

TEACHERS' READINESS TO DEVELOP AN INDIVIDUAL EDUCATIONAL PLAN FOR VISUALLY IMPAIRED STUDENTS

Blerta ALILI¹, Daniela DIMITROVA RADOJIQI²

¹University of Tetovo, Faculty of Pedagogy, Institute for Special Education and Rehabilitation

²"St. Cyril and Methodius" University, Skopje, Faculty of Philosophy, Institute for Special Education and Rehabilitation

Corresponding Author: e-mail: Blerta.qamili@unite.edu.mk

Abstract

The importance of vision in human life is known to everyone. We can think of our eyes as the window to the outside world. With the ability to see, we can perceive light, color, shape, movement, size, distance, the position and relationships of objects in space, or their totality. Many tasks depend on normal vision. Therefore, visual ability is used. Many interesting things about the world can be learned through educational written and visual materials. Regarding the environment, we use visual cues when going from one place to another. Socially, visual cues help us decide whether our behavior is appropriate by looking at people's faces and body language. People use visual information to identify their friends, their jobs, and the sports they will play. Therefore, when there is any visual impairment, each individual must make changes in their learning methods depending on the amount of residual vision they possess, and find new ways to compensate for the lost information in social life, entertainment, and career choices.

The research included a sample of 110 respondents, which consists of 110 teachers from regular schools, which are included in inclusive education, in regular primary schools in the municipality of Tetovo.

The results of this research show that educators of regular primary schools are willing to work with people with damaged vision, also to cooperate with colleagues for achieving success in inclusive schooling. As we could notice by the results, the primary schools in Tetovo had five blind students, which leads us to believe that the awareness of people upon the education and inclusion of blind people in public and inclusive schools is still very low.

Keywords: visual impairment, blind students, inclusive education, teacher readiness.

Introduction

In children with visual impairments, as part of efforts to develop a sense of independence, they should be asked to be responsible for their own books and materials. Sighted children in the classroom can occasionally guide the child with visual impairment. However, care should be taken to ensure that the child with visual impairment does not become too dependent. Children with visual impairments should not be treated differently from sighted children, and the same general expectations should apply to them. Children with visual impairments should be encouraged to participate in all classroom activities. If participation in classroom activities is not possible, additional activities should be organized. Children with visual impairments should be given similar special assignments to those given to sighted children. The teacher should make sure to verbally explain everything to the child with visual impairment.

It may be appropriate to give the child with visual impairment extra time to complete their homework. The teacher should make sure to verbally explain everything to the child with visual impairment. These children will have specific problems in science-related subjects and will need close attention in science-related matters. It can be very helpful for them if they have a partner to support them. Movement is important for these children, and they should be helped in physical

education classes as much as possible. A method should be followed that does not cause anxiety or distress to the children while monitoring their achievements and progress. The student should be given a realistic self-concept.

Research Hypothesis

Research hypothesis h¹: The gender of the surveyed teachers appears as a factor in assessing their readiness to develop an IEP for students with visual impairment.

Research hypothesis h²: The age category of the surveyed teachers appears as a factor in assessing their readiness to develop an IEP for students with visual impairment.

Research hypothesis h³: The work experience (years of experience in education) of the surveyed teachers appears as a factor in assessing their readiness to develop an IEP for students with visual impairment.

Research Questions

The research aims to identify whether work experience affects teachers' preparation to develop individual educational plans for blind students;
whether their academic level affects their willingness to collaborate to formulate individual educational plans.

Literature Review

We perceive and understand the outside world through our senses. As is known, the eye is one of the most important sensory organs. We can think of our eyes as the window through which humans view the outside world. Impaired vision negatively impacts human life. Because vision is necessary to live normally and perform many tasks. Sighted children learn many concepts and skills necessary for daily life almost effortlessly by observing and imitating adults. However, if learning experiences are not provided for children with visual impairments, they cannot easily acquire many concepts and skills. Like every human being, individuals with disabilities also have the most natural right to be able to continue their lives in every area without needing anyone's help. Today, the importance given to the education of children with disabilities is increasing. The eyes are considered the most important sensory organ of humans. However, the function of the eyes in the visual process is limited to converting light into limiting impulses. Essentially, vision is a brain function. Vision requires the integration of a visual image and the brain's perception of that image. Vision occurs in the following sequence:

- Light rays pass through the cornea, the ocular fluid, the pupil, and the lens.
- The pupil dilates or constricts depending on the intensity of the light.
- Light rays pass through the transparent fluid and stimulate the cone and rod cells in the retina.
- The visual process begins in the retina. Light rays are converted into electrical responses in the cone and rod cells of the retina.

The importance of vision in human life is known to everyone. We can think of our eyes as the window to the outside world. With the ability to see, we can perceive light, color, shape, movement, size, distance, the position and relationships of objects in space, or their totality. Many tasks depend on normal vision. Therefore, visual skills are used. Many interesting things about the world can be learned through educational written and visual materials. Regarding the environment,

we use visual cues when moving from one place to another. Socially, visual cues help us decide whether our behavior is appropriate by looking at people's faces and body language. People use visual information to identify their friends, their jobs, and the sports they will play. Therefore, when there is any visual impairment, each individual must make changes in their learning methods depending on the amount of residual vision they possess, and find new ways to compensate for the lost information in social life, entertainment, and career choices.

Methodology

Methods of analysing results are descriptive method, causal method. The technique for testing are used survey, interview.

Instruments: Survey questionnaire (Stages of Concern Questionnaire, Averu YS, 2017) intended for teachers of regular primary schools (Appendix 1). The questionnaire is based on three content dimensions: (a) Self-assessment of personal readiness for the development and implementation of IEPs for visually impaired students, (b) Assessment of the readiness of the environment (school, colleagues) for the development and implementation of IEPs for visually impaired students, and (c) Assessment of objective difficulties in the development and implementation of IEPs for visually impaired students.

The sample consists of 110 teachers from regular schools, who are involved in inclusive education, in regular primary schools in Tetovo.

After collecting the data, they proceeded to grouping and tabulating them in order to facilitate further processing. Then, they proceeded to calculating the frequency and assessing the structure of the obtained results. The χ^2 test was applied. The statistical analysis was performed using the computer program Exel and the statistical software SPSS. A statistically significant difference will be considered a difference at a significance level of $p < 0.05$

The research took place in three regular primary schools in Tetovo. The concerns of teachers and their competencies for developing an IEP plan in working with blind students in inclusive education are analyzed.

Table 2.1.3: Repeated Measures ANOVA: Readiness for the Development and Implementation of the IEP – Descriptive Statistics

Dimension of IEP readiness	Mean	Std. Deviation	N
Personal readiness	2.2609	0.80574	110
School/environment readiness	2.9533	1.00763	110
Perceived objective difficulty of the IEP	2.1985	0.87218	110

The purpose of the calculated statistical post-hoc test, the mandatory appendix of every (statistically significant) ANOVA test, is to precisely show the location i.e. the origin of the measured significant differences.

Table 3.2.1: Independent Samples t-test: Preparedness of educators for the development and implementation of IEPs and generative artificial intelligence among students with developmental disabilities

Variable	Levene's Test (F)	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval – Lower	95% Confidence Interval – Upper
Personal preparedness for IEP	7.175	.009	3.930	93	.000**	.55909	.14227	.27660	.84158
Preparedness of the school environment for IEP	1.810	.182	-.152	96	.879	-.03276	.21521	-.45995	.39443
Objective difficulties related to IEP	.992	.322	.825	96	.412	.15367	.18631	-.21615	.52349

The conducted t-test for independent samples shows that, as expected, only the difference found on the first criterion is confirmed as statistically significant. More precisely, the surveyed teachers who have experience in working with students with developmental disabilities manifest a statistically significantly higher average assessment of personal readiness for the preparation and implementation of IEPs for students with visual impairments ($t=3.930$, $df=93.90$, $p<0.01$). The statistical significance of the measured differences on the two remaining criteria, i.e. in the assessment of the readiness of the environment for the preparation and implementation of IEPs for students with visual impairments, and of the objective difficulty of preparing IEPs for students with visual impairments, has not been confirmed.

Table No. 3.2.2a: Teachers' preparedness for the development and implementation of IEPs and specific professional experience with students with visual impairment (descriptive statistics)

Variable	Experience (1 = Yes / 0 = No)	N	Mean	Std. Deviation	Std. Error Mean
Personal preparedness for IEP	1	17	2.8000	1.16977	.28371
	0	81	2.1356	.66045	.07338
Preparedness of the school environment for IEP	1	17	2.4412	1.32738	.32194
	0	81	3.0442	.88398	.09822
Objective difficulty of IEP	1	17	2.3853	1.08818	.26392
	0	81	2.1395	.82283	.09143

A statistical test of the significance of the indicated differences between teachers with and without specific professional experience in working with visually impaired students is pending, i.e. a statistical check of whether these differences are sufficiently pronounced for a possible statistical confirmation of the significance. For this purpose, the t-test for independent samples will again be used.

Conclusion

Based on this finding, it can be concluded that the availability of specific professional experience among teachers in working with visually impaired students could be treated as a factor of differences in terms of their assessments of personal readiness for the development and

implementation of IEPs for visually impaired students it can be concluded that the availability of general professional experience among teachers in working with students with disabilities could be treated as a factor of differences in terms of their assessments of personal readiness for the development and implementation of IEPs for students with visual impairments.

Recommendations

- Care should be taken to plan activities that are suitable for the child's characteristics, interests, needs, and abilities.
- Activities should be planned taking into account the developmental characteristics of visually impaired individuals.
- Residual vision should be utilized when planning activities for visually impaired individuals.
- Planning activities aimed at improving the listening skills of visually impaired individuals is important.
- Emphasis should be placed on planning activities related to orientation and independent movement skills.
- Activities should follow a sequence from simple to complex, from near to far, and from known to unknown.
- Educational trips should be organized to museums that have made arrangements taking into account the characteristics of visually impaired individuals. A guide should definitely be requested at museums, and the items being examined should be explained in detail.

References

- [1] Acedo, C. (2008). Inclusive education: Pushing the boundaries. *Prospects*, 38, 5–13.
- [2] Ajdinski, G. (2007). The role of the special teacher in the process of inclusion in regular primary schools. *Journal of Special Education and Rehabilitation*, 8(1–2), 5–14.
- [3] Ajdinski, G., Kitkanj, Z., & Ajdinski, L. (2007). *Osnovi na defektologija*. Makedonska Riznica.
- [4] Avramidis, E., Bayliss, P., & Burden, R. (2000). Student teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school. *Teaching and Teacher Education*, 16, 277–293.
- [5] Bardin, J. A., & Lewis, S. (2008). A survey of the academic engagement of students with visual impairment in general education classes. *Journal of Visual Impairment & Blindness*, 102(8), 472–483.
- [6] Booth, T., & Ainscow, M. (2011). *The index for inclusion* (3rd ed.). Centre for Studies on Inclusive Education.
- [7] Bullard, M., Rutledge, C., & Kohler-Evans, P. (2017). Using the stages of concern questionnaire to ensure professional development with teachers and teacher candidates. *International Research in Higher Education*, 2(4), 50–57.
- [8] Committee on the Rights of Persons with Disabilities. (2016). *General comment No. 4: The right to inclusive education (CRPD/C/GC/4)*. United Nations.
- [9] Dimitrova-Radojichikj, D. (2017). Prevalence and causes of blindness among Macedonian population. *Journal of Special Education and Rehabilitation*, 18(1–2), 17–25.
- [10] Dimitrova-Radojichikj, D., & Chichevska-Jovanova, N. (2013). The attitudes of primary school teachers on inclusive education in the Republic of Macedonia. *Croatian Review of Rehabilitation Research*, 49(Suppl.), 137–145.
- [11] Dimitrova-Radojichikj, D., & Chichevska-Jovanova, N. (2015). Teachers' acceptance of students with disability. *Education: Theory and Practice*, 24(5), 647–656.
- [12] Fuller, F. F. (1969). Concerns of teachers: A developmental conceptualization. *American Educational Research Journal*, 6(2), 207–226.
- [13] Reiser, R. (2012). *Implementing inclusive education: A Commonwealth guide to implementing Article 24 of the UN Convention on the Rights of Persons with Disabilities* (2nd ed.). Commonwealth Secretariat.

- [14] Save the Children. (2016). *Inclusive education: What, why and how – A handbook for program implementers*. Save the Children.
- [15] UNESCO. (2001). *Understanding and responding to children's needs in inclusive classrooms: A guide for teachers*. UNESCO.
- [16] World Health Organization. (2011). *Global initiative for the elimination of avoidable blindness: Action plan 2006–2011*. WHO.