Information Technologies and Games in the Education of Hearing Impaired Children

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Acquiring speaking due to partial or complete inadequacy of the hearing, negatively affecting the individual's educational performance and social cohesion due to language use and communication difficulties is defined as hearing impairment. Hearing impaired communication skills negatively affect language and speech development, as well as affecting the entire development of the individual in the negative. Today, the developments in the field of technology have also shown itself in hearing aids. Thus, hearing impaired people, depending on the degree of hearing impairment they have and the ability to choose a variety of devices offered. On the other hand, it is very important to provide the hearing aid with the appropriate hearing aid for children with hearing impairment, but it is important to be able to respond to the special needs of supporting the learning process of these children with technological applications during the information age. Hearing impaired children have difficulties in motor development, balance and coordination compared to their normal hearing peers due to the type and grade of hearing loss. In addition, cognitive retardation due to low auditory experience causes negativity in social, psychological and academic fields due to negativities in language development. These drawbacks lead to the shaping of educational environments according to the needs of children with hearing impairments. Hearing impaired children can not vocalize their voices as they should because they can not hear speech voices as needed. Therefore, depending on the hearing impairment, the vocabulary of these children develops more slowly than their peers with normal development. Information and Communication Technologies (ICT) is also fully engaged here and offers a wide range of tools and application possibilities for the education of children with hearing impairments. These tools range from multimedia applications that address many senses to smartphone and smart board applications. The inclusion of ICT in the education and training process has increased the knowledge and skills of hearing-impaired children on motivation, comprehensibility, academic achievement, and technology use. The use of ICT in the teaching process affects the academic achievement positively in terms of ease of presentation, making classes more enjoyable for teachers and students as it increases the diversity of activities, increasing the attention and information of the students, The ease of finding and displaying the visuals of words that students do not know during the teaching process facilitates communication and interaction with hearing impaired people in

terms of time and communication. Increasing students' learning, bringing the visuals of places far away from the social sciences lessons into the classroom environment, motivating the lessons and increasing creativity are benefits of ICT use. The use of ICT in lectures makes it easier for students to learn how to use these technologies and the fact that hearing-impaired children feel themselves more successful and successful because they provide a fast and effective way of expression by positively influencing reading and writing shows how important ICT use is in the classroom. Private instruction software is collected in five groups. These; training and repetition software, simulation software, self-teaching software, educational game software and problem solving software. In the private education centers, while the computer is being processed with the courses, educational software is widely used among training softwares. The reason for the choice of practice and repetition software is due to the need to repeat very often after learning a topic for hearing-impaired children's hearing-impaired peers. These software provide students with the ability to use their preliminary knowledge and practice, as well as the role of motivating the competition. Educational gaming software is used as a reward for students at the end of the lesson or to ensure that distracted students focus their attention on the lesson and to help students learn lesson topics or develop problem solving skills by making use of their willingness and desire to play games. When choosing educational gaming softwares, the criteria of attractiveness of gaming devices and activities, educational value of the software, compliance with the physical abilities of the students, and low intensity and aggression items must be considered. Educational gaming software can be an effective teaching material when it is appropriately selected at the time or when it is designed according to the desired qualities. The games that are used to spend time with the computer in order to evaluate the leisure time of the students are outside this grouping. The learning achievements of students benefiting from information technology are increasing compared to the students who are educated with classical education. The problem of attention dis- tribution can be neglected as the information technologies increase the interest of the students with hearing impairment to the lessons and become fun to learn. By contributing to the written expression skills of the students with hearing impairment, students who have hearing impairments can use the past, present and future times correctly and have a positive influence on written expression skills by contributing to written expression skills such as building sentences and using correct times correctly.

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