately that reading, writing, grammar, painting, and music should be taught again. Teenagers need to get a serious education at school, they are obliged to study literature, history, philosophy, accountancy, catastrophes, and music. Music needs to be learned to cultivate a sense of beauty, but it says it's important to keep an eye out that learning music, like painting, doesn't become a simple craft. He talks about the upbringing of women and says that it does not look like the upbringing of men, because their nature is different from that of absolute men.

In his pedagogical views, Aristotle attaches great importance to moral skills in the field of mental education, taking willpower, and activity as a basis. Natural talent, meanwhile, gaining skills (Matlab learning movements, repeating them more often) and intelligence-these are three sources of moral education, he says.

For qualities to be formed, it is also necessary to have well-thought-out exercises that structure Noble behavioral habits and skills, to get used to it, for which it is necessary to make constant efforts, and from habit, and from getting used to it, to teach that moral behavior is formed.

Aristotle notes that in any desire and activity, there will be a disadvantage, excess, and mediocrity. Therefore, of all things, only mediocrity, only balance is good and useful. Hence, a behavior that does not allow either excess or omission in everything is a target of good. Here are the ideas that it is necessary to practice more to generate such behavior.

Unlike Plato, Aristotle says that the family is not excluded from upbringing, giving moral education should be largely the responsibility of the family.

Aristotle's views have a great influence on the development of antique pedagogy. Especially his works "*Marriage ethics*" and "*Politics*" were devoted to the theoretical development of moral issues.

Aristotle, noting that morality is important in the life of society, says that "nature has endowed the human hand with a weapon — mental and moral strength, but it can also use this weapon about the opposite: therefore, a person without moral supports becomes the most dishonest and wild, the most radical being in his sexual and taste inclinations."

Aristotle was able to do a more thoughtful study of the nature of moral relations than other philosophers of antiquity. In his opinion, moral quality means activity, and behavior. All moral qualities justify the fact that justice, friendship, love, generosity, truce, goodwill, etc. are manifested only in human activity.

Since a person lives in society, his moral qualities are never manifested in a pure, impartial state, but only in positive activity. Therefore, all moral qualities are social, says Aristotle. Since a person by nature does not possess qualities but is accustomed to virtue, he attaches great importance to the role of upbringing (not only children, but at the same time raising all the population), and in particular, to perceptual education of emotions in feelings. In his opinion, such upbringing is carried out with the help of existing laws and procedures necessary for people to learn to live morally. The Thinker refers to serving a state that can always replace a parent by virtue.

Along with moral qualities, Aristotle attaches great importance to mental qualities important to a person — knowledge, wisdom, insight, etc. But expresses moral qualities by subjecting them to mental qualities. Aristotle recognizes only the activity of the mind. For this reason, he considers the ideal of happiness to be truly in intellectual observation. In general, the ancient philosophers Socrates, Plato, and Aristotle argued that in their theory there should be a norm in everything. They viewed morality as a means by which a person can achieve happiness.

Ian Amos Komensky about the role of upbringing in the family. In Western Europe, too, in the atmosphere of secular feudal lords, an experienced, skillful, and courageous warrior with knightly qualities, as well as a special system of upbringing associated with the upbringing of a noble, feminine, decent, good—natured, conscientious, selfless and loyal person, that is, the upbringing of a Knight, came to the field.

Czechoslovak humanist-pedagogue Jan Amos Komensky pedagogy is a great pedagogue who feared the foundation of Science, showed ways of its further development, and devoted his conscious life, and practical pedagogical activity to such noble work as teaching and raising children.

Great Czech pedagogue Y.A.Komensky is born on March 28, 1592, in Moravia, in the family of a Miller. His family belonged to the priest "Czech fraternal" team, and this team had gathered patriots fighting for the liberation of the Czech Republic around them. Komensky, separated from his parents, cannot study for quite a long time, at the age of 16 he enters the Latin School with the help of the Team "Czech brothers", where he sees and understands the evil of the upbringing system, the vile nature of teaching methods. "As early as that time, I saw my country behind in the issue of upbringing. I thought that science and upbringing should belong to everyone as early as that time," Komensky said. After graduating from high school, he enters the University of Horborny (in Germany), after graduating from which he listens to a lecture course at Heidelberg University, in which advanced professors worked at that time at the University. Komensky studies economic, political and cultural marriage in Austria, and Holland. It also expands its knowledge and worldview. During that period, war was frequent among individual principalities. During the 30 Years ' War (1618-1648), a team of Czech carmates was expelled by the German nobility as they fought for their independence. As a result of expulsiion, Komensky becomes very much from his wife and child, and his manuscripts disappear.

In the Polish city of Leshno, where the " Czech brothers " moved and settled, Komensky heads the Fraternal school, where he organizes a gymnasium. During his almost 80 years of life, he created more than 250 works, and textbooks on pedagogy, education, philosophy, and theology. These include: " the open door of languages and all sciences "(1631)," great didactics "(1632)," School of mothers "(1632)," School of Pansophy "(1651)," well-established school laws "(1953)," pictures of what is perceived by the means of the senses " (1658), works and textbooks. He also writes books such as logic, physics, Latin, and the Greek language. His textbooks are translated into many languages as early as his lifetime, making Komensky's name known to the whole world.

Komensky's pansophical work is powered by the progressive people of England and called by Parliament. Komensky comes to England in 1641 year, but after the beginning of the war of gardensdans, this work remains. After Komensky becomes known to the world, they begin to invite him to all countries. Compiles a Latin textbook and language teaching methodology in Sweden.

Komensky returns to Leshno in 1648, when he is appointed bishop to the Czech fraternal community. After the team is disbanded, he continues his teaching career again. A few years in the administration of schools in Hungary. The work “video world in pictures”, that is, “pictures of what is perceived by the means of the senses”, puts forward the work of reading with pictures. In this, several works on pedagogy were given, such as “the rule of youth behavior”, and “the law of well-established schools”.

At the time of the Swedish—Polish war in 1656, a team of Czech brothers in Leshno will be crushed. Komensky escapes to Hamburg. From it passes to Amsterdam. Then, by the Order of the Dutch Senate, his works will be printed balls.

Komensky is very fond of his homeland and fights for its independence. Many of his works reflected a sense of patriotism. He collects Czech folk poetry, compiles a collection of Czech proverbs and encourages to preserve, love the language of his people.

We see the influence of three characteristics in Komensky’s worldview.

1. Philosophy of nature. In the 16th and 17th centuries, the English philosopher-materialist Bacon puts forward the theory of sensualist philosophy. Komensky looks at the teaching process from this position. Cognition begins with perception. There is also no knowing where there is no sensation, he says.

2. Since the Czech fraternal community is a religious community, Komensky is also a religious priest. But Komensky’s priesthood was associated with a practical view of marriage.

3. Some aspects of Komensky’s worldview arise under the influence of the Renaissance. Love for people, cheerfulness, and a confident look at how people create good, all contrasts with a lack of confidence in relation to a medieval person.

Komensky believes that the external objective world will reign. The world is a whole. Everything in the world is connected with each other. There is nothing left to part with. The world is made up of opposites. The world is not hardened. It has its own law of growth and growth. The law says that it belongs to be, that is, to God.

In his pedagogical theory, Komensky puts forward the concept of the harmony of upbringing with nature. Teaching in the “great didactics” should be subject to naturalness, teaching should be subject to the demand of nature, he says. The process of mental and physical growth of a child will be similar to the process of growth in nature. For example, a garden-

er takes care of trees, and takes into account its growth characteristics. A similar teacher is subject to the law of upbringing. The training process takes place slowly, like nature. In the principle of naturalness, the fact that a person is considered a branch of nature (not built by God) says that the laws of nature affect his growth is considered progressive in his time. But a person is a social being and grows under the influence of Social law.

Komensky, the educator must grow talent in the child, if the child lives without pedagogical influence, this talent grows by chance. When a person comes into the world, he acquires a talent inherent in a person. Just like a seed in an Apple, it is sometimes more, sometimes less - commented.

Komensky says that the basis of everything in the issue of upbringing harmony with nature is 4. For example, the universe arose from 4 things, i.e.; Earth, water, air, and light. The development of the world is also divided into 4 parts, these are Spring, Summer, Autumn, and Winter. Human development is also divided into 4 periods; infancy, childhood, adolescence, and maturity. Also, the educational process is also divided into 4; preschool education, Primary Education, Secondary Education, and Higher Education.

General Education idea. At the time when Komensky lived, there was an idea that everyone does not need to be drawn to study, only a capable person should study. Komensky, on the other hand, assures that everyone should be drawn to study, and that everyone should receive a general education in their native language. Speaking of general education, it also takes women into account. In that period, studying for women was a huge problem, nevertheless, she put forward this issue.

Another valuable aspect of Komensky's pedagogical theory is that students have the concept of acquiring knowledge. No matter how dusty the window is, a person can still see his reflection, of course, a clean mirror makes a person show his reflection clean. The task of the teacher was to wipe the dust in the mirror, that is, to convey knowledge to the child's mind, to grow it from the mental side. In his works, Komensky shows the purpose of upbringing. The purpose of upbringing is to prepare a person for the world of Eternity. This can be done through three different educations:

1. Mental education.
2. Moral education.
3. Religious education.

This goal is achieved from the birth of a child to the age of 24, during which the child believes that he must finish four schools, and study for 6 years each.

Thus, the school-Komensky, according to him, should teach students to think, move, know issues practically independently, speak to students, and correctly express and prove their opinion. “Labor glorifies a person,” says Komensky. Therefore, Labor also promotes the need to be taught from an early age.

Komensky says that from an early age, it is necessary to form morality and decency in the child. Qualities such as courage, self-control, endurance, willingness to make a profit when time and circumstances require it, and fulfilling duty are qualities. In addition to these basic qualities, humility, faithfulness, kindness to people, purity, thoroughness, politeness, respect for adults, and hard work are also important tasks for the upbringing of qualities.

He sees the following as tools of moral education: a) an example of parents, teachers, and comrades; b) guiding children, conducting conversations with them; c) conducting exercises in teaching children good behavior, fighting sloth, thoughtless work, and indiscipline.

Komensky cites the Czech proverb “A school without discipline is a quiet mill”, indicating that discipline is of great importance. He opposes the discipline that is established in medieval schools by the means of a bitch. Recommends human treatment of children. Discipline: the teacher’s example, sincere, open sympathy, the teacher’s correct attitude towards the child (if he loves the child, wants him to be good, if the lesson is meaningful, can explain discipline arises), says that reasonable praise or condemnation of the child in front of the majority, among his comrades, leads to discipline.

Komensky’s pedagogy is a scientific pedagogical, a great contribution to World Culture. His views have not lost their relevance so far.

Opinions of enlightened thinkers on family education

Johann Henry Pestalozzi was born in the Swiss city of Zurich into a doctor’s family. Pestalozzi believes that the goal of upbringing is to grow all the natural forces and abilities of a person, in every possible way and in harmony with each other, even when they grow up. The influence of upbringing on a child should be in harmony with his nature.

Pestalozzi, based on the idea of the essence of upbringing, seeks to create new methods of upbringing — techniques that help to cultivate and cultivate the power of man, mud fixing it with human nature.

Johann Friedrich Herbart was born in Germany. Herbart studied first at the Latin classical school, and then at the University of In.

After graduating from University, Herbart worked as an educator in

the family of an aristocrat from Switzerland. In 1800 he went to Pestalossi's Burgdorf Institute. But he could not master the Democratic views of the great educator.

Herbart attached great importance to determine the purpose of upbringing. He believes that the goal of upbringing is to make a person of good quality content. Herbart intended to educate people, considering this goal eternal and unchanging, as people who can adapt to existing relationships, respect the established order of law, and obey this order.

The pedagogue should set such a goal for the child he is raising so that the child can also set such goals for himself after he grows up. Here are these future goals: 1) goals that can be realized and 2) can be divided into two as necessary goals.

The goals that a person can set for himself in the field of a particular specialty at one time are those that can be realized.

The necessary goals are called such goals that a person needs these goals in any area of his activity.

Having set goals for which upbringing can come true, he must cultivate in a person the ability to perceive in a variety, comprehensively, expand the circle of interest and make it fuller, and therefore he himself falls in accordance with the idea of inner freedom, the idea of evolution. When it comes to the necessary goals, upbringing is obliged to content the morality of the future figure on the basis of the idea of goodwill, the idea of law and justice, or, in the words of the herbalist, to create a stable moral character in this figure. Herbart believes that the essence of upbringing consists in enriching the child's heart with imagination, wants to instill in the child the ideas and reasons for virtuous behavior, and, on this basis, create a moral character in it.

Herbart is in three pieces that manage the upbringing process, give training, and moral education. Herbart divides various interests into six independent types. He places the following interests among the first group of interests: imperial interest — which leads to reasoning; aesthetic — interest provides an artistic assessment of these phenomena. The following interests are among the second, group interests: the liking interest is the interest that interests family members and a very close acquaintance; social Interest is an interest aimed at knowing a wider circle of people, society, and one's own people. Herbart believes that in the initial period of its history, mankind was interested in things and types of activities characteristic of children and adolescents. For this reason, he says, “ it is necessary to give students humanitarian knowledge that is taken from the framework of the history and literature of ancient peoples and is becoming more and

more complex.

Views of Russian educators on family pedagogy. The famous Russian pedagogue, founder of Russian pedagogy and folk Schools, and “teacher of Russian teachers” *Konstantin Dmitrievich Ushinsky* was born on February 19, 1824, in Tula. Ushinsky was brought up in the family until the age of 9 and brought up. Then he entered the Novgorod-Seversk gymnasium and successfully graduated from it in 1840. In the same year, he entered the Law Faculty of Moscow University and received an education under the direct guidance of the famous professor of that time, Redkin. Ushinsky at the age of 22 entered the Yaroslav Lyceum as an acting professor of cameral (Legal) Sciences and began work. He was able to demonstrate that he was a great talent in his early three-year pedagogical career.

Also, Ushinsky, with excellent enthusiasm, took up teaching work and tried to provide students with enviable knowledge, aroused interest in science in them, and most importantly, encouraged his people and native land to love, ardor from the soul, and work honestly. Meaningful lectures of this young and talented professor were listened to with interest by Lyceum students and learned a deep and solid lesson.

FROM THE HISTORY OF THE DEVELOPMENT OF THE SCIENCE OF FAMILY PEDAGOGY IN UZBEKISTAN

Views on family education in Central Asia in ancient times. All nations in the world have experienced a primitive community system. The first stage in the development of mankind was the unification of people into a primitive gang, in which the gang embodied a large community of ancient people. The oldest gang was gradually divided, and went to a separate Association of relatives - a circle to the SEED Community.

The first Seed Communities began to chip in the female person, that is, the mother's grandson. This stage in the history of mankind was called the era of the clan - matriarchy. Matriarchy is a stage in the development of the oldest system, when kinship relations were determined towards the mother, and the seed and the head of the family were a woman. Much later, as the weapons of Labor and forms of economic activity improved, the leadership position in the team gradually began to shift to a man, now a man has become a captain for a clan. Scientists called this period in the history of mankind patriarchy. Patriarchy is such a stage in the development of mankind that a man has a leading position in the life of society, and kinship relations are also marked towards the father.

By this period, the tradition of living as a primitive community gradually went into development, discoveries were created that were important

in the history of mankind in World Culture. Events such as the invention of paper in China, counting in India, the emergence of a decimal number system, the invention of the division of the Earth's sphere into degrees, hours a day, minutes, and seconds in Mesopotamia, the emergence of a caravan route in Central Asia that connects the Mediterranean Sea and India, and later the opening of the "Great Silk".

Upbringing in the primitive era mainly consisted of teaching children the experiences gained by people in the family, in the community, and in the labor centers. The labor skills taught to children served them to grow up smart, polite, and ready to fight for survival. For thousands of years, the work done in cooperation has brought the norm of the relationship of decency between people.

In his book "history", the Greek historian Herodotus, who lived about 484(480)-431(425) BC, in his important information on the educational style of the ancient Persians, Sacks, massages, says that "the most honored thing of the Persians is courage." Accordingly, they were more proud of the boys. The king also sent gifts to him every year, whoever had many sons. They also paid attention to the age of the children. Boys were taught only three things from the age of five to twenty: horseback riding, archery, and correct vocabulary. The boy was not shown to his father until the age of five, he was brought up by women. That's what they did so that their father would not grieve if a boy died.

Sons have never been disrespectful to their parents. They believed that such a state can be expected only from children born without marriage or abandoned. In addition, Herodotus says that for the Persians it was considered a deception and a shame to be in debt. They considered the rivers sacred. Therefore, those who did not spit in the river water did not even wash their hands.

"Quran Karim" is an important source of Family Education. Islam - Islam (Arabic.- submission, obedience, submission of oneself to the will of Allah) is one of the three religions common in the world. Islam is a doctrine sent by Allah to guide people in the right way. In the Quran, which is the basis of Islam, and the Prophet Muhammad Mustafa s.a.w. Allah is all-sufficient, All-Merciful. The main idea of Islam is that the result of good manners, that is, hell, is the reward of the righteous deeds of a true believer, a perfect person, the result of the sins of heaven and vice versa of bad manners, that is, hypocrites. The importance of religion in the formation of morality and in its social place is great. One of the main goals of religion is to explain the harm of evil in a person and to encourage those who have gone on a bad path to the right path. The Quran is a book recognized as sacred in the Islamic religion. Islamic beliefs, beliefs, legal and moral

norms, restrictions, and prohibitions have been expressed in it.

The central idea of the Koran is talhit, that is, the doctrine of the singular god – Allah. The Quran was translated into modern Uzbek Alauddin Mansur in 1990-1991.

According to the teachings of Islam, special emphasis is placed on the formation of cognitive abilities in a person on the basis of vision, hearing, and mental observation, since knowledge and mental perfection are considered the main criteria for human maturity. We can know this in the “Koran” both from secular sciences (natural, psychological, geographical, sociological and medical knowledge) and from ideas that promote the study of religious views.

At all stages of the development of society, the forms of marriage and family were determined based on the material conditions of society. As productive forces and production relations progress, family forms develop further, changing their content. The influence of economic relations existing in society on the division of Labor is also manifested in marriage-family relations. Having a man in the family as a head is a consequence of economic domination. With the development of a personality society, the reasons for marriage and building a family also change.

The national values of our people have been closely intertwined and intertwined with the values of Islam since the early 14th century. Therefore, the teaching of Islam, the religion of humanity, enlightenment, and purity, glorified by our ancestors, regarding the spiritual and moral health of society, in particular, the deep assimilation of their views on the upbringing of the family from its integral parts, helps everyone who is determined to build their future to create a fully matured generation in every possible way. As you know, building a family is a social relationship between people. The strength of this relationship determines the stability of society.

Islam has looked with attention to the purity of the family, its jeeps, and tranquility. He believes that marriage, considered the main problem of the family, is the most sacred within human relationships.

The countries that were in the interests of women were in crisis, the lands that revered it were one hundred bulges towards development. When we read the Quran and hadiths, we witness that women are respected in them. The rules of Islamic law stipulate that a woman, first of all, consider her femininity – IBO-fantasy, femininity, decency-her behavior, the need to preserve her health, that she is primarily a mother, that is, a source of life. In particular, in the surah of nisu, the woman was glorified incomparably.

Islam has a much closer relationship with other world religions with

respect to the state and law, which serves to ensure the continuity of existing dependence in the form of Sharia. In many countries where Islam is considered a state religion, legal laws are issued based on Sharia, and the great sin of breaking the oath taken with the Koran and crime. Concerning the Koran and hadiths, Sharia law governs family and society, property ownership, criminal law, Treasury-tax, and financial order and arbitrators.

The word Sharia is derived from Arabic, and its lexical meaning is the right path, the divine path, or legislation.

In addition to the legal life of Muslims, Sharia also includes a set of moral and religious ritual requirements. Religious and legal sects in Islam and their founders, defenders-acquirers (lawyers), rules of organization and order of the activities of Veterans, swearing (ont), making promises and swearing, severing debt, guaranteeing, guaranteeing, saving analysis and the rules of procedure belonging to them are among the main sections of the Sharia. Sharia focused the entire anger of her guidance programs towards punishment on the abrupt elimination of moral perverts and acts considered sinful. Sharia also establishes measures to inflict cruel punishment against violence, adultery, and theft.

For example, a woman accused of adultery according to the Sharia law was stoned or kicked out of her hair into the desert, tied to a horse's tail. And the one accused of theft, at first, had one finger, and if this case is repeated over and over again, his paw, wrist, and, in the end, his head were beheaded and punished in a certain way.

Also noteworthy is Sharia's Department, which focuses on property ownership rights and tax procedures. This section provides a detailed description of the Sharia law and regulations, rules and regulations relating to property ownership and inheritance rights, rent and Kira (hire of labor), land ownership (land tenure) and land lease, tax procedures, hums, Zakat, alms, tithes, procedures and rules that, according to the foundation and testament, impart the policy of their time in relation to taxes levied on foreigners. The procedures for formalizing and canceling trade agreements, slaughtering animals, hunting, and even fishing have not been left out of Sharia's point of view. God bless:

“And of his signs is that he has created pairs for you that you may find peace, and he has made love and mercy between you. Indeed in this are signs for a people who reflect.” (Surah Rum, verse 21)

The Koran is the Holy Book of Muslims. All thoughts and instructions in the Qur'an are words revealed to Muhammad by Allah. The Quran provides relevant instructions on the relationship between a couple in family life, happy marriage, family marriage, raising children, divorce and its guidance.

This is how Allah bless the Holy Quran:

“Marry those of you that are single, (single men or women), and those of your male and female slaves that are righteous. If they are poor, Allah will enrich them out of His Bounty. Allah is all-encompassing, all-knowing” (Surah Nur, verse 32).

Hadiths as important sources of Family Education. The Arabic Quran, according to the Uthmani RASM. “message”, “News”) – Muhammad (s.a.C) narratives about what he said, what he did, instructions. It will consist of two parts: text and stigma. The text is the end of the document in the invasion of Hadith, that is, the LAFS of Hadith made up of meanings. The Arabic Quran, according to the Uthmani RASM. - prop, proof, basis) – a component of each Hadith. To attribute the word to the one to whom the stigma is spoken. Muhaddis scholars use the stigma with the document in one sense. At the beginning of the hadith, the names of all persons are indicated one by one, from the one who first said and heard it, to the collector of hadiths, and this is the basis, evidence of Hadith. The scribes checked whether Hadith was real or fake by comparing these sciences. If the years and positive qualities of the people who transplant Hadith coincide with the condition, the stigma is correct, then Hadith was also considered correct.

The Arabic Quran, according to the Uthmani RASM. Hadith narrator) is a theologian who was involved in collecting, sorting, and commenting on hadiths. As a result of the fact that after the death of Muhammad (Sa), the accumulation of hadiths began to become a broad tradition, part of the theologians specialized in this area and they received the so-called muhaddis. The Hadith collections gained attention in the Islamic tradition and were used by the muhaddis (e.g., Muhammad al-Bukhari, Muslim ibn Al-Hajjaj, Ibn Maja, and B.) and have become popular in Islamic history. In Islam, Hadith is the second source after the Koran.

Hadith is a source that reflects the life, activities, and instructions of the Prophet Muhammad after the Qur’an. Hadith was kept in multi-volume collections, carefully combed to be absolutely reliable, and underwent special checks. This source served as a handy in resolving disputes between people, family disagreements and arbitrations. The hadiths described the Prophet’s behavior in various situations to the smallest detail and calmly became a moral code, a moral order, since the behavior of the ambassador of Allah on Earth is a practice that must be imitated without a doubt for a Muslim who considers himself a true Muslim. In hadiths, it is possible to transfer a specific meaning to any alternative word form, but at the same time, in the text of the Koran, it is not allowed to change the expression of the word at all.

The term Prophet Muhammad (Sa) Movarounnahr was first men-

tioned in the hadiths. Accordingly, this term was also known among the Arabs in pre-Islamic times. Thus, the term Movarounnahr was interpreted in different ways in medieval sources, and as a geographical area was first included in the composition of Turan, the Turkish khanate or the Turkestan country (until the 7th century), then Khorasan (in the 7th-10th centuries), and even later Turkistan (from the 11th century), and for a certain time Khorezm (the end The sum of the information presented in various sources about this term also does not cover the lands of the Turkestan natural and geographical region, which in territorial terms means the term “Central Asia”. The most broad-meaning concept of the term Movarounnahr, used in the Middle Ages, can conditionally include only those lands that are located between the Amu Darya and Syrdarya.

Concern about the family is manifested in the extensive inclusive marriage system, which is carefully developed in the Islamic religion. This system, which begins in the family, is strengthened by “marriage”. In more detail about this, we can get a complete and broader understanding of the works of Sheikh Mohammed Sadiq Muhammad Yusuf His Highness’s “happy family”.

Islamic law is generally built on relief. There are many verses and Hadiths about this. In particular, a man and a woman, as far as marriage is concerned, in these matters, too, Allah Almighty wished his servants relief and ordered them to build a family and live honestly. The word “marriage” means the meanings of addition, concentration, and rapprochement in the dictionary. In Shariah “however,” marriage is a bond that forms the possession of fertility.”

The preaching of marriage in the circumcision of the Prophet Sallallahu Alayhi Wa Sallam came in a very strong way. In order for us to realize this fact, we will study the following Hadith.

It is narrated by Abdullah Raziyallah and Anhu: “ O youth team of the Prophet Sallallahu and Alayhi Wasallam, Whoever of you is capable of marriage, let him marry. For he is the keeper of the sight and the keeper of the Farge. I have heard that whoever is unable should fast, this is a measure for him.”

According to Islamic teachings, the family is built on the following grounds and purposes:

1. The family is built in order to find the approval of Allah Ta’ala, to embellish oneself with the morals of the Prophets s.a.w, and Islamic manners. These manners and morals cannot be outside the family. For example, let’s take kindness, meekness, and mutual assistance. Is the family, in fact, not the main space for the manifestation, and strengthening of noble moral

patterns? The one who intends to follow the verse of Allah Ta'ala and follow the Sunnah of the Prophet peace and blessings of Allah be upon him has fulfilled the true prayer.

2. From family life, Honorable goals should be pursued through double communication. The family should be treated as a beautiful jury, which imposes on the spouses great and honorable responsibilities.

In order to fulfill those responsibilities, the husband and wife must make their hymns higher and cooperate with each other in times of ease and difficulty, breadth and narrowness. Having strengthened their families, they should grow Noble Children and try to bring benefits to the community, and for the motherland. This in turn necessitates the conscientious fulfillment of the duties assigned to him by everyone on the basis of faith.

3. Family communication between a couple should be between love, appreciation, and mutual understanding.

Marriage connection-the spiritual category is a kind of communication. Therefore, this connection should be based on love and compassion. Every brother should start trying to start a family only when he has absorbed these meanings.

Abu Hurayra is narrated from Raziyallahu Anhu:

Nabiy (s.a.C): "A woman marries for four things: for moli, for hasabi for lineage, for Jamali and for religion. Choose your religion, and your hands will be covered with dust."

Before marriage, the bride is considered the qualities of the candidate of interest. In this hadith, four of the best qualities that should be in the candidate who will be encouraged for the same marriage are mentioned in the most famous.

If these four qualities, both the community and the family and the family, join the religion and become the adornment of a girl, it is certainly good. But when these four qualities are compared with each other, there is no equality in religiosity between them. Perhaps the rest will not reach the quality of religiosity, even if a number of other good qualities are added to it.

Because fertility is a temporary quality. How many are those who are separated from the property in a moment? If the bride is interested in her goods and marries her, and her goods are bullied and unitarkized, then mazkura will not be interested in the bride.

A good Bride of Hasabu descent will certainly be a good bride. But just believing in the hasbu lineage does not lead to anything good either. It is much better if the parents, and grandparents are good people, but they

remain in their homes, the bride herself comes to the groom's House. If the bride is not religious, proud of her lineage can embarrass the groom and loved ones.

Jamal is also a good thing in its own way. But it is also fleeting. A sentence in which after a certain period there is a collective change of any person. On top of that, just leaning on Jamal and doing things doesn't lead to anything good either. If the bride knows that she is getting hot for her team, it is not for nothing that she will use this factor to dominate the groom by making him feel overwhelmed.

It is narrated by Abdullah ibn Amr Raziya'llahu Anhu:

“The messenger of Allah, peace and blessings of Allah Be Upon Him, said:”all the things of the world are fabrics, and the best fabric of the world is a righteous woman.”

Nasoi and Muslim narrators.

The word “fabric” means something that can be enjoyed.

A righteous person means a person who follows the orders ordered by Sharia and returns from the repatriates and does additional good deeds of his own free will. Righteousness is in the likeness of a servant and in what he does. So, at the time of choosing a bride, it is necessary to pay attention to the fact that the bride will be righteous. This is to be mature both in creation and in good manners and in other qualities.

As long as the bride does not follow the instructions of Sharia, nor does she pray and do good deeds according to the embodiment of righteousness.

In his book, *Ihyoyu ulumid-din*, Imam Ghazali said: “it is more important to be careful about a woman. Because he becomes like a slave by marriage. It is difficult to have halos from him. And the husband is able to divorce in any case.”

The more attention is paid to the qualities of a worthy bride in Islamic Sharia, the more attention is paid to the qualities of a worthy groom.

Thoughts on family pedagogy in the Middle Ages. In folk pedagogy, views on the problem and upbringing of the family have a very long historical root. We read in historical sources that samples of folk oral creativity and written monuments pay special attention to issues of family, parental, family stability, interaction in the family.

Well-known enlightened scientist Abdullah Avloni made a significant contribution to the development of pedagogical thought, reflecting in his works the best traditions of the Uzbek people, an important life issue on

education and upbringing.

When raising a child in a healthy way on the issue of physical education, Abdullah Avloni turns to parents, and pays special attention to the activities of teachers when raising a child from the side of thought.

The fact that the child is regularly engaged in the development of thinking skills in children defines as a necessary and sacred task. Consequently, he is the holy duty assigned to the conscience of the teachers, “leaning on their attention... Therefore, the power of thought, its adornment, its breadth, depends on the upbringing of the teacher.”

At the same time, the author also noted that education and upbringing are inseparable processes: “even if there is a slight difference between teaching and upbringing, the two of them are not separated from each other, the body of one person is enriched with one soul and the body of the other is like a body.”

One of the manifestations of our spirituality is Abdurauf Fitrat. Fitrat wrote a philosophical work “family” in Persian in 1916, in which he talks about the reform of family life.

Fitrat attaches importance to the fact that children can be in the fresh air, and receive aesthetic pleasure from the beauty of the environment, and nature, and says: “Air is also important for a person from food. It is possible to stand without food for five to six hours, it is impossible to stand without air for a minute. Therefore, it is necessary to take babies out all the time to pure air, to garden beds. On all sides of the cities in Farang, there are tents for children, air playgrounds. In addition to these, in their schools, children play various games on special playgrounds during break times.

Fitrat advises the use of various action games in the physical education of children and parents to ensure that their children are engaged in such games. Emphasizing the need for mobility for children, he concludes that when physically conditioning children, it is useful to practice them with certain games. The fact that it is useless to forbid children from the game is that they constantly sit in one place, do not move, leads them to have a weak body. Parents should always encourage and promote their children to the game. But children’s games should not go beyond etiquette and morality. Fitrat believes that these action games should help the child develop his mind, insight, science and find the right moral education. He knows that through these games, the child can be taught life, mental and moral education, the main thing is to physically temper the child.

Fitrat again explains that the importance of cleanliness is too great for children to be healthy, physically mature: “notes the need for Nasophathy (cleanliness) and cleanliness, the existence of two aspects of it .

Children first have the ability to disease earlier than adults. Therefore, filth is a source of causing any disease, and filth harms children ten times more than adults.

Secondly, when they are taught purity from an early age, purity becomes their habit from time to time. On the contrary, when taught from youth to filth, when they grow up they get used to such a habit that it is worth the hatred of those.”

The author emphasizes teaching children to follow the rules of personal hygiene: “let parents and teachers wash children every day with soap on their faces, clean their mouth and teeth, constantly monitor their clothes, as much as possible transfer children to places where there are no flies and flies, because these insects are distributors of various diseases.”

Later, Fitrat will tell about the upbringing of thought - mind, that is, about the role of discussion in the development of intelligence. He likens the children to water and says, “just as the water is in a container of whatever color, it is in that color that the children adopt any habits and morals of that environment, whatever environment they are in. The greatest condition for moral education is that children learn more good and bad things from their homes, from their fellow peers. Fitrat suggests that the upbringing of a child should be dealt with not only by school, but above all by the family and the public. It repeatedly states that the role of the family, parents, is very large, especially in moral education.

Fitrat points out that the moral education of the child has a very great influence on other children at school, noting that it is necessary to take measures to quickly correct children with bad morals at school”, noting that it is advisable to exclude children who are famous in bad health in schools, if it is not possible to correct them. Because it is necessary to take such a measure so that the child does not transfer his bad moral qualities to other children,” Fitrat believes.

He knows that it is a very correct action not only to bring people with moral impairments closer to the school guard than to the task of teaching at school. Again, he advises not to let children read even books that are harmful to children’s morals, not age-appropriate.

Approaches to family education in the XX century and their essence. Family education in our country is one of the most important social factors of ideological nature, the basis of the family - society, with centuries-old strong spiritual foundations.

In our view, in the family environment, the factors necessary for the harmonious functioning of the individual in all respects are the legal, economic, psychological, environmental, aesthetic and etc. content that arise

between family members in the process of managing the family economy, the treatment of communication interference in its socialization, that is, in the process of maintaining social relations, there are factors that serve. Therefore, in the conditions of independence of the Republic of Uzbekistan, renewal in social society, the formation of strong families in the transition period, in which drastic changes are taking place, the relations of the market economy, as well as social competition, are becoming more relevant than ever.

In particular, in the “Avesto”, the sacred book of the Zoroastrian religion, the phenomenon of Family vision was approached by young men and girls who have reached puberty as the implementation of one of the social tasks.

In the East, several centuries ago, in terms of family and its organization, Family Relations, its role, and role in personality maturation, our scholars such as Joseph Khos Khojib, Kaikovus, Jalaliddin Davoni, Muhammad Sadik Koshgari, Abu Raykhan Beruni, Abu Ali Ibn Sina, Amir Temur, Alisher Navoi also expressed their views.

The national values of our people, lifestyle, and upbringing of children in the family are expressed in the national spirit in the works of the Uzbek enlightenment Abdurauf Fitrat, Abdullah Avlani, and Abdulla Kadiri, who created at the end of the XIX century at the beginning of the XX century.

In the theory and practice of pedagogy, a number of scientific research has been carried out on the surface of the issue of family and family education. The conclusion of a marriage contract, family disagreements, as well as the problems between the couple and the social, legal, psychological, and pedagogical aspects of the organization of family relations are discussed by pedagogical, psychologist, philosopher and legal scholars O.A.Karimova, A.K.Munavvarov, F.B.Shaumarov, Sh.B.Shaumarov, X.Farov, E.Faziev, L.Oripova, R.Saidov, M.Akhmedov, M.Makhmudov, A.Safarov, N.Sa dullaev, M.Kholmatova, M.O.Inamava, A.Mosurmanova, S.Yuldasheva, I.V.Grebennikov, I.V.Dubrovina and G.P.It has been studied in depth by razumiginas.

And the issues of organizing the upbringing of children in the family, increasing its effectiveness, the use of national traditions in establishing family education, Yu.P.Azarov, M.Dadacanov, M.J.Inayatov, M.O.Inamava, K.F.Kamolova, Sh.Shodmonova, Sh.Atajonova, I.X.Karimova, A.Buriev, B.A.Mirenskiy, S.E.Garglina, I.D.Vodzinsky, A.I.Kochetov, K.A.Ya of Kulinkovich. Such a pedagogue and psychologist as Rakhmonova was studied by scientists.

Pedagogical and psychologist scientists V. Karimova, J.Alimova,

R.D.Feyzulin. The main idea of the scientific research work of Salimova is the formation of social perceptions of Uzbek families in youth, the role of spiritual and moral education in the preparation of girls for family life, the preparation of adolescent youth for family life in classroom and extracurricular conditions, which are thoroughly covered.

The social status of the family, its role in organizing the upbringing of children in society, the participation of parents and representatives of the older generation in this process, and the issues of using national values in family education. It is necessary to separately note that the work of Musurmonova was analyzed in depth. Also M. Makhmudova (preparation of students and youth for family life based on the content of folk pedagogy). According to the essence of scientific research carried out by Abdullaeva (spiritual preparation of adolescents for family life using the example of teaching the discipline “national independence and the basics of spirituality”), the proximity to the research problem is distinguished.

The issue of family education during the years of independence.

After the independence of Uzbekistan, our country began a nationwide campaign to restore historical truth and Justice. Spiritual masterpieces, created over thousands of years, turned into the blood and soul of our people and began to be viewed in a new way. It was recognized that the value of national traditions should rise, in a word, they began to clear the eyes of the springs of goodness, which were hidden by force and unconsciousness.

The former was also tempted by national traditions and traditions, and some kind of “evil” was searched from his educational treasures. Folk traditions were humiliated. Some traditions were given a religious meaning and the end of life was swept away. The valuable and exhortations of our ancestors were taken to old age, their value was high. The educational significance of the tales of the elderly began to be overlooked. Women almost forgot “alla”. The imposition of the European way of life by pressure on the lives of our people, who have lived according to the laws of one and a half thousand years of Muslim Sharia, has caused conflicts and conflicts in the minds and lives of our people. The people burned between two herbs: on one side, the traditions and customs of the ancestors, which have been practiced for thousands of years, weddings, holidays, parties, and ceremonies.

Family law is a branch of law that regulates personal property relations between spouses, relatives, parents, and children. From this maxim, it is also possible to notice that family law is closely related to civil law, despite the characteristics that make it different from others.

REFERENCES

1. Constitution Of The Republic Of Uzbekistan. - T.: «Uzbekistan», 2018 p.80
2. Law of the Republic of Uzbekistan “On Education”. № 637.- T.:23.09.2020, -p.40.
3. Family Code Of The Republic Of Uzbekistan. - T., 1998.
4. Abdulla Avloniy Turkiy guliston yoxud axloq kitobi 8-9 b.T.: 2008 y. (reissue www.islom.uz library)
5. Акрамова Ф.А. Оилада маънавий муҳитни шакллантиришда хотин-қизларнинг роли. - Т.: «Нихол Принт», 2016. -42-б.
6. Акрамова Ф.А. Оилада соғлом психологик муҳитни таркиб топтиришнинг ижтимоий-психологик асослари. - Т.: : «Шамс АСА», 2014. -185-б.
7. Акрамова Ф.А.Оилада муомалани ташкил этиш психологияси. – Т.: «Шамс АСА», 2006. -90-б.
8. Adams, Gary A.; King, Lynda A.; King, Daniel W.Relationships of job and family involvement, family social support, and work–family conflict with job and life satisfaction. Source: Journal of Applied Psychology 81.4 (Aug 1996) 411-420.Impact factor: 3.8.
9. Davila J. Marriage // Encyclopedia of Stress In 3 vol. / Ed. By G. Fink Vol.2. SanDiego: Acad. Press, 2000. 1.
10. Эргашев П.С. Мулоқот психологияси. – Т.: ТДПУ, 2003.
11. Huygen F.J., Smits A.J. Family Relations, Coping Styles, Stress, and Cardiovascular Disease Risk Factors Among Children and Their Parents. Source: Family Systems Medicine 1.1 (Spr 1983): 23-32.Impact Factor: 2.6.
12. Лоиков П. Формирование межличностных отношений в семье. / Вестник Таджикского национального университета (Душанбе). Том: 2. Номер: 3-7 (124) Год: 2013 . Страницы: 290-291.
13. Hashitnov K., Nishonova S. Pedagogika tarixi. - T.: O‘zbekiston Milliy kutubxonasi nashriyoti, 2005.
14. Иномова М. Фарзанд-нихол, ота-она боғбон. Т.: 1993.
15. Иномова М. Оилада болаларни маънавий-ахлоқий тарбиялашда миллий қадриятлар. Т.: 1995.
16. Хасанбоева О. Оила педагогикаси.Дарслик Т.: “Алоқачи,2007.
17. Хасанбоева О.Оилада маънавий- ахлоқий тарбия. Т.: 1998.
18. Xidirova F. Oilada qizlarni oilaviy hayotga tayyorlash. - T., 2007.

19. Karimova.V.M., Oila psixologiyasi -2008, 170b.
20. Саифназарова Ф. Ўзбек оиласи: ижтимоий ва маънавий кадриятлар. – Т.: «Yuristmedia markazi», 2007.
21. Сафаров О., Махкамов М. Оила маънавияти. Услубийқўлланма. Т.:’Маънавият”, 2009.
22. Salayeva M.S. Umumiy pedagogika. Darslik. – Toshkent: “Nodirabegim”. 2021. – 598 bet.
23. Салаева М.С. Ўзбек педагогикаси тарихини даврлаштиришнинг назарий-педагогик асослари. Монографиya. – Toshkent: Фан ва технологиyaлар, 2008. – 180 б.
24. Салаева М.С., Кислицина И.Л., Салаева М.С. Мирзо Улуғбек номидаги Ўзбекистон Миллий университетида сақланаётган ноёб қўлёзмалар коллекциялари. Монография. – Т.: Университет, 2018. – 112 б.
25. Салаева М.С ва муаллифлар жамоаси. Педагогика. Энциклопедия. 3-жилд. – Т.: Ўзбекистон Миллий энциклопедияси, 2018. – 424 б.
26. Салаева М.С. Просветительско-педагогические воззрения Мухаммада Ризо Огахи. // Вестник КОАНРУ. – Нукус, 2001. №4. –С. 63. (13.00.00 2001)
27. Салаева М.С. Битиктошларда битилган тарбия нишонлари. // Халк таълими. – Тошкент, 2003. №6. – Б. 106-109. (13.00.00 2003)
28. Салаева М.С. Педагогика тарихини даврлаштириш замон талаби. // Халк таълими. – Тошкент, 2004. №2. – Б.17-19. (13.00.00 2004)
29. Салаева М.С. Действующие теоретические и практическиеосновы периодизации истории узбекской педагогики. // Педагогические науки. Москва, 2011. №5. – С. 12-13. (13.00.00 01.07.2011 №26)
30. Salayeva M.S. Directions and content of pedagogical researches held in Uzbekistan during the independence years.// The advanced science. Open access journal. - USA, 2011. – Issue 3, – P. 37-40. (13.00.00 2011 №1)
31. Salayeva M.S. Pedagogical Conditions of Using the Materials of the Uzbek National Pedagogics in the Pedagogical Course Studying.// Eastern European Scientific Journal. Ausgabe 3-2016. www.Auris-Verlag.de (ISSN 2199-7977)P. 63-168. (13.00.00 №1)
32. Salayeva M.S. Pedagogical conditions of use of materials of the uzbek folk pedagogy in the pedagogy course. ISSN 2311-2158. The Way of Science. 2016. №6 (28). P. 57-59.
33. Salaeva M.S. Periodization problems, stages of formation and development the educational system of Uzbekistan. ISSN // Actual problems of modern sciences education and training in the region. Elektronik scientific edited volume. 1.2017. P189. P. 195-195. (13.00.00 №1)
34. Йўлдошев М. Оиладаги рухий мухит ва унинг тарбияга таъсири. – Т.,

2004. -99-б.

35. Пешперова И.Ю. Брак и семья: традиционные и коллизийные аспекты в международном семейном праве. / «Россия в глобальном мире», 2014,4 (27).
36. Тўраева О. “Оилавий ҳаёт этикаси ва психологияси”. Т., Ўқитувчи. 1998.
37. Хасанбоев J, То‘рақулов X., Хайдаров M., Хасанбоева О. Pedagogika fanidan izohli lug‘at. -Т.: Fan va texnologiya, 2008.
38. William L. Cook, David A. Kenny. Application of the Social Relations Model to Family Assessment. Source: Journal of Family Psychology, Vol. 18, No. 2, 361–371. Impact

CHAPTER 6

ORGANIZING CONSULTATION SERVICES IN SCHOOLS COLLABORATIVELY

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1. Introduction

Many professions employ a procedure known as consultation. Consultation is one of the most beneficial helping processes when it comes to schools and the mental health services offered in schools. Through exchanging views, the parties can better understand many topics that might be advantageous to the student and meet their needs. Studies that will be conducted in this sense can be covered under the consultation category. Contrary to a straightforward exchange of ideas, the consultation process is a more methodical, focused, and comprehensive engagement that also includes evaluation.

School-based psychological counselors are able to discuss a student's needs with teachers, family, and administrators. Yet, this procedure may also take the form of providing information and is not always referred to as consultation. These attempts could remain in this way as unplanned ones and yield ineffective results. Yet, psychological counseling and guidance services might be more effective in schools if collaborative consultation studies are purposefully organized.

Discussions that allow for everyone to contribute their personal expertise and experience can present numerous opportunities that can result in the development of collaborative consultation. It is possible to speed up the resolution of issues that have an impact on one another in collaborative settings. It's probable that institutions other than instructors, students, and parents are involved in this dynamic process (Alshalawi, 2019). In addition to the importance given to this issue abroad (Baker et al., 2009; Conroy, et al., 2022; Missouri Center for Career Education, 2015; O'Keefe & Medway, 1997), there are also studies in Turkey (Aslan & Güven, 2019; Kılıç-Özmen & Kabapınar, 2019; Tagay & Sarı, 2012) it is noteworthy that the importance of the issue is increasingly mentioned, with the cooperation aspect coming to the fore. This article examines the position of collaborative consultation among other consultation types, as well as the general definitions of the topic and the skills it necessitates, as well as the specifics of the development and upkeep of this approach, all within the context of expanding the relevant studies.

2. Consultation Concept

In reality, many helpful professions include consulting as a key component. Every profession, depending on conceptual guidance and knowledge base, contributes a distinct perspective to the counseling process, as is widely recognized (Bramlett & Murphy, 1998). According to their status within the educational system, school counselors differ. Seven elements stand out when the roles of school counselors are examined, especially

those from lower educational levels (Lampe, 1990; cited in Idol & Baran, 1992). These include creating programs, providing psychological counseling and guidance, being professional, evaluating, coordinating, and consulting.

Three of these roles—coordination, counseling, and consultation—are given more attention than the others. To ensure that students' cognitive and affective development is maximized, the counselor plays the role of coordinator, coordinating the required resources. In order to provide students with specialized programs and services, it also adheres to an efficient referral procedure. The legal and procedural aspects of referral are something that this procedure helps educators become more aware of. On the other hand, taking into account its position in the literature, the consultation role might be seen of as having unique traits in comparison to the others.

One of the fundamental responsibilities of psychological counselors is consultation (DeWayne & Thaddeus, 1992), and these responsibilities have grown in importance over time (Knoff, 2000). Parallel to this growth, the significance of consultation in terms of preventive measures on topics like children at risk and violence in schools was emphasized (Dinkmeyer & Dinkmeyer, 1984; Frederick & Farah, 1999; Gault, 2001; Keys, Bemak, Carpenter, & King-Sears, 1998). In this way, it has been noted that when engaging with behaviors and settings connected to the risk situation, interventions must be more collaborative and multidimensional (Castro-Villarreal & Rodriguez, 2017).

In order to comprehend and address the various needs of students, the counselor consults with teachers, administrators, parents, support personnel, and other important parties. To prevent and, if required, intervene is the goal of this function (Bundy and Poppen, 1986). The counselor is expected to facilitate the student's problem's resolution in the intervention style because they are seen as problem solvers (Blum, 1986). Studies of consultation are conducted in both school and non-school settings. Teachers, administrators, and other support or mental health staff members may consult with each other within the school. In the more external context, the supporters are parents and community leaders.

Tharp (1976) defined consultation as having a tripartite structure as its foundation. The process of affecting changes in the client through an agent is included in this structure in an indirect manner. The consultant, the mediator, and the objective are the three parties. A professional endeavor to change the behavior of the target individual is mediation. The consultant is regarded as a specialist in behavior change methods.

One of the three tasks of the counselor, according to Keys, Bemak, and Lockhart (1998), is consultation. The other two roles are coordination

and consultation. In typical consultation procedures, the counselor aids the consultation area (parent, teacher) in acquiring new knowledge and abilities as well as in formulating a plan for helping the kid. The typical consultation perspective is replaced by collaborative consultation in school counseling programs that assist at-risk youth. The counseling role of the school counselor is significantly expanded by collaborative efforts in school community services and school-community cooperation.

The consultant's collaborative role, which is underlined here, can also be taken into account independently of the consultation. Collaboration is a method of interaction in which two or more equal persons actively work toward a shared goal (Cook & Friend, 1991). Those who get counseling assume responsibility for the circumstance, whereas those who employ cooperation share responsibility for some situations (Hansen, Himes, & Meier, 1990). Moreover, consulting involves experts giving each other advice or exchanging information. It can be viewed as an unequal relationship in this way. In order to satisfy the needs of students, specialists or parents collaborate.

The idea of consultation might therefore be viewed in terms of collaboration. A group of experts from various professions communicate throughout a collaborative consultation process to provide original answers to challenges that both parties have agreed upon. One of the key consequences of collaborative consultation is the provision of successful educational programs in the contexts that are most suitable for persons with special educational needs (Idol, Nevin, & Paolucci-Whitcomb, 1995; Nevin, Thousand, & Paolucci-Whitcomb, 1990). Everyone in this paradigm has their own area of expertise, thus in this way, it is flexible. A participant in a collaborative relationship can always participate as the consultation's "provider" or "receiver" (Nevin, Thousand, & Paolucci-Whitcomb, 1990). This implies that the elements involved in the collaborative consultation process are also involved in the process of mutual interaction.

It is noteworthy that when the cooperation component is taken into account, more thorough definitions of this concept are formed in terms of the characteristics of the idea of consultation. It is possible to analyze certain misconceptions about school consultation in this way (Erchul & Myers, 1996). The following presumptions and the associated more accurate viewpoints may help to clarify and improve our understanding of the idea of consultation:

"Mental health professionals and teachers are equal parties": One could argue that this equality may be at the knowledge level. Moreover, an exhausted teacher frequently starts the consultation. He is searching for a solution because he is powerless to do anything about the issues in the

classroom. The demands of the roles are also diverse. A mental health specialist can help the teacher with individual intervention or treatment as well as kid consultation. All of these considerations call for a reexamination of the second assumption.

“Collaborative consultation is not guiding”: In fact, it can be said that a guided approach is often better even for consultations that are carried out especially for educational-vocational-individual needs in schools.

“Confidentiality must always be maintained in consultation”: It’s not always true that confidentiality exists in educational settings. Particularly when it comes to the “solution” to an issue, confidentiality might not be desired. Less-confidential consultations may increase knowledge of the consultation procedure’s normality, which may in turn motivate instructors to seek assistance. Solutions in one setting may need to be adapted to other environments as students perform distinct functions in other environments. The ability of the child to perpetuate the change he/she encounters in many contexts and surroundings may be constrained by extremely strong confidentiality, which interferes with the transfer of even knowledge within normal bounds.

“Teachers want more collaborative consultation”: This may be because of the false notion that all parties are on an equal footing. Instead than collaborating as a result of their training, teachers could favor prescribing methods. The collaborative consulting method may appear to take more time than the prescribing method.

It is acknowledged that there are several instances of negative presumptions about the consultation. In order for the consultation procedure to function well, these assumptions must be accurately assessed. Of course, the aforementioned presumptions can be altered to suit the requirements of individual parties in various situations, and alternative considerations can then be considered again in that light. Particularly, concerns like voluntariness and confidentiality may need to be handled with care in these conversations without jeopardizing the participants’ security.

The content of the service can be addressed in terms of consultation. As a result of the fact that the consultation satisfies the needs in several dimensions, various consultation classifications and types come into play (Bramlett & Murphy, 1998). The mental health consultation is one of these and is based on psychoanalytic philosophy. Being able to analyze them can help you understand the issue better, thus the goal is to develop insight into your own thoughts, feelings, and actions (Caplan, 1970; cited in Bramlett & Murphy, 1998). Direct observation and appraisal of behavior are seen beneficial in another sort of behavioral consultation. Focus is placed on classroom environment components such as instructor actions and stim-

uli. Six dimensions of comprehensive support are targeted, ranging from verbal engagement through the implementation of entire educational programs. Apart from these two basic (mental health and behavioral) consultations, consultation with the prescriber is also emphasized. The person who gives the consultation as the person who diagnoses the problems and indicates the solution stands out in this approach and the dependency of the consultation area emerges accordingly. Within the scope of explaining this addiction, in the triple dependent approach, the counselor recommends individual interventions based on the information he/she collects. In the collaborative model, the consultant's expertise remains, but he is a party that strives for the development of joint solutions. Intervention to problems at the organizational level is handled in this context. Both of these two consultations are used effectively to intervene in individual and systematic problems in educational environments (Keys, Bemak, Carpenter, & King-Sears, 1998). Potential negative feelings that parents may experience in the face of the role of an expert are criticized in this type of consultation. (White and Mullis 1998; Cited by Keys, Bemak, Carpenter and King-Sears, 1998).

Other consultation types are also included in addition to the categories that are presented here. According to the requirements, these consultations are proposed. Collaborative consultations with a family focus (Fine, 1990) and integrative approaches are notable examples of these. Integrative consultation is an eclectic model of consultation with six dimensions: the goal of the consultation, the relationship between the consultant and the consultee, the consultant's role in the consultation, the role of the consultee in the consultation, the consultation process, and the consultant's communication abilities. In this model, the process of consultation is detailed in considerably greater detail. A proactive approach to problem-solving is emphasized in the family-oriented collaborative consultation model, which places an emphasis on shared responsibility. While examining the protecting and enhancing aspect of psychological counseling services, the second strategy stands out among the others. It's probable that this strategy incorporates critical abilities that can serve as the foundation for preventive measures, such as pre-crisis parenting research, possessing interpersonal communication and problem-solving skills, adopting an active and neutral style, and prioritizing cooperative efforts.

It is notable that there are numerous consultation models, as can be shown. The collaborative consultation approach, however, is the most well-known and quickly growing consultation strategy. It is also noted that different models have different configurations depending on the requirements. Here, more information on the collaborative consultation is provided.

3. Characteristics of Cooperative Consultation

When examining its origins, it has been stressed that consultation arose in reaction to the rise in conversations about medical and psychometric techniques as a means of addressing issues in schools (Bramlett & Murphy, 1998). Furthermore covered is how the consultation and cooperation process helps to finish and integrate the education of children with learning difficulties in the classrooms. As consultation comes before collaboration, it has historically incorporated more and more collaborative elements, despite receiving more attention in the literature. As a result, the phrase “collaborative consultation” first appeared in the middle of the 1980s as a special education service choice for students with moderate disabilities (Coben, Thomas, Sattler, & Morsink, 1997). It is also underlined that, in terms of its application to educational settings, the concept of collaborative consultation evolved from the literature on mental health (Caplan, 1964; cited in Ford & Fitterman, 1994). It is acknowledged that the idea of consultation and the idea of cooperation gradually merged.

As most school counselors occasionally struggled to find a solution to a school issue and teachers were subject matter experts in their respective subject areas, collaborative consultation, according to Horne and Mathews (2004), was considered as the best strategy for consulting delivered in schools. In this regard, it is considered that teacher participation in the consultation process as well as the demands in the area of special education have contributed to the development of collaborative consultation more over time. The perceived efficacy of parent-counselor collaboration, teacher-counselor collaboration, and collaborative consultation was examined in a study (Hoskins, Agramovich, & Smith, 2007). It was focused on the questions such as what are the positive and negative elements of them, and how do the aspiring instructors rank them? It was determined that combined collaborative consultation was favored as a consequence. It was discovered that this strategy was more efficient and methodical than individual counseling sessions with parents and teachers. This strategy broadens the variety of interventions. The notion of needs has also become more organized.

Generally speaking, cooperative interaction style is a procedure that entails devoting resources and taking charge in accordance with the desires and shared accountability of both parties for a certain goal (Friend & Cook, 1996; cited in Keys, Bemak, Carpenter, & King-Sears, 1998). Other than the ones already mentioned, collaborative consulting, which encompasses this interaction style, has other noteworthy characteristics (Reinhiller, 1999). They include elements like making sure there are three parties involved in the process, choosing cooperation over specialization, actively participating in problem solutions, and maintaining confidentiality.

It becomes clear from examining the characteristics of the collaborative consultation idea that cooperation is a key component in the majority of these characteristics. In a sense, the parties involved in the consultation process share some of the obligations related to the interaction process. According to Nevin, Thousand, Paolucci-Whitcomb, and Villa (1990), collaborative consultation is typically dependent on the face-to-face participation of all participants in the conversations. Additionally, when necessary, it makes sure that the parties are involved and that the process is managed within the parameters of accountability and shared goals. Interpersonal abilities are regarded as valuable when the needs of the group are addressed when necessary (Cited in Idol, Nevin & Paolucci-Whitcomb, 1995). This notion holds that the roles played by those taking part in the consultation in carrying out the process demand practically equal shares.

Contrary to traditional approaches, collaborative consultation benefits from having a counselor who is an expert and employs reciprocal expertise (Idol, Nevin, & Paolucci-Whitcomb, 1994). In addition to this, it is recognized that all group members can contribute significantly, taking into consideration their diverse areas of competence, as opposed to the one individual carrying out the entire process. From this, it can be inferred that reliance on the counselor is unhealthy in comparison to other models (Keys, Bemak, Carpenter, & King-Sears, 1998). In fact, leaving a free mobility area in this manner—which is not addictive—can be considered as a proactive step that speeds the identification of original parties for a solution. In this situation, for instance, the special education teacher of the child (since he qualifies for emotional and behavioral services), a court-appointed guardian, a social worker, the manager and counselor of the group home, and the child are all members of a team that addresses the needs of a child in an example case (a caregiver with an alcohol addiction and the potential for sexual abuse). Once the traits of the collaboration process mentioned above are taken into account, the endeavor of such a team to work around an issue will enable a solution to the problem to emerge more quickly. Because the topic is quite complex and calls for the contributions of many different viewpoints, expertise, knowledge, and experience (Keys, Bemak, Carpenter, & King-Sears, 1998). As can be seen, the required level of collaboration in the consultation will be attained if the team members who are in charge of the child's circumstances carry out their tasks independently and behave with a team spirit at the same time.

The advantages of collaborative consultation were further discussed by Ford and Fitterman (1994) in terms of requirements comparable to those in the aforementioned scenario. As a result, among the outstanding advantages are easing the multifaceted debate of options in related situations, lowering costs by efficiently employing resources, demonstrating a

professional approach by placing the student at the center, and especially having a preventive dimension.

When these positive factors are taken into account, it becomes clear that, in addition to being crisis-oriented, it is extremely valuable for the collaborative consultation to emphasize the preventive and protective components. Preventive consultation studies can be just as beneficial as crisis intervention in terms of achieving successful outcomes, depending on the proper utilization of resources. When we consider the goals of the consultation, the immediate objective is to address the issue that the students are now facing, and in this regard, remediation is prioritized. Long-term consultation objectives include prevention. It is intended that consultation will be based on an effective communication approach for both purposes (Bramlett & Murphy, 1998). Both crisis response and preventative aspects are brought up in light of the consultation's goals, and it is acknowledged that these goals require a healthy, collaborative partnership.

4. Collaborative Process for Consultation

The process of consultation is viewed more in the context of collaborative consultation. The five stages of collaborative consultation are comparable to the stages of problem solving, according to Keys, Bemak, Carpenter, and King-Sears (1998). A common understanding of the issue must be reached before it can be turned into a goal, carried out as part of the plan, and evaluated as in earlier stages of problem solving. In this way, the consultation process could be seen as a problem-solving process. Similar to this, Baker et al. (2009) view collaboration in consultation as a traditional eight-step problem-solving process from problem formulation through evaluation. This approach is used by educators and mental health professionals, particularly when dealing with misbehavior. Once treated with a problem-solving approach, the collaborative nature of the consultation is also beneficial for mental health issues like anxiety at school. For this, various scholars are still concentrating on creating an action plan similar to the processes in problem solving (Conroy, et al., 2022).

The word "consultation process" can also refer to a procedure that occurs with respect to the participants in the consultation (West & Idol, 1990; cited in Idol & Baran, 1992). In light of the parties with respect to whom the consultation was held, it is noteworthy that these parties are fairly different. These individuals could include more than two professionals or could be team members in the classroom or who assist students. Perhaps classroom-only teachers develop a support network among themselves. The fact that the same procedure can occur between parents or members of the school's professional staff is underlined. Finally, it is acknowledged that this process might occur between individuals who are a part of so-

cial or non-academic sectors. In this sense, the consultation process is a procedure with various participants. Nonetheless, the instructor stands out as the key player in all procedures. In a study for teachers (Kılıç-Özmen & Kabapnar, 2019), it was discovered that classroom guidance teachers with a favorable opinion of the counseling and guidance service found the guidance service to be efficient in the areas of consultation, coordination, getting to know the student, counseling, giving information, placement, and monitoring, respectively. It may be claimed that consultation is possibly the first service area that teachers have the most access to, as this is where they can ask for assistance from the guidance services process and subsequently receive those services. Teachers stand out in this regard as the key player in the consultation process and the one who forges teamwork. In other recent research (Aslan & Güven, 2019), it has been noted that the functions of consultation to provide collaboration for teachers are emphasized.

Consultations can sometimes go wrong for a variety of reasons, including incorrect expectations about responsibilities, poor communication, or an unwillingness to completely disclose the issue. To ensure a healthier progression of the process, a matrix has been created (Kurpius, 1991) to show the ideal circumstance in the consultation effort. This matrix is used as a conceptual tool to help with an overall impression of the pre-consultation scenario or to assess how ready the environment and culture are for the consultation. It is also well recognized that it helps determine how much time should be spent on achieving the goals. The windows in Figure 1 below, denoted by the numbers I through IV, show the potential for cooperation. It is important to note whether this possibility results from having an open mind to the new concepts and advancements mentioned above or from the careful application of the tools for change described on the left.

	CLOSED	OPEN
STEADY STATE	I Not possible	II Although it is possible, suspended
UNBALANCE	III Controversial though possible	IV The ideal

Şekil 1. Probability of consultation

The figure illustrates that an open mind and imbalance make for the most productive circumstances for collaborative consulting. A collaborative consultation process is not anticipated to occur in an environment where there is balance and apathy to new ideas. It was discovered that one

of the major issues in a study that confirms the existence of this condition (Bozkur and Kaya, 2021) is that instructors and parents are unwilling to cooperate in the challenges experienced in providing psychological counseling services to kids in schools.

Collaborative consulting acknowledges the potential for challenges in all aspects of the working process. Collaborative consultation challenges can be both institutional and personal. Counselors are supposed to be aware of the numerous reactions people go through during the process, including feeling disheartened or constrained and wanting or unwilling to change. Personal obstacles, according to Fine (1990), can include things like trouble thinking creatively, difficulty adapting to new situations, a lack of originality, and even time restraints. In addition to these, it seemed that environmental-systemic variables as well as individual factors can cause these difficulties because the consultation involves contact with the environment and people in addition to its own environmental integrity.

In view of this circumstance, it is possible that the developed collaborative consultation system will be unfamiliar to the participants for other locations, such as other classes and houses. The consultation process can be impacted by system-level barriers as well as individual factors if the circles-systems in question lack support, lack communication as well as some economic difficulties, other cultures do not reinforce the system or are rigid, and if there is an exclusionary system structure with excessively rigid attitudes are present (Keys, Bemak, Carpenter, & King-Sears, 1998).

Systems- and person-based barriers come in a wide variety. Barriers based on collaboration can be analyzed under three categories in addition to these two (Bramlett & Murphy, 1998). They are categorized as managerial-level considerations, institutional/organizational factors, and elements relating to the parties exchanging consultations. When these factors are considered collectively, both individual and systemic factors, such as a lack of personal skills required for effective consultation, an inadequacy in receiving the required training in this regard or in managing the classroom, a lack of openness to new ideas, or being held accountable for an intensive curriculum, stand out, as was previously stressed.

Similar factors were the focus of Coben, Thomas, Sattler, and Morsink (1997) as well. Conroy, et al. (2022) draw attention by highlighting that school-family cooperation, which is an extension of system factors, and ensuring the teacher's motivation in this context will be among the most important sources of support for this process. This discussion is further supported by these authors. On the other hand, Erchul and Martens (2010) highlighted that it is possible to support instructors in numerous ways in facilitating the consultation process. This support includes assistance with

the school culture, such as utilizing sympathetic encouragement and appreciation, informing teachers about novel interventions, and promoting peer-to-peer assistance among instructors.

5. Essential Capabilities for the Collaborative Consultation Process

When the abilities of experts to create collaborative consultation are closely examined, it becomes clear that these abilities are also discussed in greater detail under different headings, such as communication, problem-solving, and even values in addition to personal abilities (Ford & Fitterman, 1994; West, Idol & Cannon, 1989; cited in Idol and Baran, 1992). Qualities such as self-awareness, self-efficacy, self-confidence, open-mindedness, and tolerance stand out when seen within the context of the person's competences. O'Keefe and Medway also made this point (1997). It's crucial that the counselor believes they are capable of carrying out this process, particularly in terms of their therapeutic abilities. Second, essentially every verbal and non-verbal communication skill, besides the capacity to assess the parties' readiness, contributes to the process. This involves having the abilities necessary to successfully reference attempts, where a variety of therapeutic techniques can aid in the process and, if necessary, employing decision-making competence would be more appropriate. Even though there are different stages of problem solving, the third point, when a problem solving process based on cooperation is followed, calls attention to the importance of competences for the entire implementation of the process, which encompasses the widest stages. In this way, the goal is to develop multifaceted action plans and to keep the observation process going as uninterruptedly as feasible by seeking input as needed. Being a change agent is a valuable role to play in the fourth dimension of acting in systems. In a way, the counselor is supposed to promote consultation, particularly in gaining the required support for school administrations (Missouri Center for Career Education, 2015). A priority for values and beliefs-related competences is, lastly, a comprehension of respect for individual differences that applies to all students. In this framework, students with impairments are given special consideration, and their multifaceted integration and integration with the environment are thought to be priorities. The existence of values and beliefs that have an impact on all of these processes is viewed as complimentary and valuable. Since collaboration in consultation is more effective when there is an engagement that is attentive to obligations based on values and moral standards based on human connections, claim Dobson and Gifford-Bryan (2014).

All of these competencies needed for collaborative consulting can be categorized into five categories when taken as a whole. The majority of

the skills, when analyzed in terms of their content, are amazing communication, interaction, and problem-solving abilities. Also, it is clear that unique abilities related to value and system structures are essential for the process's effective organizing.

6. Conclusion

In terms of its definition, organization, and implementation, collaboration-centered consultation, one of the most remarkable models of consultation, is viewed as a full process. In fact, it wouldn't be inaccurate to say that the consultation process is inherently a cooperative endeavor. In this regard, it is important that creating this partnership necessitates a variety of personal and environmental-systemic abilities. It will be carried out more effectively if these competencies are made available and the consultation process is based on cooperation. This will make the consultation process more useful than other forms of consultation. Contrary to what is commonly believed, this approach can be seen as a time-saving method for preventing and solving problems, despite the fact that it appears to take a lot of time given that the participants have shared contributions and responsibilities.

At our schools, it could be possible to further organize collaborative consultation. Although there may be administrative, time, and human challenges, there may also be significant advantages in terms of addressing the parties' needs for consultation more efficiently. When psychological counselors, teachers, families, and school administrations work together in a collaborative consultation approach on a variety of issues, such as reducing school violence to boosting academic success and career preparation, faster outcomes can be achieved. The collaborative component of consultation indicates a process that instructors are happy with and gain from, according to studies (Aslan & Güven, 2019; Castro-Villarreal & Rodriguez, 2017). These findings would suggest that progress has been made in addressing teachers' long-standing requirements (Duis, 1995) to comprehend their own position in consultation.

It would be advantageous to follow some recommendations in the structuring of the collaborative consultation process, given its future-focused nature. The effectiveness of school consultation practices can be improved in a number of ways, including through improved recipient-giver communication and acting in accordance with the model's characteristics (Erchul & Myers, 1996; Villa, Thousand, Paolucci-Whitcomb, & Nevin, 1990). In light of these recommendations, it is notable that the consultation service gives importance to the parties' free decisions within the parameters of voluntariness, as well as the acceptance of the consultant's expert knowledge and the separation of roles, which can both have a positive im-

pact on the process. The people taking part in the consultation may be hesitant and reject the procedure owing to a range of feelings, and they may not think this assistance is necessary. In certain situations, the counselor may need to collaborate with willing parties (Missouri Center for Career Education, 2015). This implies that the participants' voluntary engagement is also necessary for the cooperation for the consultation. In addition to these suggestions, ideas for the educational system can be proposed (Carey, 1995; cited in Bramlett & Murphy, 1998). As a result, school-wide policies can encourage efforts to always be alert to challenging circumstances and crisis scenarios and to develop abilities to manage these situations, as well as the consultation process can be improved. Organize the consultation, even if in small steps, and include the guidance with the services for gathering and disseminating information as you go about the necessary tasks.

These suggestions can be supplemented with another significant recommendation in the evaluation section. The consulting procedure is extensive, and it can be challenging to get the required results without assessment. It is seen as crucial to clearly identify the accomplishments and client results at the beginning of the process and to utilize efficient measuring techniques in the evaluation of the outcomes in the development of consultation through evaluation (Sheridan et al., 1996; Cited in Bramlett & Murphy, 1998). The consultation procedure can produce more desired results if these aspects are taken into consideration.

The continuation of the accomplishments associated to this process outside of school may produce better results, despite the fact that it is obvious that the consultation process takes place primarily in schools. The most crucial actors in guaranteeing the continuity of school consultation studies at home and in evaluating the results are the parents, with their values and culture (Conroy, et al., 2022). They have made an immeasurable contribution, particularly in terms of sustaining the achievements obtained through consultation, promoting its use, and ultimately supporting cooperation.

REFERENCES

- Alshalawi, A. S. (2019). Impact of Effective Collaboration and Consultation: Insights for Educators, *Global Journal of Education and Training*, 2(9), 1-6.
- Aslan, A.M. & Güven, M. (2019). Okul Psikolojik Danışmanlarının Ailelerle Yürüttükleri Konsültasyon Çalışmaları, *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 9(52), 109-148.
- Baker, S.B. et al.. (2009). School Counselor Consultation: A Pathway to Advocacy, Collaboration, and Leadership, *ASCA Professional School Counseling*, 12(3), 200-206.
- Bramlett, R.K. & Murphy, J.J. (1998). School psychology perspectives on consultation: key contributions to field. *Journal of Educational and Psychological Consultation*, 9(1), 29-55.
- Bozkur, B. & Kaya, A. (2021). Konsültasyon Öz-yeterlik Ölçeğinin Türkçeye uyarlanması ve okul psikolojik danışmanlarının konsültasyon öz-yeterliklerinin incelenmesi, *Pegem Eğitim ve Öğretim Dergisi*, 11(1), 49-96.
- Castro-Villarreal, F. & Rodriguez, B.J. (2017). Using Consultee-Centered Consultation with Teachers in a Contemporary School Setting to Inform Culturally Responsive Practice, *Contemporary School Psychology*, 21, 240-254.
- Coben, S.S., Thomas, C.C., Sattler, R.O. & Morsink, C.V. (1997). Meeting the challenge of consultation and collaboration: developing interactive teams. *Journal of Learning Disabilities*, 30(4), 427-432.
- Conroy, & et al.. (2022). Harnessing Home-School Partnerships and School Consultation to Support Youth With Anxiety, *Cognitive and Behavioral Practice*, 29, 381-399.
- Dinkmeyer, S. & Dinkmeyer, J. (1984). School counselors as consultants in primary prevention programs. *Personel & Guidance Journal*, 62(8), 464-466.
- Dobson, E. & Gifford-Bryan, J. (2014). Collaborative-Consultation: A Pathway for Transition, *Kairaranga*, 15(1), 11-19.
- Duis, S. et al. (1995). Collaborative consultation: are both school psychologists and teachers equally trained? *The Annual Meeting of the Council for Exceptional Children*.
- Erchul, W.P. & Martens, B.K. (2010). *School Consultation, Issues in Clinical Child Psychology*, Springer Science+Business Media, LLC. DOI 10.1007/978-1-4419-5747-4_9
- Erchul, W.P. & Myers, L.W. (1996). Some misguided assumptions underlying the practice of school consultation. *The Annual Meeting Of The National Association Of School Psychologist*, Atlanta.
- Fine, M. J. (1990). Facilitating home-school relationships: a family-oriented approach to collaborative consultation. *Journal of Educational and Psychological Consultation*, 1(2), 169-187.

- Ford, C. & Fitterman, L.J. (1994). Collaborative consultation: literature review and case study of a proposed alternative delivery system. ERIC.
- Frederick, D. & Farah, I.A. (1999). Violence and schools in the USA: implications for counseling. *International Journal for the Advancement of Counseling*, 21(4), 349-366.
- Gault, H.J. (2001). Consultation about violent students. *Child & Adolescent Psychiatric Clinics of North America*, 10(1), 129-138.
- Hall, A.S. & Lin, M. (1994). An integrative consultation framework: A practical tool for elementary school counselors. *Elementary School Guidance & Counseling*, 29(1), 16-28.
- Horne, S.G. & Mathews, S.S. (2004). Collaborative consultation: international applications of a multicultural feminist approach. *Journal of Multicultural Counseling and Development*, 32, 366-378.
- Hoskins, W. J., Astramovich, R. L. & Smith, S. D. (2007). School counselling consultation: a comparison of parent, teacher, and conjoint modalities. *Guidance & Counseling*, 21(3), 152-159.
- Idol, L., Nevin, A. & Paolucci-Whitcomb, P. (1995). Collaborative consultation model. *Journal of Educational and Psychological Consultation*, 6(4), 347-361.
- Idol, L. & Baran, S. (1992). Elementary school counselors and special educators consulting together: Perilous pitfalls or opportunities to collaborate?, *Elementary School Guidance & Counseling*, 26(3), 202-214.
- Keys, S.G., Bemak, F. & Lockhart, E.J. (1998). Transforming school counseling to serve the mental health needs of at-risk youth. *Journal of Counseling and Development*, 76, 381-388.
- Keys, S.G., Bemak, F. Carpenter, S.L. & King-Sears, M.E. (1998). Collaborative consultant: A new role for counselors serving at-risk youths. *Journal of Counseling & Development*, 76(2), 123-133.
- Kılıç-Özmen, Z. & Kabapınar, Y. (2019). Sınıf Öğretmenleri ve Okul Psikolojik Danışmanları Birbirlerini Nasıl Algılamaktadır?, *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 9(53), 482-521.
- Knoff, H.M. (2000). Organizational development and strategic planning for the millennium: A blueprint toward effective school discipline, safety, and crisis prevention. *Psychology in the Schools*, 37(1), 17-32.
- Kurpius, D.J & Thaddeus, R. (1992). Outreach, advocacy and consultation: A framework for prevention and intervention. *Elementary School Guidance and Counseling*, 26(2), 176-189.
- Kurpius, D.J. (1991). Why collaborative consultation fails: a matrix for consideration. *Journal of Educational and psychological consultation*, 2(2), 193-195.
- Missouri Center for Career Education (2015). Missouri Comprehensive Guidance

and Counseling Program, Jefferson City, MO.

- Nevin, A. Thousand, J. & Paolucci-Whitcomb, P. (1990). Collaborative consultation: empowering public school personnel to provide heterogeneous schooling for all-or, who rang that bell? *Journal of Educational and Psychological Consultation*, 1(1), 41-67.
- O'Keefe, D. J. & Medway, F. J. (1997) The Application of Persuasion Research to Consultation in School Psychology, *Journal of School Psychology*, 35(2), 173-193.
- Reinhiller, N.W. (1999). Efficient and effective formats for collaborative consultation. *Journal of Educational and Psychological Consultation*, 10(2), 173-184.
- Tagay, Ö. & Sarı, T. (2012). Okullarda Konsültasyon Hizmetleri ve İşbirliğine Dayalı Konsültasyon Modelleri, 1(23), 157-172.
- Villa, R.A., Thousand, J.S., Paolucci-Whitcomb & Nevin, A. (1990). In search of new paradigms for collaborative consultation. *Journal of Educational and Psychological Consultation*, 1(4) 279-292.