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ANALYSIS OF CURRENT ASSESSMENT PRACTICES FOR CHILDREN WITH SPECIAL EDUCATIONAL NEEDS IN THE REPUBLIC OF KAZAKHSTAN

Abstract

This research investigates the current assessment practices for children with special educational needs (SEN) in the Republic of Kazakhstan following the country's transition from a medical model to a socio-educational model. The research examines the recently implemented four-stage assessment system conducted by secondary schools, psychological-medical-pedagogical counselling centers, and rehabilitation centers. A distinctive feature of Kazakhstan's approach is the team-based assessment methodology that mandates participation of subject teachers, special educators, speech therapists, and educational psychologists regardless of location. Notably, specialists select assessment tasks independently based on children's age and educational standards, as the government has not established standardized assessment tools. To evaluate the effectiveness of these practices, we conducted a comprehensive mixed-methods study involving surveys and interviews with professionals actively implementing these assessment procedures. The research sample included 20 psychological, medical and pedagogical councils and 63 secondary schools, with a total of 186 respondents (135 primary school teachers from inclusive education institutions and 51 specialists from psychological, medical and pedagogical councils). Additionally, in-depth interviews were conducted with 30 teachers to obtain more detailed insights. The findings reveal both strengths and limitations of the current assessment practices in Kazakhstan, providing valuable insights into how secondary schools and specialized organizations select and implement assessment methods. This analysis contributes to understanding the practical implementation of the socio-educational model and identifies areas for potential improvement in the assessment system for children with SEN in Kazakhstan.

Keywords: special educational needs assessment, assessment practices, inclusive education, socio-educational model, team-based assessment, Kazakhstan education system.

Introduction. Assessment of special educational needs is becoming a topical issue in Kazakhstan, as the results of the assessment allow to determine the learning path of children with special educational needs and to enable each child to study according to his or her potential. Therefore, the assessment of children's special educational needs in inclusive education in Kazakhstan, based on international conventions, is shifting from a medical model to a social model. The purpose of this article is to examine the effectiveness of the new model assessment system developed in relation to Kazakhstan's transition to a social model of assessment of children with special educational needs. The focus of the inclusive educational environment is on qualitative assessment of

students' special needs, defining an educational route in accordance with the results of identification and assessment of children with disabilities, depending on the values and strategies underlying the humane philosophy of educating children with disabilities. The medical model and emphasis on the 'problems' of the child are considered discriminatory and lead to the segregation of children with disabilities. For many years in Kazakhstan, this medical model divided children with special educational needs into 8 groups and educated them in special educational institutions. The assessment was carried out by only one organisation, the Psychological-Medical-Pedagogical Council. Children with special educational needs were directed to special educational institutions on

the basis of a referral issued by that institution. (Yersarina, 2020). The introduction of modern approaches to inclusive practice based on the socio-pedagogical model requires addressing many objectives in the education system. This leads to changes in the content of the activities of not only general education organisations, but also the psychological, medical and pedagogical council. In accordance with the state program of the Presidential Decree on the development of education in 2020-2025, in accordance with other normative legal documents “psychological, medical and pedagogical councils” in transition from medical model to “social-pedagogical” model, it was noted that the activity of PMPC will be reflected in clear direction of children to determine their educational needs” (Strategic Development Plan of the Republic of Kazakhstan, 2025). Also, the ‘Law on Education’ of the RK states that according to the basic principles of state policy in the field of education everyone has the right to quality education, emphasises the priority of development of the RK education system, takes into account the intellectual development of each person, psychophysiological and individual characteristics, and ensures accessibility of education for all. (Law on Education, Chapter 1, Article 3).

The order of assessment of children with special educational needs is specified in Order No. 4 of 12 January 2022 “On Approval of the Rules for Assessment of Special Educational Needs” of the RK:

1) identification by a teacher (educator) of children with special educational needs in the course of educational process using monitoring of social-emotional well-being of each student (pupil) and features of learning and cognitive activity, as well as criterial evaluation of students’ achievements;

2) psychological and pedagogical support with the consent of parents (legal representatives) specialists in-depth study and assessment of special educational needs of children with learning difficulties;

3) psycho-pedagogical support of education organisation based on the results of in-depth examination by specialists further assessment

of special educational needs of children with learning difficulties in PMPC;

4) interdisciplinary team assessment of the special educational needs of children in psycho-pedagogical correction offices and rehabilitation centres.

The above evaluation system has been used for about one year from the previous year. In this article, we will discuss the issues with which this assessment system can be put into practice at each stage and that we encounter in practice. As assessment of special educational needs is a complex process and a topical issue, much research work has been carried out on this topic. This is due to the fact that developing a curriculum that focuses on teaching a child according to his or her learning needs is directly linked to carrying out proper assessment work. The importance of assessing the system implemented in RK legislation and special educational needs is confirmed by studies carried out in other countries. In many foreign countries, assessment is carried out by educational psychologists. For example, in Australia the assessment system consists of five stages: data collection, identification the consequences of disability (a special team established in the school ranks the health indicators of students), provision of recommendations for verification, verification (Dr Martin Desforages and Professor Geoff Lindsay, 2010). Australia and Kazakhstan also use team assessment. While in Kazakhstan the team assessment involves the educational psychologist, main subject teachers, special educator and speech therapist, in Australia the team assessment involves the educational psychologist and subject teachers. In both countries, the result of the other specialists’ advice may additionally be requested from the other specialists, if necessary.

In Lindsay’s 2008 study assessing special educational needs in England, in six studies of local authorities they found that they relied on the expertise of specialist professionals (Lindsay 2008). The regulations prescribe that local authorities request written samples of advice from parents, educational and medical, psychological and social services. It shows that the evaluation takes into account the opinion of

various professionals and is carried out through a team decision in choosing an educational trajectory for specific educational needs. Many standard tasks and formal assessments can be flawed. DeLuca et al. have identified errors that occur during informal assessment of students with complex communication disorders (DeLuca, E. R., Da Fonte, M. A., Boesch, M. C 2022). Therefore, the success of the assessment system is directly related to the content of the tasks used by professionals. ABAS assessment tasks are widely used in many countries. Effective use of the ABAS assessment tool depends on a formal disability assessment system and compatibility of work strategies (Prokopiak, Anna & Kirenko et al., 2020). Although the results of the widely used Ctoni-2 guideline in the United States correctly assessed general intelligence, the relationship between factors was not proven in the dispersion analysis (McGill, R. J, 2016). The Ctoni-2 guide may lead to over-interpretation of this construct measurement tool in geometric and visual measurements when interpreting individual user characteristics (Glutting, Watkins, Konold, & McDermott, 2006), and these measures should be formulated as “pseudofactors” and should not be used for diagnostic decision making. Francis, Y. J., & Sanders, L argue that the four-step collaborative action plan based on the RADIO framework using mixed methods such as SEN data analysis, informal interviews, surveys, observations, and resource reviews undermines the validity of assessment results and suggests that future research should include children’s perspectives (Francis, Y. J., & Sanders, L 2022). However, most studies to date are based on research to assess language proficiency or use new assessment tools of children with disabilities, while there is no research on the appropriateness of assessment tools for school-age children from another country. (Hertel, I., Chilla, S., & Ibrahim, L. A 2022). Catts, H. W., et al. provide direct evidence of the necessity of including language measures in the screening of reading disorders (Catts, H. W 2020). They believe that early intervention based on detection of literacy progression in children with such disorders should be provided by determining

whether such measures identify learning disabilities. Šafárová et al. believe that the use of new technologies in assessing dysgraphia (writing disorder) yields better results. In their research work they diagnosed the level of children’s graphomotor development using a special Wacom Ink Pen on a Wacom Intuos Pro L tablet (Šafárová et al., 2021). A review of the literature shows that there is a lot of controversy around the assessment of SEN and the methods used in it, in this area the possibility of research work and application of new technologies is still to be considered.

Materials and Methods. This study utilized a mixed-methods research design, incorporating both quantitative and qualitative approaches to assess the effectiveness of the evaluation phase. The primary research method was a survey conducted via Google Forms, complemented by in-depth interviews with selected educators. The study was carried out in the Republic of Kazakhstan (RK) and involved 20 specialists from the psychological, medical, and pedagogical council (PMPC) and representatives from 63 secondary schools. A total of 186 respondents participated, comprising 135 elementary school teachers working in inclusive educational environments and 51 specialists from PMPC, including speech therapists, supervisors, educational psychologists, special educators, psychoneurologists, and other specialists. The study was conducted in 2022, capturing a diverse range of professional experiences, with an average respondent work experience of 15-17 years. Data collection was conducted in two stages: first, through an online questionnaire administered to 135 educators, which aimed to gather information about the assessment process, challenges faced, and the impact on students with special educational needs (SEN). The second stage involved structured interviews with 30 educators, providing qualitative insights into the implementation and effectiveness of the assessment methodology. The questionnaire focused on critical aspects of the assessment process, ensuring comprehensive data collection aligned with research objectives. The survey questions adhered to ethical standards, and no additional unrelated information was requested

from participants. To ensure the validity and reliability of the collected data, the questionnaire was developed based on existing validated assessment frameworks and reviewed by experts in inclusive education and educational psychology. A pilot test was conducted before the full-scale survey to refine the questionnaire for clarity and relevance. Consistency in data collection was maintained through standardized interview protocols. The responses were systematically analyzed using simple statistical methods such as calculating percentages, averages, and frequency distributions. The quantitative data collected from the survey were processed manually and summarized in tables and charts for clear visualization. The results from the quantitative analysis provided insights into general trends and patterns within the assessment process, while the qualitative analysis allowed for an in-depth understanding of educators' experiences and perceptions.

Results. According to the system of graded evaluation the main criterion was the successful acquisition of the curriculum, achievement of the goal of the lesson and improvement of academic achievement. The successful achievement of the goals set for the individual development program was also taken into consideration. Progress

of 249 students in an inclusive environment was analyzed here based on the identified post-assessment curriculum. As a result, it was found that among the children with SEN, 21 children with psychophysical disabilities require full diagnosis by a special organization of psychological, medical and pedagogical organization. This emphasizes the importance of determining the proper educational trajectory to determine the child's educational needs and potential. During the analysis of the RK gradual evaluation system, a survey and interviewing of specialists of in-school team evaluation and the psychological-medical-pedagogical council of the special organization were conducted. The results showed their effectiveness at the stage of assessment introduced in RK in 2022. This is evident from observing that of the 21 children referred to the PMPC, 17 achieved the goals and objectives of the curriculum at a satisfactory level consistent with their potential abilities. The remaining 216 students achieved the goals and objectives of the selected adapted curriculum as indicated by the results of the in-school team assessment. We interviewed 135 educators to identify the specifics of the progression of in-school assessment and factors influencing assessment. This included by grade level.

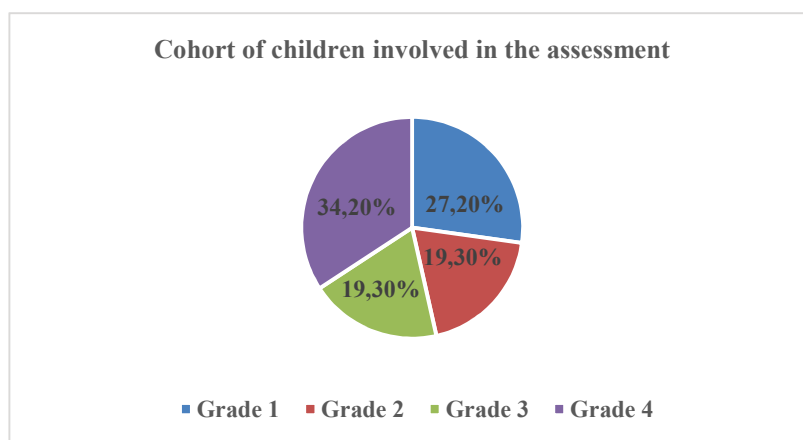


Figure 1: Cohort of children involved in the assessment

The survey showed that on average there are about 24 students with special educational needs in primary education classes in RK. Among children with special educational needs the most common are children with health conditions, which is about 66.1%, the remaining

17.3% – children with low performance due to any social and psychological conditions, 4.7% – gifted children and 11.8% – children with psychophysical disorders. Teachers, and occasionally specialists from the in-school psycho-pedagogical support office – speech

therapists, special educators and educational psychologists – were involved in identifying children with special educational needs. Teachers claimed that there were no criteria and no special methodology on which they relied when participating in the assessment. The results of the survey showed that it is very important for primary school teachers to use data on individual indicators and specific features of children in the assessment areas to plan the educational process. After identifying children with SEN, a team-wide assessment was conducted with the participation of teachers and the offices of psychological and pedagogical support. Along with the teachers a speech therapist, a special teacher, a teacher-psychologist, a child and his parents took part in it. They checked the child's progress in the main subjects, the level of development of speech and intelligence. Based on the results, an individual curriculum for each subject was developed, and the need for additional help from specialists was determined. If a child with an SEN of 6 months under the terms of the contract cannot master the curriculum, he or she is referred to the psychological and pedagogical council for an in-depth and full examination. The results of the study showed that 21 out of 29 children with psychophysical disorders were referred to the PMPC. In the course of the study teachers conducted classes from January 2022 to November 2022, taking into account the presence of simplified tasks in the child's individual development cards, the specifics of the organization of classes taking into account potential abilities, the developmental component in the objectives of the lesson. The respondents noted that the personal development program considered the opinion of parents in 97.6% of cases. As a result it was established that among children with SEN children with psychophysical disorders require full diagnostics by the special organization. During the interviews it was found that teachers try to direct the children as much as possible to the assessment, rather than team assessment, as they state that they experience difficulties in the presence of a complex defect and severe psychophysiological disorder. Elementary

school teachers receive student achievement as the primary criterion for assessment, which was answered by 86% of the respondents. Conditions such as the presence or absence of a psychophysical disorder, conduct disorder, and frequent non-attendance were identified as the second important condition. Respondents gave varying responses to the question of what difficulties they faced in educating children with special educational needs. By grouping these responses, it appeared that educators were concerned about the following issues. Among them is there is the fact that the mistakes that are sometimes made in the assessment process due to inaccurate assessment criteria are mostly inaccurate curriculum definitions. For example, when determining the level of development of intelligence in children with speech impairments, it may be difficult for him to give an exhaustive answer to the question. In addition, the results of the interviews showed that the child's somatic condition, according to some educators, also hindered the child's educational attainment due to its potential. The second question from the evaluation revealed that 14 teachers working in inclusive settings found it difficult to work with children with intellectual disabilities. And 19 educators noted good teaching aids and facilities in the education of children with intellectual disabilities. The rest of the teachers claimed that they had no difficulties in planning their work due to the influence of various factors in working with children with special educational needs.

Peculiarities of PMPC assessment in RK

Currently, not only the psychological, medical and pedagogical council is engaged in assessment, based on best international practices, the assessment is conducted first within the school in a team direction, and PMPC sends a child only with the permission of parents to conduct a broad spectrum assessment.

New areas of PMPC activity were determined by the socio-pedagogical model:

- comprehensive examination in accordance with standard programs of psychological, medical and pedagogical research;
- determination of the type of disorders, problems or developmental difficulties:

Table 1. Analysis results of the 1st stage of the SEN evaluation

Evaluation Criteria	Advantages	Difficulties encountered
Program acquisition of the major disciplines	The assessment involves more than one specialist, which affects the fairness of the assessment process	Uncertainty of assessment criteria
Spoken language		Difficulty in assessing in the presence of serious insufficiency and severe psychophysiological disorder
Features of mental processes		Scarcity of methodological guidance and lack of material facilities

- socio-pedagogical classification of children with SEN, shifting the emphasis from medical diagnosis to psychological and pedagogical classification;

- identification a group of children with special educational needs;

- assessment and determination of the scope of special educational needs;

- determination of the types of assistance and services provided to different groups of children with special educational needs;

- elaboration of proposals for meeting special educational needs;

- expansion of advisory assistance to parents on the upbringing and development of children in family settings;

- provision of advisory assistance to general education organizations in creating special learning conditions for children with special educational needs (Yersarina A.K. "Organization of psychological, medical and pedagogical consultations in the system of inclusive education", methodological recommendations Almaty 2020).

The PMPC assessment usually involves an educational psychologist, a speech therapist, a special educator and a neurologist. Depending on the child's condition, other specialists may also be involved, for example, an ENT doctor and an ophthalmologist, etc.

When asked by PMPC specialists about the pool of children who most frequently refer to the assessment, a respondent answered that 72.5% (36 respondents) were preschool-age children. And 17.6% (9 respondents) responded that they are elementary school children, and the remaining 11.7% (6 respondents) responded that they are middle school students. It provides systematic, organized assistance for early identification and timely intervention to children with special educational needs in Kazakhstan. Assessment of special educational needs in schools shows a relatively lower percentage because of the identification of children with psychophysical disorders as a result of early screening and remedial work in the preschool period.

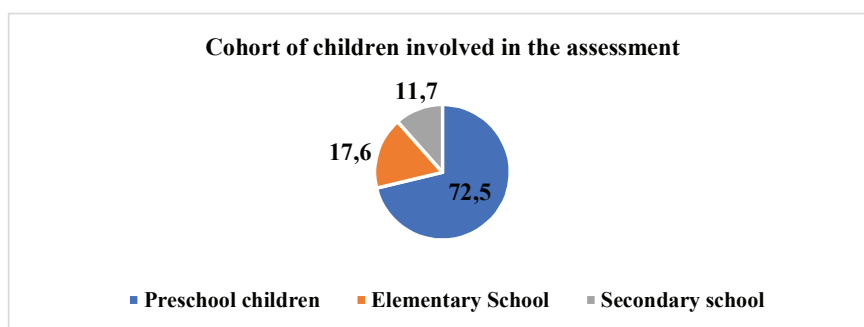


Figure 2: Cohort of children involved in the assessment

PMPC specialists have established that during the evaluation and determination the type of educational programs, particular attention is paid to the level of cognitive development

and speech development of the child. Further, the condition of gross and fine motor skills, adaptive behavior, and the level of proficiency in educational programs are evaluated.

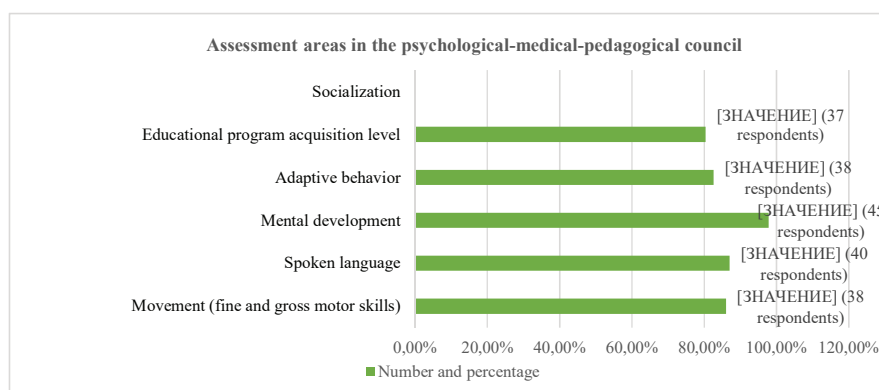


Figure 3: Assessment areas in the psychological-medical-pedagogical council

As noted in Kazakhstan, on average, children undergo an assessment session only once or twice to determine special educational needs. This means that the assessment process is complete and there is no need for reassessment, as it can offer effective educational programs for children with SEN.

The PMPC specialists responded to the question, “What difficulties do you encounter during the assessment?”: parents disagree with the diagnostic results, failure to make contact with children with SEN, failure of a child with SEN to communicate, insufficient time allocated for assessment, incorrectly outdated diagnostic assignment during assessment, problems in the child’s behavior.

Table 2. Difficulties encountered by PMPC specialists

Respondents' answers	Number of respondents	Percentage
Communication difficulties with the child	19	37,4 %
Parental disagreement with the results of the evaluation	6	12 %
Lack of parental contact	3	5,8 %
Difficulty in determining the level of development of students' intelligence and mental processes	1	1,9 %
Poor state and mood of the child	5	9,8 %
Lack of time	3	5,8 %
Did not answer the question	3	5,8 %
No problems	10	19,6 %
Misdiagnosis of children with communication disorders in determining their specific developmental position	1	1,9 %

The result shows that specialists often have difficulty communicating with the child during the evaluation process. This is most commonly caused by the fact that the PMPC assessment includes children with psychophysical disabilities who, due to the results of the in-school team assessment, have no improvement in academic performance or require a special educational program,

and have difficulty adapting in their new environment. When asked what information the PMPC proposal should provide to subject teachers and specific professionals learning in an inclusive environment to effectively organize the educational process, most respondents answered that it is to identify the type of curriculum and the form of special accommodations.

Table 3. Content of the PMPC proposal

Respondents' answers	Number of respondents	Percentage
Recommendations	6	11,8 %
No response	2	3,9 %

General information about a child with SEN	6	11,8 %
Identification of the type of instructional programs and form of special arrangements	15	29,4 %
Information about assessment areas and outcomes	14	27,4 %
Counseling activities for schools, parents	8	15,7 %

Although the answer varies, all respondents fill out a referral according to a certain approved sample. It briefly specifies the form of instruction, special conditions necessary for a child with an SEN. This is insufficient information, as can be seen from the answer of PMPC specialists. A.S. Verozub believes that children with multiple developmental disorders can differ in speech, intellectual, emotional, motor, sensory aspects, so such children should be evaluated according to the following blocks: emotional reaction, visual perception, auditory perception, tactile sensitivity, ability to orient in space, motor development (fine and large motor skills), cognitive development as well as general characteristics of activity (motivation, understanding of direction, nature

of activity, pace and dynamics, efficiency, learning ability).

Therefore, it became clear from the questionnaire that assessing the child in all areas and including general information about assessment areas and the child in the direction will allow school teachers to more effectively organize the educational process for children with SEN due to the provision of additional information on the optimization of the educational program. Testing its impact on the learning process now requires further research.

The results of the research show that more than 70% of PMPC specialists pay attention to the intelligence level when choosing the form of instruction for a student with special educational needs.

Table 4. *Information that specialists rely on when choosing the form of instruction*

Respondents' answers	Number of respondents	Percentage
Level of intellectual development	38	74,5 %
Teachers' statements	2	3,9 %
Doctor's report	6	11,8 %
Children's history, parents' opinions	5	9,8 %

The results of the survey showed that in 82% of the cases the advice of other specialists is used in the assessment of special educational needs, which is explained by the presence of major PMPC neurologists, ENT and ophthalmologists.

Besides the answers of the specialists who participated in the interview, the methods used in the assessment of special educational needs, counseling, are applied according to age. The exception to this are examples of tasks of the

same origin and standardized tests applied according to the sample approved for PMPC specialists, where each specialist tries to apply methods appropriate to the specifics of the child. However, it is established that at preschool age, Segen boards, Koss cubes, Raven matrices, the Pierrot-Ruessen method and the Glenn-Domain method are most often used. When using with school-age children, specialists choose their own methods.

Table 5. *Analysis of the PMPC SEN evaluation*

Evaluation Criteria	Advantages	Disadvantages
During the differential diagnosis, the set of tasks and methods used are selected by specialists independently	Several specialists take part in the evaluation, rather than one, which affects the objectivity of the evaluation process	Improper use of outdated diagnostic tasks in the evaluation process, problems in the child's behavior The issue of funding Lack of logistical support The test result does not provide information about the methods and areas of assessment used in the evaluation

Despite the fact that during the analysis of the system of assessment of special educational needs of the RK deficiencies are identified, it can be noted that to some extent the focus is on the assessment process because of the variety of types and stages of assessment. The deficiencies encountered are due to the economic potential of the RK and the new formation of an inclusive society and consciousness.

Discussion. It was found that although there is a proper assessment system in place, the key factor is that the content of the tasks used in the assessment process plays a critical role. This is due to the fact that the data from the assessment helps to identify factors to improve the quality of education. Also, Baker, S. et. al found that the correlation result between the use of assessment tools for developing reading and speaking skills allows educators to predict improved reading skills (Baker, S. K., Gersten, R., Haager, D., & Dingle, M 2006). Accordingly, these educators can better focus on speech development as a remedial component when working with students with special educational needs or incorporating work with a speech-language pathologist into an inclusive environment, so additional research work should be conducted on this topic. The use of additional digital technology is also very significant in the assessment process. It is considered an indispensable tool as a source of additional information and for comparing student performance in dynamic assessment. However, the possibilities of using monitoring tools to improve the quality of education are vast and should be done by defining the structure and concept of its application (Bell, C. A., Dobbelaer, M. J., Klette, K., & Visscher, A 2019). The use of such cameras also allows observation of the child's psychological characteristics in the assessment process. Also, the organization of systematic assessment work in teaching children with complex disabilities and, accordingly, the organization of teacher qualification courses influences the improvement of the quality of education. (Lemekh, E. A., 2022). Antoniou, F. et. al. found that artificial intelligence, such as a special software unit, can produce better

results in the assessment as an auxiliary tool, identifying the strengths and weaknesses of the child (Antoniou, F., Ralli, A. M., Mouzaki, A., Diamanti, V., & Papaioannou, S.).

There are many factors influencing the acquisition of reliable information in the assessment of SEN. Kazakhstan is a multinational state, so despite the fact that the above-mentioned assessment system is a legislated system at the macro level, the adaptation of diagnostic tasks to determine the specific educational needs and developmental level of the child is becoming increasingly important. In this regard, a study conducted by Murtagh in an Irish school has shown that the quality of educational psychological and special education services is negatively affected by factors such as the quality of translation services and the lack of appropriate assessment tools (Murtagh, L., & Seoighe, A 2022). Performing ability in children with disabilities has been found to show low levels and communicative and language deficits are due to family factors (Jylänki, P., Mbay, T., Byman, A., Hakkarainen, A., Sääkslahti, A., & Aunio, P 2022). The level of understanding of word meaning allows to predict the child's level of development later in the identification of reading disabilities (Camilleri, Bernard & Law, James. 2009). Dynamic assessment has been found to yield better results than standardized testing when assessing speech position (Camilleri, Bernard & Law, James. 2009). The use of self-assessment approaches in inclusive education also contributes beneficial to the academic performance of children with SEN (McConomy, M. A., Root, J., & Wade, T 2022). Children with multiple disabilities and intellectual impairments acquired problem-solving skills during functional science inquiry sessions using self-assessment sheets created using a multi-region design and demonstrated independent problem-solving skills. (Miller, B., & Taber-Doughty, T 2014).

The survey results showed that teachers in education experience difficulties in working with children with intellectual impairments. The main reason is the inability of such children to adapt to a new situation, inability to show the result of the activity, low level

of thinking operations. As McDonnell et al. point out in their research work, one of the problems arising from teaching general education curriculum content to students with intellectual and developmental disabilities is that they are unable to apply the skills they have learned in normal work settings. Results also show that students with significant disabilities do not participate in activities that promote academic integration. To help increase the engagement of these children in general education classrooms, we suggest that contextual factors that support the need for a partnership between teachers and occupational therapists to facilitate the acquisition of curriculum-related skills (Skinner, S. Y., Katz, J., & Knight, V. F, 2022). Therefore, when teaching children with disabilities, it is important for educators to enhance skills according to recent research findings. For example, it has been found that when teaching children with intellectual disabilities, there are no problems in analyzing schema harpy tasks, analyzing tasks based on a modified schema that includes graphic organizers, systematic feedback tips, distinguishing task types, and solving textual tasks (Browder, D. M., Spooner, F., Lo, Y., Saunders, A. F., Root, J. R., Ley Davis, L., & Brosh,C.R, 2018). Nevertheless, additional research on the applicability in children with intellectual disabilities due to the peculiarities of the linguistic structure of the Kazakh language is needed to apply the methods suggested above.

With the purpose of designing effective individual plans for a student enrolled in inclusive settings, it is necessary to describe the strengths of the developmental area and the range of problems in order to more accurately represent the special needs of a student with SEN. (Liubarets, V., Miroshnichenko, T., Cherusheva, G., Pyzh, N., & Protas, O., 2022). The results of the analysis of cognitive, affective, and behavioral psychometric components in the psychometric assessment of students showed that the components in teacher and parent surveys are not distinguishable

(De Boer, A., Timmerman, M., Pijl, S. J., & Minnaert, A, 2012).

Conclusion. The results of the study emphasise the importance of a systematic approach to assessing and supporting children with special educational needs (SEN). The introduction in Kazakhstan of a step-by-step assessment system based on international experience has made it possible to optimise the process of identifying and meeting the educational needs of children at different stages of their development. The team assessment carried out in schools in combination with the work of PMPC specialists has shown its effectiveness in determining adequate educational trajectories for children with SEND. Moreover, early identification of disorders in preschool age contributes to the timely start of remedial work, which reduces the need for complex interventions at later stages. The difficulties identified in the work of PMPC specialists, such as time constraints, outdated diagnostic tools and the complexity of interaction with children, demonstrate the need to improve the system of training and retraining, as well as to strengthen the material and technical base. The data obtained confirm that adequate diagnosis and an individualised approach to teaching children with SEND have a positive impact on their educational achievements. However, in order to further improve the effectiveness of the educational process, it is necessary to continue research aimed at analysing the long-term impact of the graded assessment system on the academic achievement and development of children with disabilities. Thus, the formation of an inclusive educational environment and ensuring quality assessment of children with special educational needs require comprehensive efforts, including professional development of specialists, modernisation of diagnostic methods and strengthening of cooperation between educational institutions and PMPC. This will be the basis for the successful realisation of each child's potential and strengthening the system of inclusive education in Kazakhstan.

References

- Antoniou, F., Ralli, A. M., Mouzaki, A., Diamanti, V., & Papaioannou, S. (2022). Logometro®: The psychometric properties of a norm-referenced digital battery for language assessment of Greek-speaking 4–7 years old children. *Frontiers in Psychology*, 13, 1–14. <https://doi.org/10.3389/fpsyg.2022.900600>
- Baker, S. K., Gersten, R., Haager, D., & Dingle, M. (2006). Teaching practice and the reading growth of first-grade English learners: Validation of an observation instrument. *Elementary School Journal*, 107(2), 199–219. <https://doi.org/10.1086/510655>
- Bell, C. A., Dobbelaer, M. J., Klette, K., & Visscher, A. (2020). Qualities of classroom observation systems. *School Effectiveness and School Improvement*, 30(1), 3–29. <https://doi.org/10.1080/09243453.2018.1539014>
- Browder, D. M., Spooner, F., Lo, Y., Saunders, A. F., Root, J. R., Davis, L. L., & Brosh, C. R. (2018). Teaching students with moderate intellectual disability to solve word problems. *Journal of Special Education*, 51(4), 222–235. <https://doi.org/10.1177/0022466917721236>
- Camilleri, B., & Law, J. (2009). Assessing children referred to speech and language therapy: Static and dynamic assessment of receptive vocabulary. *International Journal of Speech-Language Pathology*, 9, 312–322. <https://doi.org/10.1080/14417040701624474>
- Catts, H. W., Fey, M. E., Weismer, S. E., & Bridges, M. S. (2020). The relationship between language and reading abilities. In *Understanding individual differences in language development across the school years* (pp. 144–165). Routledge. <https://doi.org/10.4324/9781315796987>
- De Boer, A., Timmerman, M., Pijl, S. J., & Minnaert, A. (2012). The psychometric evaluation of a questionnaire to measure attitudes towards inclusive education. *European Journal of Psychology of Education*, 27(4), 573–589. <https://doi.org/10.1007/s10212-011-0096-z>
- DeLuca, E. R., Da Fonte, M. A., & Boesch, M. C. (2022). Reliability among school-based professionals: Using a feature-matching screening checklist to identify communication systems. *Journal of Special Education Technology*, 37(4), 536–549. <https://doi.org/10.1177/01626434211066973>
- Desforges, M., & Lindsay, G. (2010). Procedures used to diagnose a disability and to assess special educational needs: An international review. Centre for Educational Development, Appraisal and Research, University of Warwick. Retrieved from https://ncse.ie/wp-content/uploads/2014/10/5_NCSE_Diag_Ass.pdf
- Francis, Y. J., & Sanders, L. (2022). Using a quality first communication approach: Working systemically to support young people with speech, language, and communication needs in the youth justice system. *Educational and Child Psychology*, 39(2), 102–120. Retrieved from www.scopus.com
- Glutting, J. J., Watkins, M. W., Konold, T. R., & McDermott, P. A. (2006). Distinctions without a difference: The utility of observed versus latent factors from the WISC-IV in estimating reading and math achievement on the WIAT-II. *Journal of Special Education*, 40, 103–114. <https://doi.org/10.1177/00224669060400020101>
- Hertel, I., Chilla, S., & Ibrahim, L. A. (2022). Special needs assessment in bilingual school-age children in Germany. *Languages*, 7(1), 4. <https://doi.org/10.3390/languages7010004>
- Jylänki, P., Mbay, T., Byman, A., Hakkarainen, A., Sääkslahti, A., & Aunio, P. (2022). Cognitive and academic outcomes of fundamental motor skill and physical activity interventions designed for children with special educational needs: A systematic review. *Brain Sciences*, 12(8), 1001. <https://doi.org/10.3390/brainsci12081001>
- Lemekh, E. A. (2022). Sostoyaniye programmy professional'nogo razvitiya spetsialistov v korrektsionno-razvivayushchikh tsentrakh obucheniya v otnoshenii otsenki kachestva obrazovaniya sredi uchashchikhsya s tyazhelymi mnozhestvennymi narusheniyami v Respublike Belarus' [The state of professional development programme of specialists in correction and development training centres regarding the assessment of quality education among pupils with severe multiple disorders in the Republic of Belarus]. *Education and Self Development*, 17(3), 72–82. <https://doi.org/10.26907/esd.17.3.07> [in Russian]
- Lindsay, G., Desforges, M., Dockrell, J., Law, J., Peacey, N., & Beecham, J. (2008). Effective and efficient use of resources in services for children and young people with speech, language, and communication needs (DCSF-RW053). Department for Children, Schools and Families. Retrieved from <https://dera.ioe.ac.uk/8593/1/DCSF-RW053.pdf>
- Liubarets, V., Miroshnichenko, T., Cherusheva, G., Pyzh, N., & Protas, O. (2022). Control monitoring of the educational process of students with special learning needs. *Journal of Higher Education Theory and Practice*, 22(5), 60–73. <https://doi.org/10.33423/jhetp.v22i5.5202>
- McConomy, M. A., Root, J., & Wade, T. (2022). Using task analysis to support inclusion and assessment in the classroom. *Teaching Exceptional Children*, 54(6), 414–422. <https://doi.org/10.1177/00400599211025565>
- McDonnell, J., Jameson, J. M., Bowman, J. A., Coleman, O., Ryan, J., Eichelberger, C., & Conradi, L. (2020). Assessing generalization in single-case research studies teaching core academic content to students with intellectual and developmental disabilities. *Focus on Autism and Other Developmental Disabilities*, 35(3), 143–152. <https://doi.org/10.1177/1088357620902500>

Miller, B., & Taber-Doughty, T. (2014). Self-monitoring checklists for inquiry problem-solving: Functional problem-solving methods for students with intellectual disability. *Education and Training in Autism and Developmental Disabilities*, 49(4), 555–567. Retrieved from www.scopus.com

Murtagh, L., & Seoighe, A. (2022). Educational psychological provision in Irish-medium primary schools in indigenous Irish language-speaking communities (Gaeltacht): Views of teachers and educational psychologists. *British Journal of Educational Psychology*, 92(4), 1278–1294. <https://doi.org/10.1111/bjep.12499>

Pravitel'stvo Respubliki Kazakhstan. (2022). Prikaz № 4 ob utverzhdenii printsipov otsenki osobykh obrazovatel'nykh potrebnostey Respubliki Kazakhstan [Order No. 4 on the approval of the principles of the assessment of special educational needs of the Republic of Kazakhstan]. Retrieved from <https://adilet.zan.kz/kaz/docs/V2200026618/history> [in Russian]

Prezident Respubliki Kazakhstan. (2018). Strategicheskii plan razvitiya Respubliki Kazakhstan do 2025 goda (Ukaz № 636 ot 15 fevralya 2018 g.) [Strategic Development Plan of the Republic of Kazakhstan by 2025 (Decree No. 636, February 15, 2018)]. [in Russian]

Šafárová, K., Mekyska, J., & Zvončák, V. (2021). Developmental dysgraphia: A new approach to diagnosis. *International Journal of Assessment and Evaluation*, 28(1), 143–160. <https://doi.org/10.18848/2327-7920/CGP/V28I01/143-160>

Verozub, A. S. (2022). Innovatsionnyy podkhod k razrabotke tekhnologii obsledovaniya detey s tyazhelymi mnozhestvennymi narusheniyami razvitiya [Innovative approach to the development of technology for the examination of children with severe multiple developmental disorders]. *Spetsial'noye obrazovaniye – Special Education*, 1(65), 54–62. [in Russian]

Zakon Respubliki Kazakhstan ob obrazovanii. (2007). [Law of the Republic of Kazakhstan on Education]. Retrieved from https://adilet.zan.kz/rus/docs/Z070000319_ [in Russian]

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VALUES FORMATION IN SCHOOLCHILDREN THROUGH GLOBAL STRATEGIC STUDIES: QUANTITATIVE STUDY RESULTS

Abstract

This study examines the impact of geopolitical education in the school geography curriculum on students' cognitive development, practical skills, and value formation. A structured questionnaire was used to assess students' understanding of fundamental geopolitical concepts, their ability to analyze international processes, and their perceptions of key values such as tolerance, responsibility, and civic awareness. The collected data were analyzed using statistical software to objectively assess the level of learning and identify patterns in students' responses. The results indicate that students demonstrate strong retention of knowledge and high levels of engagement in geopolitical topics, but there are challenges in the practical application of acquired skills. The study highlights the importance of integrating geopolitics into education to prepare students for informed participation in global affairs. By strengthening decision-making competencies and promoting ethical perspectives, geopolitical education can contribute to the development of responsible citizens capable of addressing contemporary international challenges. The results point to the need for interactive learning approaches, including discussions, simulations, and case studies, to strengthen students' ability to critically evaluate geopolitical scenarios. The study also highlights the need for a well-structured curriculum that combines theoretical knowledge with practical learning to enhance students' preparedness for future challenges.

Keywords: cognitive knowledge; skills; value attitudes; school education; quantitative analysis.