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# Formation of knowledge about national traditions in high school students with intellectual disabilities through modern technologies

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#### Abstract

The purpose of this research is to get teachers' opinions in order to provide knowledge about national traditions in mentally retarded high school students through modern technologies. This research was designed in a qualitative manner. The participant group of the research consists of 40 high school teachers who teach students with intellectual disabilities in Almaty, Kazakhstan. Research data were collected with a semi-structured interview form developed by the researchers. As a result of the research, the majority of teachers participating in the research stated that they strongly support the use of modern technologies in order to ensure the formation of knowledge about national traditions among mentally handicapped students. On the other hand, the majority of the teachers participating in the research stated that they sometimes make use of modern technologies in order to create knowledge about national traditions among mentally handicapped students. The majority of the teachers participating in the research were interested in what could be done by making use of modern technologies in order to provide knowledge about national traditions among mentally handicapped students. They responded by creating a new course on national traditions, training students on the use of technology, integrating mobile technologies into education and providing in-service training to teachers. Some teachers stated that the technological opportunities of schools should be increased; a blended learning environment should be created; the physical environment

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of the classrooms should be created with materials related to national traditions; student participation activities should be created; and a teaching plan related to national traditions should be created.

Keywords: National traditions, modern technologies, intellectual disability, teacher opinions;

#### 1. Introduction

Intellectual disability, which is expressed as a state of being below normal in terms of general intelligence functions in addition to the inadequacy seen in adaptive behaviours that occurs during the developmental period, slowing down in body, mind, language, emotional, social characteristics and functions due to various reasons before birth, after birth and at the time of birth, can be defined as the inability to learn as a result of pause and regression (Leeming, Swann, Coupe, & Mittler, 2018).

# 1.1. Theoretical and conceptual framework

Although there is no single definition that defines mentally retarded children, who constitute a large proportion of children with special needs, definitions specified in some studies are included in the literature (McGuire, Tian, Yeargin-Allsopp, Dowling, & Christensen, 2019). In these definitions, not only the intelligence scores of these children are measured by intelligence tests, but also their social adaptation, language development, health etc. are also investigated and measured (McDonnell et al., 2019; Mwoma, 2017).

Intellectual disability, which is expressed as a state of being below normal in terms of general intelligence functions in addition to the inadequacy seen in adaptive behaviours that occurs during the developmental period, slowing down in body, mind, language, emotional, social characteristics and functions due to various reasons before birth, after birth and at the time of birth, can be defined as the inability to learn as a result of pause and regression (Derbissalova, Abaeva, Turyszhanova, Bekmuratova, & Zhigitbekova, 2022; Gilmour, Fuchs, & Wehby, 2019). With the direct instruction approach, it is suggested that individuals affected by intellectual disability can gain cooperation, empathy and self-control, targeted social skills, questioning in conversation, making positive comments about others, expressing themselves in positive terms, listening, problem-solving and adapting to new situations (Brock, 2018; Neece, McIntyre, & Fenning, 2020).

Moreover, initiating and maintaining interaction, asking questions, apologising with the teaching presentation exemplified by the student's expected skills, asking for help and finishing the job on time and speaking on the phone appropriately with the teaching presentation exemplified by the student's expected skill were revealed (Pei & Sonoyama, 2022; Singh, 2014). As students who are affected by disability gain social skills through teaching using effective teaching methods, their social acceptance will increase (Drummer-Yesilyurt & Tezer, 2019). Social acceptance means that individuals who are not affected by disability have positive attitudes towards individuals who are affected by disability and see them as other people (Tallboy & Sukran Oz, 2019).

The acceptance of disabled individuals, i.e., seeing them as other people, depends on their positive interaction with them (Burke, Arnold, & Owen, 2018; Jones, 2015). In general, learning disabilities of individuals with intellectual disabilities are that academic concepts can be categorised as difficult, with lack of attention span, simple perception and reactions, forgetting quickly, difficulty in adapting to new situations, difficulty in comprehending abstract terms and difficulty in adapting knowledge and skills to new situations (Agran et al., 2020).

Although the language and speech disorders of mentally retarded individuals vary according to the degree of disability, in general, they have difficulty in starting a conversation in conversational skills; their receptive and expressive language skills are limited; they have difficulty in understanding a story within the framework of a certain topic; they experience stuttering, voice production disorder, delayed speech and articulation (such as adding/dropping sound, adding/dropping syllables) disorders (Eratay, 2017; Shogren, Shaw, Raley, & Wehmeyer, 2018; Sullivan, Sadeh, & Houri, 2019). It is known that children with intellectual disabilities experience more emotional and social problems than normal children (Hutzler, Meier, Reuker, & Zitomer, 2019; Kuntz & Carter, 2019). They are children who are more dependent on their friends, do not want to take responsibility and communicate with children younger than themselves (Urea & Carmen, 2020). They have problems in establishing friendships, initiating and maintaining communication, being aware of their emotions, controlling their behaviour, obeying and comprehending social rules (Lemons, Vaughn, Wexler, Kearns, & Sinclair, 2018).

The rapid development of technology has brought about many innovations, and one of the places where these innovations are seen most effectively has been in the information sector (Cabi, 2015). Almost all the devices we use have reached a more efficient and useful level with information technologies and they continue their development. Education is one of the areas where information technologies are used most widely. The use of modern technologies in the teaching activities of individuals with intellectual disabilities enables providing and increasing motivation, making learning more enjoyable, increasing self-confidence, offering alternative ways for individuals with limited expressive language skills to express themselves and sharing what they know, individualisation, supporting different learning styles and abilities, and providing a consistent and desired number of exercises. It is stated that they contribute to teaching in the form of facilitating information gathering (Whitby, Leininger, & Grillo, 2012).

#### 1.2. Related research

Blank, Fogarty, Wierzba, and Yore (2000) planned social skills training for 24 mentally retarded students who exhibit behaviours such as hitting others, inability to communicate, hindering teaching and distraction. The social skills programme is based on the cooperative teaching method and the direct teaching approach. The teacher observation form, teacher rating scale and student anecdotal records were used to measure the effectiveness of teaching.

Wehmeyer et al. (2006) conducted a meta-analysis of single-subject research on technology use in work activities for individuals with intellectual and developmental disabilities. They emphasised that a universal design should be taken into account in applications, especially stating that the applications where universal design is made are effective and that more research is needed on this subject.

Mechling (2007) conducted a literature study to examine the effectiveness of assistive technologies in providing clues to students with intellectual disabilities in teaching self-management skills. He emphasised that assistive technologies enable individuals with disabilities to have more control over their own lives and also stated that technology is effective in helping individuals be independent in their daily life and social skills.

Liu, Wu, and Chen (2013) conducted a literature review to determine the trend of learning technologies in special education. For this purpose, they examined 26 studies that provided these criteria by determining the criteria such as the learning technologies used in the education of individuals with special needs; the disability group of individuals with special needs are explained in detail; and the research focused on learning outcomes published between 2008 and 2012. In the

studies, besides the positive aspects of learning technologies, the negative aspects are also stated. These situations are listed as limited access to technological tools, difficulties encountered in the practical integration of technology, time limitations and difficulties in classroom management.

# 1.3. Purpose of the research

The purpose of this research is to get teachers' opinions in order to provide knowledge about national traditions among mentally retarded high school students through modern technologies. Parallel with this aim, the following sub-objectives have been developed:

- 1. Do high school teachers support the use of modern technologies in order to create knowledge about national traditions among students with intellectual disabilities?
- 2. Do high school teachers make use of modern technologies in order to ensure the formation of knowledge about national traditions among students with mental disabilities?
- 3. What are the high school teachers' opinions of mentally handicapped students about what can be done by using modern technologies in order to provide knowledge about national traditions?

#### 2. Methods and materials

In this section, the method used in the research is defined. The demographic characteristics of the teachers participating in the research are included. The development process of the semi-structured interview form developed by the researchers is explained. In addition, the data collection process and the method used in the evaluation of the data are detailed.

#### 2.1. Research method

This research was designed in a qualitative design. Qualitative research, which focuses on the phenomena in the flow of social life and tries to examine these phenomena without any transformation, includes a wide variety of perspectives used to determine the multifaceted and complex nature of modern social life. The complexity of the in-depth examination and explanation of social reality and the increasingly different perception of problems emphasises the dynamic aspect of qualitative research. In the process of designing and conducting qualitative research, researchers have a flexible and dynamic workspace. Flexibility, which is expressed as the ability of researchers to develop new methods and approaches at every step of the research process and to make new arrangements that will increase the impact of the research, is one of the main features of qualitative research.

#### 2.2. Participants

The participant group of the research consists of high school teachers who teach students with intellectual disabilities in Almaty, Kazakhstan. Teachers actively provided training in the 2021–2022 academic year. A total of 40 high school teachers participated in the research. 13 of the high school teachers participating in the research are female and 27 are male. 16 of the high school teachers participating in the research have 1–5 years, 14 have 6–10 years and 20 have 11 or more years of experience.

#### 2.3. Data collection tools

In the development of the semi-structured interview form developed by the researchers in order to get the opinions of the high school teachers who teach the mentally handicapped, first, the literature scanning was done. As a result of the findings obtained from the literature, semi-structured interview

questions were prepared by the researchers within the scope of the research. The interview questions were reviewed by two faculty members who are experts in the field. The questions were rearranged in line with the opinions of the experts. In the semi-structured interview form, there are two questions to determine the gender and professional seniority of high school teachers. Three questions were developed in order to obtain the opinions of teachers in order to provide knowledge about national traditions among mentally retarded high school students through modern technologies. Two questions in the semi-structured interview form are closed-ended and one is open-ended. The semi-structured interview questions developed in accordance with the purpose of the research are as follows:

- 1. Do you support the use of modern technologies in order to create knowledge about national traditions among your mentally handicapped students? Please tick one of the options: I support a lot, I support, I support a little, I do not support or I do not support at all.
- 2. Do you make use of modern technologies in order to create knowledge about national traditions among your mentally handicapped students? Please tick one of the options I always use, I often use, sometimes I use, I rarely use and I don't use it at all.
- 3. What are your views on what can be done by making use of modern technologies in order to provide your mentally retarded students with knowledge about national traditions?

### 2.4. Data collection process

In the process of collecting research data, interviews with teachers were conducted face to face. Interviews with teachers were carried out in the school environment. During the interviews, care was taken to keep the interview environment quiet. The researchers asked the teachers to fill in the semi-structured interview forms by giving it to them directly. While the teachers were filling in the semi-structured interview forms, the researchers were in the environment so that they could ask the researchers about the points that were not understood. It took about 1 month to complete the interviews with the teachers who constituted the study group of the research.

# 2.5. Data collection analysis

The descriptive analysis method was used in the analysis of the research data. Descriptive analysis is generally used for processing data that does not require detailed separation on a qualitative data set. The purpose of descriptive analysis is to bring together the data collected as a result of interviews and observations with the reader in an organised and interpreted way. In most descriptive analyses, the data are classified according to predetermined themes, the findings related to the classified data are summarised, and the summaries are interpreted with the subjective knowledge of the researcher (Kvale, 1994). By carrying out these stages, the opinions of the teachers received in order to provide knowledge about national traditions among mentally retarded high school students through modern technologies were transformed into findings with descriptive analysis.

#### 3. Results

In this section, the answers given by the teachers participating in the research to the questions in the semi-structured interview form are given in frequency and percentage tables.

In Table 1, the teachers participating in the research and supporting the use of modern technologies in order to create knowledge about national traditions among mentally handicapped students are given.

Table 1. Teachers supporting the use of modern technologies in order to create knowledge about national traditions among mentally retarded students

Category	F	%
I support a lot	31	77.5
I support	5	12.5
I support a little	3	7.5
I do not support	1	2.5
I don't support at all	-	-
Total	40	100

In Table 1, the teachers participating in the research and supporting the use of modern technologies in order to provide the formation of knowledge about national traditions among mentally handicapped students are categorised. 77.5% of the teachers answered 'I support a lot', 12.5% answered 'support', 7.5% answered 'I support a little' and 2.5% answered 'I do not support'. Among the teachers participating in the research, there is no teacher who does not support the use of modern technologies in order to provide information about national traditions among mentally handicapped students. From this point of view, it is possible to say that the majority of the teachers participating in the research strongly support the use of modern technologies in order to ensure the formation of knowledge about national traditions among their mentally handicapped students.

Table 2 provides details on the teachers participating in the research with regard to giving students with mental disabilities the opportunity to benefit from modern technologies in order to provide knowledge about national traditions.

Table 2. Teachers' use of modern technologies in order to create knowledge about national traditions among mentally handicapped students

Category	F	%
I always take advantage	1	2.5
I often use	5	12.5
Sometimes I take advantage	26	65
I rarely use	6	15
I never take advantage	2	5
Total	40	100

In Table 2, the teachers' use of modern technologies in order to provide knowledge about national traditions among mentally handicapped students are categorised. 2.5% of the teachers answered 'I always use them', 12.5% answered 'often use them', 65% answered 'sometimes use them', 15% answered 'rarely use them' and 5% answered 'never use them'. From this point of view, the majority of teachers participating in the research stated that it is possible for mentally retarded students sometimes to benefit from modern technologies in order to learn about national traditions.

In Table 3, the teachers' opinions about what can be done by using modern technologies are given in order to provide information about national traditions among mentally handicapped students.

Table 3. Opinions of teachers on what can be done by using modern technologies in order to create knowledge about national traditions among mentally handicapped students

Category	Category	F	%
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Creating a new lesson on national traditions	33	82.5
Providing education to students on technology use	30	75
Integrating mobile technologies into education	25	62.5
Providing in-service training to teachers	21	52.5
Increasing the technological opportunities of schools	17	42.5
Creating a blended learning environment	13	32.5
Creating a physical environment of the classrooms with materials	10	25
related to national traditions		
Creating activities with student participation	6	15
Creating a teaching plan for national traditions	3	7.5

In Table 3, the teachers' views on what can be done by using modern technologies in order to create knowledge about national traditions among mentally handicapped students have been categorised. 82.5% of the teachers made suggestions to create a new course on national traditions, 75% suggested to provide training to students on the use of technology, 62.5% suggested to integrate mobile technologies into education, 52.5% suggested to provide in-service training to teachers, 42.5% suggested to increase the technological opportunities of schools and 32.5% suggested to create a blended learning environment. In addition, 25% of the teachers stated that the physical environment of the classrooms should be created with materials related to national traditions, 15% of them stated that activities with student participation should be created and 7.5% of them stated that a teaching plan should be created regarding national traditions.

#### 4. Discussion

The majority of the teachers participating in the research stated that they strongly support the use of modern technologies in order to ensure the formation of knowledge about national traditions among mentally handicapped students. On the other hand, the majority of the teachers participating in the research stated that they sometimes make use of modern technologies in order to create knowledge about national traditions among mentally handicapped students. The majority of the teachers participating in the research on what can be done by making use of modern technologies in order to provide knowledge about national traditions among mentally handicapped students responded by creating a new course on national traditions, training students on the use of technology, integrating mobile technologies into education and providing in-service training to teachers. Some teachers stated that it is necessary to increase the technological opportunities of schools, to create a blended learning environment, to create the physical environment of the classrooms with materials related to national traditions, to create student-participated activities and to create a teaching plan regarding national traditions.

When the researches in the field are examined, it is seen that there are studies that refer to the opinions of teachers in the education of individuals with special needs. As a result of the findings obtained from these studies, it has been determined that teachers working with students with special needs need information and training about assistive technologies, and that they cannot benefit from assistive technologies sufficiently due to the high cost of assistive technology equipment (Alammary, Al-Haiki, & Al-Muqahwi, 2017; Chmiliar, 2007; Copley & Ziviani, 2004). In the research of Kulu, Schreglmann, and Ginisli (2018), it was stated that schools and classrooms do not have enough equipment and technological software and materials are lacking. The teachers who participated in this research also stated that the classes should be properly organised and the necessary materials should be provided, and they put forward a similar necessity to this research. Türel (2012) stated in his study

that teachers experience technical problems, infrastructure problems and that they experience difficulties arising from the lack of knowledge and skills of teachers. It can be said that the elimination of these deficiencies and the trainings to be given to the teachers for the use of technology and technology will increase the quality of the technology-supported education given/to be given to the individuals with special needs. Fitzgerald, Koury, and Mitchem (2008) reviewed the studies between 1996 and 2006 examining the effects of computer-assisted instruction in the education of individuals with moderate and mild disabilities. The studies were grouped as the use of technology in teaching reading, writing, mathematics, social studies and science. Studies have shown that individuals with disabilities can use computer and technology-supported tools and enjoy new teaching approaches. Teaching of complex skills can be realised with the support of technology; however, it is stated that there should be a teaching environment where the teacher is also involved in the teaching and the teacher and the student communicate.

#### 5. Conclusion

Technology is not only changing the form of education, but also changing the requirements for how technology should be integrated into education to improve students' learning. Modern technologies integrated into all levels of education in the world are also used in the education of students with intellectual disabilities. Therefore, this research aimed to get the opinions of teachers in order to provide knowledge about national traditions among mentally retarded high school students through modern technologies. As a result of the research, the majority of the teachers participating in the research stated that they strongly support the use of modern technologies in order to ensure the formation of knowledge about national traditions among mentally handicapped students. On the other hand, the majority of the teachers participating in the research stated that they sometimes make use of modern technologies in order to create knowledge about national traditions among mentally handicapped students. The majority of the teachers participating in the research on what can be done by making use of modern technologies in order to provide knowledge about national traditions among mentally handicapped students responded by creating a new course on national traditions, training students on the use of technology, integrating mobile technologies into education and providing in-service training to teachers. Some teachers stated that the technological opportunities of schools should be increased, a blended learning environment should be created, the physical environment of the classrooms should be created with materials related to national traditions, student participation activities should be created and a teaching plan related to national traditions should be created.

#### 6. Recommendations

The teachers' opinions in order to provide information about national traditions among mentally retarded high school students through modern technologies were taken and the following suggestions were developed in this direction:

- 1. National traditions can be created so that teachers can enable students with intellectual disabilities to form knowledge about national traditions.
- 2. Classroom environments should be arranged to meet the learning needs of students with intellectual disabilities and students with intellectual disabilities should be taught primarily with modern technologies.

- Aigerim, N., Aigerim, M., Aigul, B., Akbota, A., & Aigerim, K. (2022). Formation of knowledge about national traditions in high school students with intellectual disabilities through modern technologies. *World Journal on Educational Technology: Current Issues*. 14(5), 1538-1548. https://doi.org/10.18844/wjet.v14i5.8100
- 3. In-service training programmes should be organised for teachers in order to provide intellectually disabled students with the formation of knowledge about national traditions with modern technologies.

#### References

- Agran, M., Jackson, L., Kurth, J. A., Ryndak, D., Burnette, K., Jameson, M., ... Wehmeyer, M. (2020). Why aren't students with severe disabilities being placed in general education classrooms: Examining the relations among classroom placement, learner outcomes, and other factors. *Research and Practice for Person with Severe Disabilities*, 45(1), 4–13. https://doi.org/10.1177/1540796919878134
- Alammary, J., Al-Haiki, F., & Al-Muqahwi, K. (2017). The impact of assistive technology on down syndrome students in Kingdom of Bahrain. *Turkish Online Journal of Educational Technology-TOJET, 16*(4), 103–119. Retrieved from <a href="https://eric.ed.gov/?id=EJ1160609">https://eric.ed.gov/?id=EJ1160609</a>
- Blank, D., Fogarty, B., Wierzba, K., & Yore, N. (2000). *Improving social skills through cooperative learning and other instructional strategies*. Retrieved from <a href="https://eric.ed.gov/?id=ED443552">https://eric.ed.gov/?id=ED443552</a>
- Brock, M. E. (2018). Trends in the educational placement of students with intellectual disability in the United States over the past 40 years. *American Journal on Intellectual and Developmental Disabilities, 123*(4), 305–314. https://doi.org/10.1352/1944-7558-123.4305
- Burke, M., Arnold, C., & Owen, A. (2018). Identifying the correlates and barriers of future planning among parents of individuals with intellectual and developmental disabilities. *Intellectual and Developmental Disabilities*, 56(2), 90–100. https://doi.org/10.1352/1934-9556-56.2.90
- Cabi, E. (2015). An investigation of digital native children's views towards digital tech. *International Journal of Innovation Research in Education*, 2(1), 10–15. <a href="https://doi.org/10.18844/ijire.v0i0.251">https://doi.org/10.18844/ijire.v0i0.251</a>
- Chmiliar, L. (2007). Perspectives on assistive technology: What teachers, health professionals, and speech and language pathologists have to count. *Developmental Disabilities Bulletin, 35*, 1–17. Retrieved from <a href="https://eric.ed.gov/?id=EJ812642">https://eric.ed.gov/?id=EJ812642</a>
- Copley, J., & Ziviani, J. (2004). Barriers to the use of assistive technology for children with multiple disabilities. *Occupational Therapy International*, *11*(4), 229–243. <a href="https://doi.org/10.1002/oti.213">https://doi.org/10.1002/oti.213</a>
- Drummer-Yesilyurt, G., & Tezer, M. (2019). An evaluation of the news about people with disabilities published in the written media. *Contemporary Educational Researches Journal*, 10(1), 007–020. <a href="https://doi.org/10.18844/cerj.v10i1.4610">https://doi.org/10.18844/cerj.v10i1.4610</a>
- Derbissalova, G., Abaeva, G., Turyszhanova, R., Bekmuratova, G., & Zhigitbekova, B. (2022). The use of multimedia technologies in teaching primary schoolchildren with intellectual disabilities. *World Journal on Educational Technology: Current Issues, 14*(4), 1038–1049. <a href="https://doi.org/10.18844/wjet.v14i4.7676">https://doi.org/10.18844/wjet.v14i4.7676</a>
- Eratay, E. (2017). Effectiveness of individualized teaching materials on bricklaying skills prepared with directly teaching method. *New Trends and Issues Proceedings on Humanities and Social Sciences*, 4(1), 304–316. <a href="https://doi.org/10.18844/prosoc.v4i1.2270">https://doi.org/10.18844/prosoc.v4i1.2270</a>
- Fitzgerald, G., Koury, K., & Mitchem, K. (2008). Research on computer-mediated instruction for students with high incidence disabilities. *Journal of Educational Computing Research*, 38(2), 201–233. Retrieved from <a href="https://journals.sagepub.com/doi/abs/10.2190/EC.38.2.e">https://journals.sagepub.com/doi/abs/10.2190/EC.38.2.e</a>
- Gilmour, A. F., Fuchs, D., & Wehby, J. H. (2019). Are students with disabilities accessing the curriculum? A metaanalysis of the reading achievement gap between students with and without disabilities. *Exceptional Children*, 85(3), 329–346. https://doi.org/10.1177/0014402918795830

- Aigerim, N., Aigerim, M., Aigul, B., Akbota, A., & Aigerim, K. (2022). Formation of knowledge about national traditions in high school students with intellectual disabilities through modern technologies. *World Journal on Educational Technology: Current Issues.* 14(5), 1538-1548. https://doi.org/10.18844/wjet.v14i5.8100
- Hutzler, Y., Meier, S., Reuker, S., & Zitomer, M. (2019). Attitudes and self-efficacy of physical education teachers toward inclusion of children with disabilities: A narrative review of international literature. *Physical Education and Sport Pedagogy*, 24(3), 249–266. https://doi.org/10.1080/17408989.2019.1571183
- Jones, S. K. (2015). Teaching students with disabilities: A review of music education research as it relates to the Individuals with Disabilities Education act. *Update: Applications of Research in Music Education, 34*(1), 13–23. https://doi.org/10.1177/8755123314548039
- Kulu, M., Schreglmann, S., & Ginisli, N. A. (2018). Opinions of teachers working in the field of special education on the use of assistive technologies in special education. *Van Yüzüncü Yıl University Journal of the Faculty of Education, 15*(1), 1540–1569. Retrieved from <a href="https://dergipark.org.tr/en/pub/yyuefd/issue/40566/499065">https://dergipark.org.tr/en/pub/yyuefd/issue/40566/499065</a>
- Kuntz, E. M., & Carter, E. W. (2019). Review of interventions supporting secondary students with intellectual disability in general education classes. *Research and Practice for Person with Severe Disabilities, 44*(2), 103–121. https://doi.org/10.1177/1540796919847483
- Kvale, S. (1994). *Interviews: An introduction to qualitative research interviewing*. Sage Publications, Inc. Retrieved from <a href="https://psycnet.apa.org/record/1996-97829-000">https://psycnet.apa.org/record/1996-97829-000</a>
- Leeming, K., Swann, W., Coupe, J., & Mittler, P. (2018). *Teaching language and communication to the mentally handicapped* (Vol. 35). Routledge. Retrieved from <a href="https://books.google.com.tr/books?hl=en&lr=&id=xpBoDwAAQBAJ&oi=fnd&pg=PT11&dq=Education+of+mentally+handicapped+children&ots=tUKluX4hdp&sig=6R\_d6Ui2Jzqe\_d6Ui2Jzqe\_d6\_zM\_Education%20of%20mentally%20handicapped%20children&f=false
- Lemons, C. J., Vaughn, S., Wexler, J., Kearns, D. M., & Sinclair, A. C. (2018). Envisioning an improved continuum of special education services for students with learning disabilities: Considering intervention intensity. *Learning Disabilities Research & Practice*, 33(3), 131–143. <a href="https://doi.org/10.1111/ldrp.12173">https://doi.org/10.1111/ldrp.12173</a>
- Liu, G. Z., Wu, N. W., & Chen, Y. W. (2013). Identifying emerging trends for implementing learning technology in special education: A state-of-the-art review of selected articles published in 2008–2012. *Research in Developmental Disabilities*, 34(10), 3618–3628. https://doi.org/10.1016/j.ridd.2013.07.007
- McDonnell, C. G., Boan, A. D., Bradley, C. C., Seay, K. D., Charles, J. M., & Carpenter, L. A. (2019). Child maltreatment in autism spectrum disorder and intellectual endurance: Results from a population-based sample. *Journal of Child Psychology and Psychiatry*, 60(5), 576–584. https://doi.org/10.1111/jcpp.12993
- McGuire, D. O., Tian, L. H., Yeargin-Allsopp, M., Dowling, N. F., & Christensen, D. L. (2019). Prevalence of cerebral palsy, intellectual disability, hearing loss, and blindness, National Health Interview Survey, 2009–2016. *Disability and Health Journal*, 12(3), 443–451. https://doi.org/10.1016/j.dhjo.2019.01.005
- Mechling, L. C. (2007). Assistive technology as a self-management tool for prompting students with intellectual disabilities to initiate and complete daily tasks: A literature review. *Education and Training in Developmental Disabilities*, 42(3), 252–269. Retrieved from <a href="https://www.jstor.org/stable/23879621#metadata">https://www.jstor.org/stable/23879621#metadata</a> info tab contents
- Mwoma, T. (2017). Education for children with special needs in Kenya: A review of related literature. *Education, 8*(28). Retrieved from <a href="https://irlibrary.ku.ac.ke/bitstream/handle/123456789/20867/Education%20for%20children%20with%20special%20needs%20in%20Kenya.pdf?sequence=1">https://irlibrary.ku.ac.ke/bitstream/handle/123456789/20867/Education%20for%20children%20with%20special%20needs%20in%20Kenya.pdf?sequence=1</a>
- Neece, C., McIntyre, L. L., & Fenning, R. (2020). Examining the impact of COVID-19 in ethnically diverse families with young children with intellectual and developmental disabilities. *Journal of Intellectual Disability Research*, 64(10), 739–749. https://doi.org/10.1111/jir.12769

- Aigerim, N., Aigerim, M., Aigul, B., Akbota, A., & Aigerim, K. (2022). Formation of knowledge about national traditions in high school students with intellectual disabilities through modern technologies. *World Journal on Educational Technology: Current Issues.* 14(5), 1538-1548. https://doi.org/10.18844/wjet.v14i5.8100
- Pei, H., & Sonoyama, S. (2022). Skill building for teachers at a Chinese special needs school through international videophone teleconsultation: Helping teachers develop and improve choice-making in students with intellectual disabilities. *International Journal of Disability, Development and Education, 69*(5), 1755—1771. https://doi.org/10.1080/1034912X.2020.1819530
- Shogren, K. A., Shaw, L. A., Raley, S. K., & Wehmeyer, M. L. (2018). Exploring the effect of disability, race-ethnicity, and socioeconomic status on scores on the self-determination inventory: Student report. *Exceptional Children*, 85(1), 10–27. https://doi.org/10.1177/0014402918782150
- Sullivan, A. L., Sadeh, S., & Houri, A. K. (2019). Are school psychologists' special education eligibility decisions reliable and unbiased? A multi-study experimental investigation. *Journal of School Psychology, 77*, 90–109. https://doi.org/10.1016/j.jsp.2019.10.006
- Singh, S. (2014). Inclusive education for children with special needs in India: A review study. *IOSR Journal of Humanities and Social Science*. Retrieved from www.iosrjournals.org/iosr-jhss/papers/vol19-issue2/version-4K,19248285; https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1037.5994&rep=rep1&type=pdf
- Tallboy, H., & Sukran Oz, A. (2019). A review of the studies on learning disabilities through content analysis.

  \*\*Education in the Knowledge Society: EKS. Retrieved from https://revistas.usal.es/index.php/eks/article/view/eks20192027/21346
- Türel, Y. K. (2012). Teachers' negative attitudes towards interactive whiteboard use: Needs and problems. *Elementary School Online, 11*(2). Retrieved from <a href="https://search.trdizin.gov.tr/yayin/detay/133901/">https://search.trdizin.gov.tr/yayin/detay/133901/</a>
- Urea, I. R., & Carmen, A. (2020). Dimensions of relationships of students with intellectual disabilities. *International Journal of Special Education and Information Technologies*, 6(1), 48–60. https://doi.org/10.18844/jeset.v6i1.5786
- Wehmeyer, M. L., Palmer, S. B., Smith, S. J., Parent, W., Davies, D. K., & Stock, S. (2006). Technology use by people with intellectual and developmental disabilities to support employment activities: A single-subject design meta-analysis. *Journal of Vocational Rehabilitation*, 24(2), 81–86. Retrieved from <a href="https://content.iospress.com/articles/journal-of-vocational-rehabilitation/jvr00318">https://content.iospress.com/articles/journal-of-vocational-rehabilitation/jvr00318</a>
- Whitby, P. J., Leininger, M. L., & Grillo, K. (2012). Tips for using interactive whiteboards to increase participation of students with disabilities. *Teaching Exceptional Children*, 44(6), 50–57. https://doi.org/10.1177/004005991204400605