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## **Journal of Exceptional People**

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## **Journal of Exceptional People**

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# Introduction

Dear readers,

The editors of our Journal of Exceptional People have again selected quality articles for you from many articles, which relate specifically to pedagogical topics. In this autumn issue, however, we focused mainly on articles that are not only professionally refined and report on research or provide a comprehensive overview and summarize special pedagogical topics in a particular area, but great importance was given also to the attractiveness of individual articles and their expected readability.

For these reasons, our editorial office does not hesitate in some cases to print other articles by our traditional contributors, as in previous years of our journal these contributors have already demonstrated the great quality of their research and review articles.

Another important criterion was also the universality and variability of foreign representation of publishing authors, as we believe that foreign experience and insight into the world of special education, eg in African countries, America or Asia, can to some extent enrich all readers who are open to new knowledge.

We open our autumn issue of JEP with a paper entitled The Current Situation and Problem Research on Mental Health Education of the Special Education Schools in Sichuan Province by Chinese authors (Yang Juan, Tong Yao). It is this article that introduces us to the situation of special education in the typical Chinese province of Sichuan. The following contribution by the Czech author Kristina Tománková focuses on the development of motor skills in the target group of children with visual impairment as it is implemented in the Czech Republic. We received the third contribution from Nigerian authors. Folashade Olusodo and Brenna Farrow deal with the issue of teachers' approach to inclusion in the southwestern part of Nigeria, in the state of Lagos. We obtained the following contribution from Gabriela Smečková from Valdosta State University in the American state of Georgia. This author introduces

us to the challenges and opportunities that foreign-born professors at U.S. universities face along with their students who also encounter challenges and opportunities.

Another interesting article by Czech authors Zdeňka Kozáková and Petra Hermanová focuses on the issue of sexual education and behavior and compares the views of teachers with the views of their pupils with intellectual disability (ID). The following study by a team of Nigerian authors investigates the discernment of special school students on the application of low-technological devices for learning. (Obielodan, Omotayo Olabo; Onojah Amos Ochayi; Akomolafe, Precious Oreoluwa; Oladosu Kamaldeen Korede & Onojah Adenike Aderogba)

Following these science papers and overview essays we have included three interesting reviews of book titles that deal with special pedagogical topics. Jana Grohmanová introduces the content of the book *Languages in the communication of deaf people: Czech Sign Language and Czech* by Macurová A., Zbořilová R., another review by Petr Kosek analyzes a book entitled *STEPS: group therapy-educational program for siblings of children with autism spectrum disorders* by Havelka D.

Last book review is named *Pedagogical psychological aspects of expressive therapies in individuals with special educational needs*. It was sent to our *Journal of Exceptional People* by Slovak author Katarina Majzlanová.

Our journal concludes, as usual, with instructions for authors who would like to publish in future issues of the *Journal of Exceptional People*. Our editorial office is open to all interesting contributions. However, you will make our work easier if you read these instructions and if you follow them when writing your contribution. We thank potential authors and we wish the readers of our magazine a pleasant reading.

Pavel Svoboda, Jan Chrastina, executive editors, JEP

# The current situation and problem research on mental health education of the special education schools in Sichuan Province (China)

(overview essay)

Yang Juan, Tong Yao

**Abstract:** By adopting a self-designed questionnaire, this research surveys the current situation of the mental health education in 32 special education schools in Sichuan province. According to the survey, the level of the mental health education implementation in the surveyed schools is average; the mental health education is well emphasized while the organization and management, funds, staffing and other guarantee conditions are still not enough; the education achievement degrees among the special education schools in different areas have significant differences, and obvious differences also exist in education implementation, guarantee conditions and education achievement degree of whether schools are equipped with psychology teachers. Besides, there are also remarkable differences in mental health education implementation between boarding schools and non-boarding ones. Therefore, the overall plan of the mental health education in the special education schools should be advocated, and the training of the mental health faculty should be strengthened, especially the post-job training of the teachers.

**Keywords:** special education schools; mental health education; current situation; problems

## 1 Presentation of the Problem

According to the *Guidelines of Mental Health Education in Primary and Secondary Schools (2012 revision)* published by the Ministry of Education in 2012, “the mental health education in primary and secondary schools is vital for improving the psychological quality of the students and promoting the harmonious development of their physical and mental health; it is also a crucial component of further strengthening and improving the moral education of both elementary and secondary schools, as well as comprehensively boosting the quality education”. The teaching goals, tasks,

contents as well as methods of mental health education are also stipulated in the guidelines. *The Tentative Regulations of Special Education Schools* also mentions that special education schools should attach importance to students' physical and mental health education, cultivate and develop students' mental quality and health habit, and improve their capacities for protecting and properly using their self-residual functions. First of all, as children, special children comply with the general laws of physiological and psychological development of ordinary children. However, due to physiological defects, they have troubles in their independent life, social adaptation and other aspects. In the course of development, they will also face more serious changes and risks both physiologically and mentally than their normal peers. For example, some surveys turn out that, comparing deaf students with ordinary students, the former show more somatization, negativity, anxiety, paranoia and other emotions (Feng Nianqin, 2004); blind students mainly show more mental problems in anxiety and hostility, and low grades students' psychological problems are especially remarkable. (2004,Huang Baifang). These issues significantly affect the mental health development of the special children. The particularity and complexity of the psychological development of special children have brought remarkable challenges to the mental health education in special education schools, and it needs more headmasters, teachers and parents to pay attention to the mental health development among the special kids.

## **2 Research methods and subjects**

### **2.1 The research subjects**

This research regarded the special education schools as a unit, and each school was distributed a questionnaire which was finished by the teachers who take charge of the mental health education of the students. The questionnaires were distributed to 35 special education schools in Sichuan province which had been randomly sampled. 35 questionnaires were distributed and 32 were reclaimed and the effective rate was 100%.

### **2.2 The research tools**

This research adopted the self-made questionnaire *a survey of the mental health education in special education schools in Sichuan Province*, which is divided into two parts. The first part is the basic information of the surveyed schools. The second part is the current situation of the mental health education implementation, which includes four dimensions: organization and management, guarantee conditions, educational implementation and the degree of educational achievement. And respec-



tively, the items each consists of are 11, 13, 12 and 3. Each item is rated on a scale of 1 to 5, ranging from completely nonconforming to highly conforming. The total questionnaire and the Cronbach's Alpha of four dimensions are respectively 0.96; 0.92, 0.877, 0.92, 0.767; by using the exploratory factor validity analysis, the KMO is 0.833; through Bartlett's test, the cumulative variance interpretation rate is 64.516%, indicating that the research data has a good level of structural validity.

## 2.3 Data Processing

Spss17.0 data statistic software was used to analyze and process the data, and the descriptive statistical analysis, T-test and other approaches were also adopted in this research.

## 3 Results

### 3.1 The distribution of samples

Table 1 shows that among the surveyed schools, there are 32 boarding schools, and they account for 93.8%; 2 non-boarding schools, account for 6.3%; 11 municipal special education schools, account for 34.4%; 21 county-level special education schools, account for 65.6%. According to the survey of in-service psychology teachers, there are 18 schools employed psychology teachers, and they account for 56.3%. The rest 14 schools, which account for 43.8%, are equipped with no psychology teachers. Further survey shows that among the 18 schools, all the psychology teachers are part-time and there are no professional ones. There are 21 comprehensive schools, and they account for 65.6%; there are 5 schools for pure deaf students and they account for 15.6%; 6 schools for the MR students, account for 18.8%.

*Table 1: Distribution of the samples*

	Boarding		Location		Psychology teachers		Types of students		
	Yes	No	Municipal	County	None	Yes	Deaf	MR	Comprehensive
Amount	30	2	11	21	14	18	5	6	21
Percentage (%)	93.8	6.3	34.4	65.6	43.8	56.3	15.6	18.8	65.6

### 3.2 The development of mental health education in special education schools

According to the survey results (see Table 2), the overall scores in the four dimensions, which are organization and management, guarantee conditions, educational implementation and the degree of educational achievement, are not high; the mean

value of each dimension is less than the average score of 3 points. Compared with guarantee conditions and the degree of educational achievement, however, scores in the dimensions of organization and management as well as educational implementation are relatively higher.

**Table 2:** *Overall scores the surveyed subjects get in mental health education*

	Organization & management	Guarantee conditions	Educational implementation	Educational achievement degree
<i>M</i>	2.98	2.79	2.98	2.84
<i>SD</i>	0.84	0.91	0.82	0.83

Further analysis (see Table 3) indicates that in the dimension of organization and management, the goal programming gets higher scores and surpasses the average score 3 points, yet its scores in organization structure and mechanism establishment are lower; in guarantee conditions, compared with the other sub-dimensions, scores in hardware facilities are higher and exceed the average score of 3, while that in the rest of the sub-dimensions are the lowest.

**Table 3:** *Detailed scores that the surveyed subjects achieve in the dimensions of organization and management and guarantee conditions*

Dimensions	Sub-dimensions	M	SD
Organization & management	Goal programming	3.41	0.84
	Organization structures	2.77	0.78
	Mechanism establishment	2.78	0.78
Guarantee conditions	Hardware facilities	3.34	1.41
	Funds	2.49	0.99
	Staffing	2.63	1.13
	Training & supervision	2.69	0.94

In the dimension of educational implementation, the sub-dimension that gets higher score is the emphasis on mental health education (see Table 4). It exceeds the average score of 3 points. However, the two sub-dimensions of mental health education curriculum teaching and practical activities have lower scores, followed by the counselling and publicity of mental health activities.

**Table 4:** Scores the surveyed subjects achieve in the dimension of educational implementation

	Emphasis	Course teaching	Practical activities	Counseling	Publicity
<i>M</i>	3.64	2.99	2.94	2.74	2.61
<i>SD</i>	0.87	1.09	1.34	0.94	0.87

### 3.3 Comparison of scores achieved by the special education schools with different features in the aspect of mental health education development

An independent sample T-test was conducted on the scores of the aspect, whether the school is boarding or non-boarding, achieves in the dimensions of implementation, guarantee conditions, organization and management as well as achievement degree, and the analysis results are shown in Table 5. According to the results, there is a significant difference between boarding schools and non-boarding schools in the dimension of educational implementation ( $t = 2.418$ ,  $DF = 30$ ,  $P < 0.05$ ). The scores boarding schools achieve in the implementation of mental health education are higher than those of non-boarding schools. There is no significant difference between the two in the dimensions of guarantee conditions, organization and management as well as educational achievement. However, there is no distinct difference between boarding schools in each dimension. But the scores in each dimension of boarding schools are higher than those of the non-boarding schools.

**Table 5:** Comparison of the scores that the aspect whether the school is boarding or non-boarding achieves in different dimensions ( $M+SD$ )

	Educational implementation	Guarantee conditions	Organization and management	Educational achievement degree
Yes	$3.07 \pm 0.78$	$2.85 \pm 0.89$	$3.05 \pm 0.81$	$2.88 \pm 0.85$
Non	$1.72 \pm 0.07$	$1.81 \pm 0.68$	$1.97 \pm 0.90$	$2.33 \pm 0.47$
<i>T</i>	2.418 <sup>*</sup>	1.61	1.81	0.89

An independent sample T-test was conducted on the scores of the aspect, special education schools in different regions, achieves in the dimensions of implementation, guarantee conditions, organization and management as well as achievement degree, and the analysis results are shown in Table 6. The results show that there are significant differences between schools in different regions in the dimensions of educational achievement ( $t = -2.24$ ,  $DF = 30$ ,  $P < 0.05$ ). The achievement of mental health education in municipal special education schools is remarkably better than that of the county-level special schools. The differences between the two kinds of schools are not enormous in the dimensions of educational implementation, guarantee conditions,

organization and management, but the scores of municipal special education schools are higher than those of the county ones in every dimension.

**Table 6:** *Comparison of the scores the schools in different regions achieve in different dimensions (M+SD)*

	Educational implementation	Guarantee conditions	Organization and management	Educational achievement degree
County-level	2.87±0.79	2.56±0.72	2.87±0.79	2.62±0.79
Municipal	3.20±0.88	3.21±1.10	3.20±0.95	3.27±0.77
T	-1.09	-1.75	-1.07	-2.24*

An independent sample T-test was conducted on the scores of the aspect, whether the schools are equipped with mental health teachers, achieves in the dimensions of implementation, guarantee conditions, organization and management, achievement degree of the schools, and the analysis results are shown in Table 7. The results show that there is a significant difference between the two dimensions of educational implementation and guarantee conditions when it comes to whether the school is equipped with psychology teachers. ( $t = 3.15$ ,  $DF = 30$ ,  $P < 0.01$ ;  $t = 2.85$ ,  $DF = 30$ ,  $P < 0.01$ ). The scores of the schools with mental health teachers get in the dimensions of educational implementation and guarantee conditions are significantly higher than those without mental health education teachers. In terms of educational achievement degree, schools with mental health teachers score significantly higher than those without mental health teachers ( $t = 2.36$ ,  $DF = 30$ ,  $P < 0.05$ ); in terms of organizational management, there is no significant difference.

**Table 7:** *Comparison of the scores that the aspect whether the schools are equipped with mental health teachers achieves in different dimensions (M+SD)*

	Educational implementation	Guarantee conditions	Organization and management	Educational achievement degree
Yes	3.34±0.70	3.15±0.81	3.17±0.80	3.13±0.75
No	2.53±0.76	2.32±0.83	2.74±0.87	2.48±0.81
T	3.15**	2.85**	1.44	2.36*

## 4 Discussion and Analysis

### 4.1 General analysis of the mental health education in special education schools

As Table 2 shows, the overall scores of mental health education in special education schools are not high in the four dimensions of organization and management, guarantee conditions, educational implementation and education achievement degree. Scores in each dimension are all below the average score of 3 points, thus, it can be inferred that the implementation of mental health education in special education schools is far from optimistic; the degree and quality of development need to be further improved; the relative plans, management and implementation have to be further strengthened as well. To analyze the scores of each sub-dimension, the goal programming of the organization and management scores high, which shows that the schools have already included the mental health education into the general work program, meaning that schools have clear orientations in the work of mental health education. However, the establishment of management institutions as well as management mechanisms still have many defects. In guarantee conditions, hardware facilities score relatively high while guarantee funds the lowest, which shows that hardware facilities of mental health education in most special education are well-equipped, for instance, schools equipped with psychological counselling room (center). Nevertheless, staffing and expenditure in such centers are still in lack, which is consistent with the result that only half of the surveyed schools have psychology teachers. In the meantime, there are few opportunities for psychology teachers to go out for training and studying. In addition, many part-time psychology teachers are those who also take charge of other disciplines and lack professional psychological knowledge and mental counselling abilities. This is in line with the survey results of Wang Xihai, Shao Wei and other researchers (Wang Xihai, 2019; Shao Wei, Wu Jing and Wang Sheng). The lack of professional and technical personnel and professional guidance are the main difficulties encountered in mental health education (Ma Zhenzhen and Zhang Fujuan, 2004).

### 4.2 Comparative analysis on the development of mental health education in schools with different characteristics

First, there are significant differences in whether there are mental health teachers in the development of mental health education in special education schools. Although all the mental health teachers in the special school are part-time, the results show that the scores of the schools with mental health teachers are significantly higher than those without mental health teachers in education implementation, guarantee conditions and educational achievement degree. The amount and level of teachers

are the important guarantees for the quality and level of the education of a school. The teachers of mental health education directly determine the smooth development of mental health education, and also determine the quality of mental health education to a large extent. According to the previous survey results, many special education schools are seriously under-equipped with mental health teachers. On average, there is only one full-time mental health teacher in 9.1 special education schools in Central China, and only one full-time mental health teacher in 11.8 special education schools in Western China (Wang Yan, Wang Zhiqiang, Zhu Nan, Feng Yajing, Yin Junyi, Zhao Liting, 2012). It can be seen that such a proportion is seriously out of balance. Although many teachers can recognize some psychological problems of special children and be aware of the urgency of mental health education, the current situations of the insufficiency and low quality of teachers seriously affect the development of mental health education in schools as well as restrict the ability of mental health education services (Gao Junjie, Chen Xiaoke, Li Zuoshan, Zhao Jun, 2013; Song Zhiying, Zheng Meimei, 2015).

Second, whether the school is a boarding school has significant difference in the implementation dimension of mental health education. Although there is no striking difference in other dimensions, the scores of boarding schools are higher than those of non-boarding schools. Although no one has paid attention to the mental health problems of the students in the boarding special education school for now, it is found from the research results of the general boarding school that the overall mental health problems of the students in the boarding school are apparently more than those of the students in the non-boarding ones, especially in the junior and lower grades (Zhang Lijin, Shen Jie, Li Zhiqiang, Gai Xiaosong, 2009). At the same time, due to the regulations of boarding, the school may be stricter in students' management, teachers may pay more attention to the life, study, safety and other aspects of the students, and the strength in mental health education may be stronger as well.

Third, there are also prominent differences in the degree of mental health education achievement of the schools located in different regions. The effectiveness of mental health education in municipal schools is distinctly higher than that in county-level special education schools. What's more, the scores in the dimensions of educational implementation, guarantee conditions, organization and management are also higher than those in county-level special education schools. According to *The Second Phase of Special Education Promotion Plan (2017–2020)* issued by the Ministry of Education, by 2020, there will be one special education school in every city (prefecture) and county (municipals) which possesses a population of more than 300,000 and a large number of disabled children. However, with the establishment of special education schools in various regions, problems in various aspects also arise. Due to the relatively backward economic development in county-level areas, the

influence of parents' concepts of education, the limited number of qualified teachers, the inadequate publicity and implementation of laws and policies as well as other reasons (Li Huimin, Wang Meng, Liu Min, 2017), the allocation of resources in all aspects of special education schools in county-level areas is not in place, such as the types of professional classrooms are not uniform, the structure of teaching staff is unreasonable, the rehabilitation teachers and psychology teachers are seriously lacking, and the opportunities for teacher to get trained are limited (Ao Yongqian, Wang Tingzhao, Zhang Mei, 2017). All of these problems seriously affect the smooth development of mental health education in county-level special education schools.

## **5 Advice**

### **5.1 General plan and layout for the work of mental health education in schools**

To promote and ensure the validity and smooth development of school mental health education, educational work of all aspects needs to be reasonably deployed from the school level and mental health education needs to be clearly included into the range of school work, the educational goals ought to be made and the management institutions, management systems and guarantee mechanisms have to be established and improved. Besides, more attention should also be paid in the mental health education. For example, schools should rally teachers to consider how to efficiently organize and hold relative courses, topical activities and psychological consultations for individual students; seek for efficient mental health education methods based on the fact that the mental health problems that special children have are complicated, diverse and difficult; positively find and know the actual situations and troubles in schools and collaborate with every power to support mental health education in mechanisms, funds, teacher resources, facilities and other aspects.

### **5.2 Strengthen the pre-job and post-job training of psychology teachers**

The present post settings of special education school teachers results in a lack of full-time psychology teachers and obstruction of mental health education implementation. Besides, the present part-time mental health teachers may also feel unable to do what they hope to due to the teaching burdens and insufficient subsidy as well as the mismatching between psychological tasks and staffing. Therefore, establishing a team of psychology teachers who are eligible for the requirements of mental health education is critical to solve the current problems. Based on the fact in special education schools, post-job training can be regarded as the dominant method, and the combination of pre-job and post-job training as complementary. In the short term,

schools can select part-time psychology teachers from the faculty of other disciplines or head teachers who are willing to engage in psychological education in order to expand the team. This is the approach to quickly meet the demand of mental health teachers in special education schools as well. In the meantime, “send out and bring in” strategy can be carried out to help improve the professional skills of the part-time psychology teachers. Sending-out is to back up psychology teachers going outside and participating all kinds of teaching and researching activities and trainings, so as to improve their theoretical knowledge and skills; bringing-in is to invite experts and scholars with solid mental health education theories and the front-line teachers with ample practical experience to the schools and guide the work, thus to facilitate the professional skills of the local faculty.

### **5.3 Allocate the resources of all levels reasonably in special education schools and ensure the balance of development**

Under the lead of national policies, governments at all levels should stick to the comprehensive and coordinated development and give priority to the rural areas, underdeveloped and remote regions in the aspects of policy, funds and staffing. They should also enlarge the investment in education, pro-actively optimize fiscal output structure, scientifically draw up budget ensure teacher’s status, and protect teacher’s rights and interests. For the teachers who always work in rural areas or poverty-stricken and remote regions, preferential policy should be carried out in terms of salary and title. In order to improve the status of special education teachers in rural areas, to attract more teachers to engage in special education and to narrow the gap between different regions as well as schools, the minimum standard of hardware and software equipment in special education schools and the subsidies of special education teachers need to be ensured.

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# Motor skills in children with visual impairment

(overview essay)

Kristína Tománková

**Abstract:** *The overview essay presents a narrative literary review of the facts about the motor skills in association with visual impairments in children from current studies. This contribution presents various knowledge and selected research surveys in issue. Motor skills and motor development in children with visual impairment is expected to be different from that in typically developing children in many ways. The aim of the contribution is to summarize appropriate and essential studies that show experiences with problem of motor skills, in a broader context, in child individuals with sensory loss.*

**Keywords:** *vision, impairment, movement, gross motor skills, motor function, motor development*

## 1 Introduction

Investigation of motor skills in children with visual impairment is limited because of an absence of instruments for assessing motor function in these children (Bakke, Cavalcante, de Oliveira et al., 2019). Children with low vision have poorer motor skills than did the children who were sighted. Furthermore, the children with low vision have weaker gross motor skills, especially balance, than fine motor skills (Bouchard & Tétreault, 2000). Severe congenital visual disability delays and alters development in all areas; the impact on motor development is complex with much secondary to delays in other areas (Sonksen, Levitt, & Kitsinger, 1984). Ocular accommodation provides a well-focused image, feedback for accurate eye movement control, and cues for depth perception. To accurately perform visually guided motor tasks, integration of ocular motor systems is essential. Children with motor coordination impairment are established to be at higher risk of accommodation anomalies (Rafique & Northway, 2015).

Children with visual impairments often reveal higher levels of sedentary time and lower levels of fundamental motor skills, health-related fitness, and physical activity than peers without visual impairments (Brian, Pennell, Haibach-Beach et al., 2019). Fundamental motor skills are an underlying mechanism driving physical activity behavior and promoting positive developmental trajectories for health. However, little is known about fundamental motor skills of preschool-aged children with visual impairments (Brian, Miedema, Johnson et. al., 2021). The changes in such human motor performance processes as stability maintenance, production of a response to the environment may be observed if loss of vision or any vision impairment appears. Insufficient visual information hampers motor performance and maybe the development of the compensatory motor reactions of the legally blind. Intensified tactile or vestibular function cannot absolutely replace the presence of normal vision in motor control (Juodzbalienė & Muckus, 2006). Visually impaired children show difficulties in recognizing their own bodies, objects around them and the spatial parameters that are essential for independent movement (Navarro, Fukujima, Fontes et al., 2004). Although imagery is traditionally thought to be inherently linked to visual perception, growing evidence shows that mental images can arise also from nonvisual modalities. Paradigmatic in this respect is the case of individuals born blind or that became blind soon after birth. It was reviewed evidence pertaining to different aspects of cognition showing that blind individuals can generate analogical mental images based on haptic or auditory input. These representations allow blind individuals to perform efficiently in a variety of domains which require the use of imagery (such as memory, spatial and navigation abilities, numerical cognition), though exhibiting in some cases specific limitations or differences, which likely depend on the modality in which information is usually acquired in these individuals (e.g., via haptics and hearing) and the strategies employed (Renzi, Cattaneo, Vecchi et al., 2013).

## 2 Overview of research findings to the solved topic

Assessment of motor skills in children with visual impairment is problematic. To minimize systematic errors and improve the quality of the investigations, increasing the number of studies regarding the tools, functionality of their activities, and testing the adaptations is necessary (Bakke, Cavalcante, de Oliveira et al., 2019).

The study of the Wagner, Haibach, & Lieberman (2013) provided an empirical basis for teaching gross motor skills in children with visual impairments. For this purpose, gross motor skill performance of 23 6–12-year-old, boys and girls who are blind, and 28 sighted controls with comparable age and gender characteristics was compared on six locomotor and six object control tasks using the TGMD-2. Results indicate that children who are blind perform significantly ( $p < .05$ ) worse in all assessed locomotor and object control skills, whereby running, leaping, kicking, and

catching are the most affected skills, and corresponding differences are related to most running, leaping, kicking, and catching component.

The study of Brambring (2001) used actometers to measure leg and arm activity in 20 children who were blind, 15 who were partially sighted, and 35 sighted controls from the same pre-school groups matched for age and gender. The results showed strong and highly significant restrictions in leg movements in the blind compared with sighted peers (63% of the leg activity of sighted controls). Differences in arm movements did not attain statistical significance (83% of the arm activity of sighted controls). The partially sighted group revealed stronger restrictions in leg movements (77% of the leg activity of sighted controls) than in arm movements (90% of the arm activity of sighted controls). However, none of the differences between the partially sighted and sighted were significant. Nonetheless, the degree of visual impairment or the birth status (full-term vs. pre-term) related significantly with activity levels in the group of visually impaired. Entering these variables as covariates revealed statistically non-significant differences between the blind and partially sighted and between the pre- and full-term visually impaired groups. This method could be used to evaluate the effects of different interventions on motor activities and to observe developmental progress in children with visual impairment at various ages.

Results of the TGMD-2 by Brian, Taunton, Lieberman et al. (2018) consistently show acceptable validity and reliability for children/adolescents who are sighted and those who have visual impairments. Results of the Test of Gross Motor Development-3 (TGMD-3) are often valid and reliable for children who are sighted, but its psychometric properties are unknown for children with visual impairments.

When controlling for vision, age, and BMI z-score, in study of Brian, Pennell, Haibach-Beach et al. (2019), home-based self-report physical activity moderately correlated with camp-based accelerometer data ( $p < .001$ ); home-based and camp-based physical activity associated with object control and locomotor subscales ( $p < .001$ ); object control and locomotor skills were the most influential factors above and beyond vision associating with both physical activity measures. Cardiorespiratory fitness and grip strength were significantly associated with both object control and locomotor skills ( $p < .001$ ).

In the study realized by Brian, Miedema, Johnson et al. (2021) was examined the fundamental motor skills of preschool-aged children ( $N = 25$ ) with ( $n = 10$ ) and without ( $n = 15$ ) visual impairment as measured using the TGMD-3. Children without visual impairments performed significantly higher than their peers for locomotor ( $p = .014$ ), and ball skills ( $p < .001$ ). Regardless of the presence of a visual impairment, many participants struggled with developing fundamental motor skills, with the greatest disparity resting within ball skills. These findings help to clarify the fundamental motor skill levels of preschool-aged children with visual impairment. Thus, there is a need for both further inquiry and intervention for all children.

In study of Caputo, Tinelli, Bancale et al. (2007) investigated perceptual-motor and motor coordination abilities of 19 children with essential congenital esotropia who underwent a late surgery (after 4 years), compared to 23 age-matched controls. Strabismus is one of the most common visual disorders in infancy. While there is a great attention on the effects of the timing of surgery as to the development of binocular vision, little is known about the possible influence of congenital strabismus on perceptual-motor and more generally, on neuromotor development. Children were tested using the Movement Assessment Battery for Children (MABC) that were performed both 1-week before surgery (T1) and about 3 months (72 weeks) after surgery (T2). At T1, abnormal or borderline results were found in more than half of the children with strabismus, as opposed to only about 17% of the controls. At T2 none of the children showed abnormal MABC total scores and there was no difference in global scores between the study and the control group. The two groups also did not show any significant difference in individual items of the MABC apart from those assessing ball skills. Our results suggest that surgical correction of strabismus, even when performed after the 4th year of life, appears to be effective in improving perceptual-motor and motor function.

Elisa, Josée, Oreste et al. (2002) assessed early neuromotor development in 20 congenitally blind or severely visually impaired children, nine without (B) and 11 with associated handicaps (B 1 H), to develop a strategy for early intervention in these subjects. The mean age at first observation was 11.4 months (range: 4–30 months). The mean follow-up duration was 16.9 months (range: 3–36 months). Assessment included developmental history, neurological examination, videorecording of spontaneous activity and administration of the Reynell–Zinkin Scales and neuroradiological and neurophysiological investigations. All B children walked independently (mean age 19.8 months) and 55.5% crawled (mean age 15 months); the B 1 H subjects displayed absence of almost all neuromotor functions, except one who walked at 20 months. All the B and just one (9%) of the B 1 H children developed satisfactory fine motor abilities. ‘Reach on sound’ at distance was achieved by all the B children by the age of 14.2 months while in the B 1 H group it was achieved by only two subjects at a median age of 19.5 months. It is conclusion that, it is possible to describe the profile of neuromotor development in B and B 1 H children; strategies to help postural motor development and ‘reach on sound’ appear to be fundamental in early intervention in these subjects.

Haibach, Wagner, & Lieberman (2014) in study examined the influence of age, sex, and severity of visual impairment upon locomotor and object control skills in 100 children with visual impairments from across the United States by means of TGMD-2. The full range of visual impairments according to United States Association for Blind Athletes (USABA; B3 = 20/200–20/599, legally blind; B2 = 20/600 and up, travel vision; B1 = totally blind) were assessed. The B1 group performed significantly

worse than the B2, or B3 groups. However, there were no significant differences between B2 and B3 except for the run, catch, and throw. Age and sex did not play an important role in most of the skills, apart from boys outperforming girls striking, dribbling, and throwing, and older children outperforming younger children in dribbling. The significant impact of the severity of visual impairment is likely due to decreased experiences and opportunities for children with more severe visual impairments. In addition, it is likely that these reduced experiences explain the lack of age-related differences in children with visual impairments.

Hallemans, Ortibus, Truijten et al. (2011) compared locomotion of children and adults with a visual impairment (ages 1–44,  $n = 28$ ) to that of age-related individuals with normal vision ( $n = 60$ ). Participants walked barefoot at preferred speed while their gait was recorded by a Vicon1 system. Walking speed, heading angle, step frequency, stride length, step width, stance phase duration and double support time were determined. Differences between groups, relationships with age and possible interaction effects were investigated. With increasing age overall improvements in gait parameters are observed. Differences between groups were a slower walking speed, a shorter stride length, a prolonged duration of stance and of double support in the individuals with a visual impairment. These may be considered either as adaptations to balance problems or as strategies to allow to foot to probe the ground.

Gross motor skill performance of children with visual impairments and its association with the degree of visual impairment and sports participation was examined in study of Houwen, Visscher, Hartman et al. (2007). Twenty children with visual impairments (mean age 9.2 years) and 100 sighted children (mean age 9.1 years) from mainstream schools participated. The results showed that children with visual impairments had significantly lower object control but not locomotor skill scores than the sighted children. No significant differences were found between children with a moderate and severe visual impairment. Children with visual impairments who participated in sports had significantly higher object control skill scores than those who did not. No significant associations between motor skills and sports participation were found in the sighted children.

Houwen, Visscher, Lemmink et al. (2008) examined performance of children with visual impairments aged 7 to 10 years on different types of motor skills. Furthermore, the association between the degree of the visual impairment and motor performance was examined. The motor performance of 48 children with visual impairment (32 males, 16 females; mean age 8 years 10 months) was assessed using the MABC. Their performance was compared with 48 children without visual impairment (33 males, 15 females; mean age 8 years 9 months). Children with visual impairment showed the poorest performance compared with peers without visual impairment on unimanual speed, eye-hand coordination, catching, static balance, and dynamic balance while moving slowly. There was no significant difference between

children with moderate and severe visual impairment, except for bimanual coordination in 7- to 8-year-olds and eye-hand coordination in both the 7- to 8-year-olds and 9- to 10-year-olds, favouring the children with moderate visual impairment. The poor performance compared with children without visual impairment is related to vision, but the degree of the visual impairment does not appear to relate to motor performance, except when associated with bimanual and eye-hand coordination. For children with visual impairment, it seems very important to adjust the environmental context and task to enhance motor performance.

Motor skill performance of children and adolescents with visual impairments studied Houwen, Visscher, Lemmink et al. (2009). Three major groups of variables are considered (child, environmental, and task). Thirty-nine studies are included in this review, 26 of which examined the effects of child, environmental, and/or task variable(s) on motor skill performance and 13 of which reported suggestions by experts about variables related to performance. Weak evidence was found for three relationships: (a) between the degree of visual impairment and dynamic balance and manual dexterity, (b) between amblyopia/strabismus and fine motor skills, and (c) between movement interventions and motor skill performance. In addition, weak evidence was found to refute a relationship between gender and static balance.

Houwen, Hartman, & Visscher (2009) stated that the physical activity levels of children with, and without visual impairments is different. Total activity was significantly higher in children without visual impairment. Time spent in sedentary and light behaviors averaged 81.4% and 15.9% in the children with visual impairment and 78.1% and 18.6% in the children without visual impairment, with significant between-group differences. Participation in moderate-to-vigorous physical activity was significantly higher in children without visual impairment versus children with visual impairment. Time spent in sedentary activity was inversely correlated with locomotor and object control scores in children with visual impairment. Light activity was positively associated with locomotor scores; total activity and moderate-to-vigorous physical activity were positively associated with object control scores. For children without visual impairment, total activity and time spent in moderate-to-vigorous physical activity were positively associated with locomotor scores, and time spent in sedentary activity inversely associated with object control scores. The present results emphasize the importance of promoting an active lifestyle in children.

Ibrahimi, Mendiola-Santibañez, & Gkaros (2021) investigate the potential impact of strabismus and amblyopia on visual-perceptual skills and visual-motor skills of patients according to the type of strabismus, visual acuity, state of binocularity, and sex. This was observational, transverse, prospective study which analyzed a sample of 146 children with strabismus (88 male and 58 female) aged 5–15 years. To determine the strabismus type, we considered the deviation direction, frequency, binocularity state, and associated and dissociated elements. Visual-perceptual skills and



visual-motor skills were evaluated using the Test of Visual Perceptual Skills 3rd ed. (TVPS-3) and Visual-Motor Integration Test of Beery 6th ed. (VMI-6). Sex was the main variable associated with the performance of the analyzed patients on TVPS-3 and VMI-6 ( $p < .05$ ); boys obtained better scores than girls in all evaluated aspects.

Levtzion-Korach, Tennenbaum, Schnitzer et al. (2000) assess the characteristic motor developmental pattern in blind children in Israel. The study compared the developmental data concerning 10 motor skills (rolling, crawling, standing alone with support, sitting from a supine position, walking with help, walking alone, climbing up the stairs with help, standing on one foot, jumping with two feet, climbing up the stairs alone) of 40 blind children to a control group of sighted children and to the motor developmental milestones of the Bayley Developmental Scale and the Revised Denver Developmental Screening Test. The motor development of blind children was delayed, the delay being significant in all 10 motor skills that were examined. This delay emphasizes the major importance of vision as a sensory input modality for the process of sensory– motor development. An adequate stimulating environment and proper parental handling could potentially shorten the motor developmental delay but probably not eliminate it entirely.

The study of the Rafique & Northway (2015) examined the relationship between ocular accommodation and motor tasks, which are often overlooked, to better understand the problems experienced by children with motor coordination impairment. Visual function, gross and fine motor skills were assessed in children with developmental coordination disorder and typically developing control children. Children with developmental coordination disorder had significantly poorer accommodation facility and amplitude dynamics compared to controls. Results indicate a relationship between impaired accommodation and motor skills. Specifically, accommodation anomalies correlated with visual motor, upper limb, and fine dexterity task performance. Consequently, we argue accommodation anomalies influence the ineffective coordination of action and perception in developmental coordination disorder. Furthermore, reading disabilities were related to poorer motor performance. It was postulated the role of the fastigial nucleus as a common pathway for accommodation and motor deficits.

Schott, Haibach-Beach, Knöpfle et al. (2021) present that while the development of motor imagery has been extensively studied in sighted children, it is not clear how children with different severities of visual impairment represent motor actions by using the motor representations constructed through the remaining intact senses, especially touch. Mental chronometry and generation/manipulation of mental imagery were examined in children with and without visual impairment. Participants included 64 youth with and without visual impairment (33 without visual impairments, 14 moderate-to-severe, and 17 blind). Mental chronometry was assessed with the imagined Timed-Up-and-Go-Test (iTUG), and generation/manipulation of mental

imagery with the Controllability-of-Motor-Imagery-Test (CMI). In addition, the effect of working memory performance (Letter-Number-Sequencing) and physical activity upon mental imagery were evaluated. Mental duration for the iTUG was significantly shorter than the active durations. Results also provided evidence of better haptic representation than motor representation in all participants; however, only for the CMI-regeneration condition controls outperformed children with visual impairments and blindness. Exercise and working memory performance showed a significant contribution only on a few tests of motor imagery. Results suggest a possible relationship between motor performance, body representation deficits and visual impairment which needs to be addressed in the evaluation and treatment of children with visual impairment and blindness.

### 3 Conclusion

Some studies identified constraints on motor development and discussed together with ideas for remediation and developmental prevention. Assessment of motor skills in children with visual impairment is problematic. Increasing the number of research regarding the tools, functionality of their activities, and testing the adaptations is necessary. These findings help to clarify the fundamental motor skills levels of children with visual impairment. There is a need for inquiry and intervention for all children. Testing results of the sighted, visually impaired, and totally blind subjects are not equal. It can be assumed that intensified tactile or vestibular function cannot absolutely replace the presence of normal vision in motor control. It was found that, the visually impaired children performed worse in tests evaluating balance and appendage coordination compared to normal sighted children, and this suggests that visual deficiency impairs children's neuro-psychomotor development. Gender and physical activity play a role in skill score. Children with visual impairments who participated in sports had significantly higher object control skill scores than those who did not. Sex seems to be the main variable associated with the results, and boys obtained better scores than girls in some evaluated aspect. Gait differences between groups were found: a slower walking speed, a shorter stride length, a prolonged duration of stance and of double support in the individuals with a visual impairment. These may be considered either as adaptations to balance problems or as strategies to allow foot to probe the ground, probably. Some results indicate a relationship between impaired accommodation and motor skills. Is postulated the role of the fastigial nucleus as a common pathway for accommodation and motor deficits. Some results suggest a possible relationship between motor performance, body representation deficits and visual impairment which needs to be addressed in the evaluation and treatment of children with visual impairments and blindness. The design of new re-

habilitation interventions that focus on strengthening adequate body perception and representation, in the context of the motor imagery, should be proposed and tested to promote motor development in children with visual impairments and blindness. It is stated that an adequate stimulating environment and proper parental handling could potentially shorten the motor developmental delay but probably not eliminate it entirely. Based on selected studies, we conclude that it is possible to describe the profile of neuromotor development in visually impaired children and appropriate strategies to help postural motor development appear to be fundamental in early intervention in these subjects.

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# Teachers' attitudes towards inclusive education in primary schools in Lagos State, Nigeria

(overview essay)

Folashade Olusodo, Brenna Farrow

**Abstract:** *Primary Teachers' attitudes towards inclusive education in Lagos State Nigeria is under-reported in the research literature. The purpose of the current study, therefore, was to bridge the gap in knowledge about inclusive education, children with special educational needs and/or disability and teachers' attitudes in primary school settings in Lagos, Nigeria. Participant schools were randomly selected, and 120 questionnaires were distributed. Data comprised participants' demographics, and a questionnaire, which was analysed using descriptive statistics, mean scores and standard deviation. Results of this mixed methods study showed that most primary teachers in Lagos had a negative attitude towards the inclusion of children with SEN/D. One of the key factors found to influence teachers' attitudes towards inclusive education was individual teachers' level of understanding about inclusive educational practices. Contrary to similar studies conducted in developed countries, our findings showed that Teachers' attitudes were not significantly affected by their academic achievement, years of teaching experience and /or exposure to people with SEN/D, nor were attitudes affected by engaging in professional Special Educational Needs training. It is proposed therefore, that initial teacher education for primary teachers in Lagos State should focus on specific training for inclusive practices. Programmes should comprise knowledge and skills to help change teachers' attitudes towards those children with SEN/D who attend regular schools.*

**Keywords:** *inclusion, teacher attitudes, children with special educational needs, Nigeria*

## 1 Introduction

Inclusive education (IE) and Teachers' Attitudes (TAtt) has been at the forefront of educational research since Salamanca (UNESCO, 1994). The ratification of IE (UNESCO, 1994) by 92 countries further implored research into how inclusion was

practised, and resultant interpretations of inclusive practice have been both diverse and culturally determined (Amr et al., 2016). From the rights-based approach and access to regular schools, the concept of IE developed into a broader perspective that embraced not just the identification of Children with Special Educational Needs and/or Disability (SEN/D) and their inclusion into regular schools, but breaking down of socially constructed barriers within education systems (Forlin & Lian, 2008; Frederickson & Cline, 2009; Garner, 2009; Forlin, 2010c).

The practice of IE, however, is affected by TAtt, motivation, and training. Key factors noted within African research literature state that, common to many countries, cultural and historical factors have affected classroom practices. To date, however, research on TAtt conducted within African states has focused only on teachers and pupils in secondary schools (Fakolade et al., 2009; Ajuwon, 2012). The purpose of the current research, therefore, is to initiate an exploration of TAtt towards the inclusion of children with SEN/D in primary schools, as according to Emanuelsson, Haug and Persson (2005) “inclusive education is most developed, and the challenges are most visible” (p. 114) within this sector.

### **1.1 Key factors to emerge from international literature: Teacher attitudes**

A review of international literature concerning TAtt revealed the most important factor to influence inclusive classroom practices were teacher attitudes towards children with SEN/D (e.g., de Boer, Pijl & Minnaert, 2011; Forlin, Au & Chong, 2008). TAtt has been found to affect psychological and sociological factors of pupils, and inclusive strategies underpin the pupil outcomes. According to Johnson and Howell (2009), TAtt has three components, which are behavioural, affective and cognitive. In addition, Rouse and Florian (2012) determined that aspects of the head (knowledge), the heart (passion) and the hand (practice) are learned by apprenticeship. Other variables found to affect a teacher's attitude according to Avramidis & Norwich (2002), and Kraska & Boyle (2014) comprise gender, education, age, training and prior contact with individuals with SEN/D.

### **1.2 Factors to affect teachers' attitudes towards inclusive education in Nigeria**

There is a dearth of literature concerning primary teacher's attitudes towards inclusion in Nigeria. A search of the university electronic repository revealed seven research articles published between 2007–2021.

Agbenyega, (2007a), Fakolade et al. (2009), Chhabra et al (2010), Kuyini and Mangope, (2011) Mukhopadhyay, (2014) findings indicated that African teachers predominantly had negative attitudes towards inclusive education. Other factors found to affect TAtt included marital status, professional qualification and level of

teachers' qualification, whilst years of teaching experience was found to be insignificant (Fakolade et al, 2009).

Ajuwon (2012) examined the attitude of 141 special educators in Nigeria and discovered that despite their tolerance towards the different behaviours of students in the classroom, special educators are not sure of their ability to handle students with SEN. This low professional self-confidence reflected inadequate training and experience in inclusive practices and negatively perceived incidences.

Ajuwon (2012) found that confidence and competence in female teachers to teach students with SEN was better than their male counterparts. Special educators based in the northern part of Nigeria, unlike their counterparts in the South, believed that attending neighbourhood schools had a positive impact on students with behavioural problems. The architectural design of classrooms and buildings to support inclusion was an additional finding (Ajuwon, 2012).

Determinants of successful inclusive education practice in Lagos State, Nigeria (Adeniyi et al., 2015) comprised a survey of 47 head teachers and 180 teachers from designated inclusive centres in Lagos. Findings indicated that materials, experience, mind-set and manpower showed a statistical significant relationship with inclusive education practice and that identified independent variables e.g., availability of materials contributed to the dependent variable e.g., teacher experience. Conclusions made focused on a positive mind-set from major stakeholders, availability of materials, and the recruitment of adequate qualified personnel when implementing inclusive education.

## **2 Methodology**

The study was conducted in accordance with the ethical guidelines by the British Educational Research Association (BERA, 2011) and the University of Northampton (UoN, 2010). A letter was sent to Lagos State Government (LSG) outlining the aim, relevance and significance of the research and a guarantee of participant anonymity. Approval was issued by LSG and the research study was conducted in five schools in Ikeja Local Government Education Authority (LGEA). Without LGS approval school principals would not have consented to data collection. Participation in the study was voluntary without any obligation to complete the research, and data collected were secured.

### **2.1 Setting and sample**

The study was situated within The State Universal Basic Education Board (SUBEB) in Lagos State, Nigeria. The SUBEB oversees 20 LGEAs. Responsibilities of LGEAs include the implementation of the Universal Basic Education in primary schools and school management. The random sample for the study consisted of 103 teachers



from five schools as directed by Ikeja LGEA department of planning, research and development.

## **2.2 Research instruments**

Data were generated using two instruments; 1) a rated-response questionnaire based on Bailey, (2004) and 2) an open-ended questionnaire. Quantitative and qualitative data collection enabled the researchers to adopt a mixed-method approach. The rated questionnaire was adapted for use with teachers. Sections focused on Teachers academic attainment, experience, and their experience of teaching students with special educational needs, age and gender. Teachers also responded to an open-ended questionnaire that comprised 14 questions. The validity and reliability of the questionnaire based on Bailey (2004), was verified using Cronbach's alpha and a score of 0.911 was found. Open ended questions in section B corresponded to the attitudes measured in section A for data triangulation.

## **2.3 Data gathering procedures**

Questionnaires were administered collectively to ensure a good response rate and participants' concerns were addressed in situ. Researcher stance, therefore, was unbiased and minimal involvement during the questionnaire administration was observed.

## **2.4 Data Analysis**

Responses to independent variables (i.e. teachers' academic attainment, teaching experience, teaching experience with children with SEN, exposure to individual with SEN and professional training) employed descriptive statistics such as frequencies, percentages, appropriate graphical charts together with their respective mean and standard deviations. Furthermore, inferential statistics (One Way ANOVA) was used to test for significant differences in the dependent variables (i.e. teachers' attitude towards inclusive education). Data analysis comprised the Statistical Package for Social Sciences-SPSS, and hypotheses tested at 0.05 level of significance for either rejection or acceptance. Qualitative responses in section B underwent thematic coding analysis (Braun and Clarke, 2006).



### 3 Results

The modified questionnaire was administered to 120 respondents. Table 1 illustrates the response rates obtained.

**Table 1:** *Response rate to Section A and B combined*

Questionnaire	No of respondents	% of respondents
Administered	120	100.0
Returned	103	85.8
Not returned	17	14.2

#### 3.1 What is the extent of teachers' attitudes towards Inclusive education within Lagos State?

The attitudes of teachers towards inclusive education are depicted in Table 2. The five components of the questionnaire were teachers' attitude towards exclusion, professional training, learning challenges in inclusive education, benefits and level of disability and implementation.

The evidence shown in the first subscale indicates that most of primary school teachers support the exclusion of students from mainstream education. The grand mean of 2.67 was higher than an average of 2.50 with regard to attitudes towards the exclusion of students.

The second subscale indicates that most teachers feel their professional training for children with SEN/D was adequate and a grand mean of 3.22 was higher than the averages of 2.50 and 3.00 as shown in Table 2. With the use of a 5-point Likert scale type, the expected average (mean) response per item is 3.00; but with the emergence of missing responses (or unidentified responses), the expected average (mean) response per item is 2.50 (either in approval or disapproval of the attributes being measured, i.e. attitude to inclusion).

The third subscale indicated that the majority of teachers were not in favour of inclusion because of the learning challenges of students with SEN. Here the grand mean response of 3.21 was higher when compared to the required mean of 2.50 and 3.00.

The fourth subscale related to the teachers' response and a mean of 3.54 > 2.50 (2.50 – being the expected mean response) suggested that inclusive education implementation was hindered by many challenges as highlighted by Bailey (2004) attitudes scale (e.g., disruption to other students learning).

With a mean of 3.59 > 2.50 (expected mean) the fifth subscale indicated that Teachers saw the benefit of inclusive education for both students with and without special educational needs, and the inclusion of students with mild and moderate disabilities.

Table 2: Teachers' Attitude towards Inclusive Education in Lagos State

	Items	Unidentified Responses	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Mean / Std. Error of the mean
Attitude towards Exclusion of Students								
8.		2 1.9%	13 12.6%	30 29.1%	12 11.7%	33 32.0%	13 12.6%	<b>2.97</b> <b>0.13</b>
15.		2 1.9%	36 35.0%	35 34.0%	12 11.7%	13 12.6%	5 4.9%	<b>2.13</b> <b>0.12</b>
20.		2 1.9%	16 15.5%	32 31.1%	5 4.9%	34 33.0%	14 13.6%	<b>2.92</b> <b>0.14</b>
		<b>Grand Mean</b>						<b>2.67</b>
		<b>Standard Error of the Mean</b>						<b>0.13</b>
On Teachers' Professional Training								
3.		2 1.9%	9 8.7%	8 7.8%	5 4.95	38 36.9%	41 39.8%	<b>3.85</b> <b>0.13</b>
10.		0 0.0%	18 17.5%	32 31.1%	22 21.4%	18 17.5%	13 12.6%	<b>2.77</b> <b>0.13</b>
18.		1 1.0%	16 15.5%	24 23.3%	17 16.5%	28 27.2%	17 16.5%	<b>3.03</b> <b>0.14</b>
		<b>Grand Mean</b>						<b>3.22</b>
		<b>Standard Error of the Mean</b>						<b>0.13</b>
Attitude to Learning Challenges in Inclusive Education								
2.		6 5.8%	10 9.7%	31 30.1%	18 17.5%	27 26.2%	11 10.7%	<b>2.81</b> <b>0.14</b>
7.		1 1.0%	15 14.6%	27 26.2%	18 17.5%	23 22.3%	19 18.4%	<b>3.01</b> <b>0.14</b>

	Items	Unidentified Responses	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Mean / Std. Error of the mean
11.		1 1.0%	5 4.95	19 18.4%	4 3.9%	47 45.6%	27 26.2%	3.67 0.12
13.		0 0.0%	10 9.7%	26 25.2%	4 3.9%	37 35.6%	26 25.2%	3.42 0.13
16.		1 1.0%	17 16.5%	25 24.3%	5 4.9%	35 34.0%	20 19.4%	3.13 0.14
		Grand Mean						3.21
		Standard Error of the Mean						0.13
	Attitude towards Implementation of Inclusion							
4.		3 2.9%	12 11.7%	24 23.3%	12 11.7%	33 32.0%	19 18.4%	3.14 0.14
6.		2 1.9%	2 1.9%	10 9.7%	9 8.7%	31 30.1%	49 47.6%	4.06 0.12
9.		0 0.0%	5 4.9%	17 16.5%	3 2.9%	52 50.5%	26 25.2%	3.75 0.11
12.		5 4.9%	9 8.7%	15 14.6%	15 14.65	45 43.7%	14 13.6%	3.24 0.13
17.		1 1.0%	2 1.9%	18 17.5%	9 8.7%	52 50.5%	21 20.4%	3.67 0.11
22.		2 1.9%	9 8.7%	5 4.9%	2 1.95	50 48.5%	35 34.0%	3.88 0.13
23.		3 2.9%	7 6.8%	31 30.1%	16 15.5%	30 29.1%	16 15.5%	3.08 0.13
24.		2 1.9%	2 1.9%	11 10.7%	5 4.9%	54 52.4%	29 28.2%	3.88 0.11
		Grand Mean						3.54
		Standard Error of the Mean						0.13

	Items	Unidentified Responses	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Mean / Std. Error of the mean
Attitude towards Inclusion Benefit & level of Disability								
1.		4 3.9%	13 12.6%	5 4.9%	14 13.6%	33 32.0%	34 33.0%	<b>3.56</b> <b>0.15</b>
5.		5 4.9%	3 2.9%	6 5.8%	14 13.6%	41 39.8%	34 33.0%	<b>3.80</b> <b>0.13</b>
14.		7 6.8%	6 5.8%	17 16.5%	11 10.7%	48 46.6%	14 13.6%	<b>3.25</b> <b>0.14</b>
19.		2 1.9%	7 6.8%	19 18.4%	16 15.5%	47 45.6%	12 11.7%	<b>3.31</b> <b>0.12</b>
21.		1 1.0%	1 1.0%	10 9.7%	13 12.6%	62 60.2%	16 15.5%	<b>3.77</b> <b>0.09</b>
		<b>Grand Mean</b>						<b>3.59</b>
		<b>Standard Error of the Mean</b>						<b>0.12</b>
		<b>Grand Mean</b>						<b>3.20</b>
		<b>Standard Error of the Mean</b>						<b>0.13</b>

Note: With the use of a 5-point Likert scale type, the expected average (mean) response per item is 3.00; but with the emergence of missing responses (or unidentified responses), the expected average (mean) response per item is 2.50 (either in approval or disapproval of the attributes being measured, i.e. attitude to inclusion).

In conclusion, according to the results obtained, teachers' attitudes tended to be unfavourable towards inclusive education. Teachers did not support total inclusion, however, attitudes about inclusion varied according to students' disability type. Students with mild and moderate disabilities were more likely to be included than students with severe disabilities and behavioural and emotional difficulties, and students with severe speech difficulties and learning disabilities teachers' attitudes towards inclusive education practices were found to be negative. Figures indicated factors such as heavy workload, disruption and poor classroom management, demands on teachers' time and disadvantages on regular students were prominent despite teachers' agreement that inclusive education benefits students with SEN and regular students. A finding to note was that training in pedagogy for children with SEN did not align with the preferences for inclusive education.

### **3.2 What do teachers in Lagos understand by Inclusive Education?**

Two major themes emerged from the responses: knowledge of IE and implementation of IE.

#### **Knowledge of IE**

The theme Knowledge of IE comprised teachers' understanding of IE, perceived beneficiaries, teacher responsibility regarding IE, and awareness of policy on IE in Lagos state.

Teachers expressed a wide range in views about their understanding of IE for example

"Inclusive education means that all students attend and are welcomed by their neighbourhood schools in age-appropriate, regular classes and are supported to learn, contribute and participate in all aspects of life in the school" (Teacher (T) 34). Similarly, T102 stated "All children benefit from inclusive education. It develops individual strength and gifts, friendship, and it works on individual goals while participating in the life of the classroom with other students of their age". Others simply stated IE was the placement of pupils with SEN into the regular school or classroom, "having the students with special needs in the same school with regular students but separate some blocks of classroom for the students with special needs under the umbrella of the same school and management" (T4). Most teachers lacked understanding of the meaning of inclusion, "It is education for special children" (T67).

Beneficiaries of IE extracted a good range of responses from T27, "The pupils with special needs are the ones who benefit from inclusive education" to T34 "Students benefit from inclusive education; teachers benefit from inclusive education". Some attributed the beneficiaries of IE to be the entire society. Most teachers' responses showed that they felt the responsibility for IE relied upon them having had previous training for IE. T4, for example, stated "It's more or less no role since the teacher is

not trained in such aspect of education”, which was reiterated by T45: “The regular teachers may not be able to handle or manage them because the disabled children need special teachers that have acquired the skill not the normal classroom teacher”. A key component of IE and inclusion found to affect classroom practice was teacher awareness of policy on inclusive education in Nigeria (2015). Only half the number of teachers within the sample said they were aware of the policy.

### **Implementation of Inclusive Education**

This theme comprised teachers’ attitudes towards the Lagos State Policy on Inclusive Education (LSPiE) (2015), constraints envisaged by teachers concerning policy implementation, professional training and frequency, academic qualifications and teaching experience, recommendations towards actualizing the policy.

Teachers were asked what they thought about LSPiE (2015) and the inclusion of children with SEN in regular schools. The majority of responses indicated that teachers perceived the policy was unfeasible. Reasons given included; the program was demanding, children with SEN would encounter stigmatization and discrimination, the availability of specific equipment, setbacks for regular students, teachers and the school at large, and lastly that the society was not ready to accept children with SEN. Responses ranged from T83 “I don’t think so, it is a good idea but the society is not ready yet to accept children with SEN, and there will be a lot of discrimination and stigmatization”, to T38 “Inclusion of children with special education needs will stop stigmatization and promote love among students learning at the same level”. T51 felt “It is a good development. Some parents with children with special needs have the privilege of sending their children to school”.

### **Constraints on the implementation of the policy.**

Many teachers implied that advocacy for IE would create additional problems for teachers such as increased lesson planning and teachers’ workload, challenges for class management, the use of appropriate teaching strategies, coping with students learning at different pace, time management, training, the need for curriculum restructuring and communication challenges. An example was provided by T56 “Yes, once they are included, the curriculum and time limit for teaching and learning would be affected because special time will be created for SEN for proper understanding and require special training activities”. T75 concurred “This is an additional burden on me as a teacher because I need to apply new techniques and methods in taking the class effectively”.

### **Have you received any training in supporting children with SEN?**

Very few teachers in this instance, 11 out of the total sample, indicated they had received professional training in catering for children with SEN and only a few

teachers claimed to have had access to annual training sessions. Teachers' professional development concerning SEN, therefore, was not sufficient to positively influence teachers' attitudes and/or enhance the implementation of inclusive education. In response to the question "Do you think with your academic qualification and years of teaching experience you will be able to teach students with SEN?", some teachers maintained they would be able to teach children with SEN while others were doubtful if the skills they had acquired via academic achievement and teaching experience would be enough to make an impact on children with SEN. Responses ranged from T52 "No, I cannot cope with disable child, reason: less teaching experience", to T30 "My academic qualification and years of experience will not be enough for me to teach students with SEN because I am not trained specially". Furthermore, teacher suggestions included frequent and up-to-date training of both regular and teachers SEN, provision of teaching and learning aids, restructuring of the environment and facilities, government financial responsibility, creation of suitable curriculum, creating awareness and educating the communities about inclusive education, which is reflected by T39 "provision of funds, training of teachers, provision of teaching materials and equipment, developing an inclusive culture in the society at large".

**Are teachers' attitudes to Inclusive education affected by their academic achievement?** Table 3 depicts the teachers' responses gathered from the closed-ended questionnaire.

*Table 3: Average (Mean) of Teachers' Attitude based on their Academic Qualification*

Teachers' Academic Qualification	Number of Teachers	Average Teachers' Attitude	Std. Error of the Mean
N.C. E	54	80.80	1.21
B.Sc.(Ed.)/B.Ed./B.A.(Ed.)	40	79.63	1.47
M.Ed.	1	68.00	0.00
O.N.D.	2	84.50	14.50
H.N.D/B.Sc./B.A/B.Tech.	5	79.80	5.57
Unidentified Respondents	1	65.00	0.00
Total	103	80.09	0.93

Observations from Table 3 indicate that teachers with O.N.D certificates expressed a more favourable attitude towards inclusion than other teacher categories. In the order of magnitude, they were followed by teachers with NCE certificates, HND/BSc/BA/B.Tech, B.Sc(Ed)/B.Ed./B.A(Ed), M.Ed. and unidentified respondents.

**Table 4:** *Analysis of Variance (ANOVA) in Teachers' Attitude based on their Academic Qualification*

Sources of Variance	Sum of Squares	d.f.	Mean Square	F-calculated	Sig.	Remark
Between Groups (i.e. Academic qualification)	448.779	5	89.756	1.008	0.417	<b>Not significant</b>
Within Groups (i.e. Academic qualification)	8637.434	97	89.046			
Total	9086.214	102				

$F\text{-Critical} = 2.30$ ;  $F\text{-cal} < F\text{-critical}$ ;  $p = 0.417 > 0.05$

Even though there was a difference in teachers' attitude towards inclusion from Table 3, the evidence from Table 4 shows that the difference was not statistically significant because the obtained p-value of 0.417 was greater than the statistical benchmark of 0.05. Furthermore, the F-calculated was less than the F-critical (obtained from the statistical Table). Hence, teachers' attitude towards inclusive education was not significantly affected by their academic qualification.

**Table 5:** *Average (Mean) Teachers' Attitude based on Teachers' Teaching Experience with students with Special Educational Needs*

Teachers' Teaching Experience	Number of Teachers	Average Influence	Std. Error of the Mean
1-5 years	18	77.50	1.19
6-10 years	6	80.50	2.15
11-15 years	3	74.67	2.40
16-20 years	3	72.33	4.48
Above 20 years	8	78.00	4.84
Unidentified Respondents	65	81.63	3.72
Total	103	80.09	0.93

Numerical values in Table 5 indicated that teachers who did not identify their years of teaching experience with SEN (no experience with SEN) showed a better attitude towards inclusion than other categories of teachers.



**Table 6: Analysis of Variance (ANOVA) in Teachers' Attitude based on their Teaching Experience with students with Special Educational Needs**

Sources of Variance	Sum of Squares	d.f.	Mean Square	F-calculated	Sig.	Remark
Between Groups (i.e. Teaching Experience)	579.742	5	115.948	1.322	0.261	<b>Not significant</b>
Within Groups (i.e. Teaching Experience)	8506.472	97	87.696			
Total	9086.214	102				

$F\text{-Critical} = 2.30$ ;  $F\text{-cal} < F\text{-critical}$ ;  $p = 0.261 > 0.05$

Although there were variations in teachers' attitude towards inclusion in Table 5, Table 6 presented the difference to be not statistically significant since the obtained p-value of 0.261 was more than the statistical standard of 0.05. Also, the F-calculated was lower than the F-critical from the statistical Table. Thus, teachers' attitudes towards inclusive education was not significantly affected by their years of teaching experience with students with SEN.

**Table 7: Average (Mean) Teachers' Attitude based on Teachers' Teaching Experience**

Teachers' Teaching Experience	Number of Teachers	Average Influence	Std. Error of the Mean
5 years below	18	85.56	2.13
6–10 years	8	77.88	2.40
11–15 years	16	81.75	2.31
16–20 years	13	78.00	3.50
Above 20 years	44	79.02	1.27
Unidentified Respondents	4	71.75	3.40
Total	103	80.09	0.93

Information from Table 7 shows that teachers with below five years of teaching experience indicated a more positive attitude towards inclusion.

**Table 8: Analysis of Variance (ANOVA) in Teachers' Attitude based on their Teaching Experience**

Sources of Variance	Sum of Squares	d.f.	Mean Square	F-calculated	Sig.	Remark
Between Groups (i.e. Teaching Experience)	1006.167	5	201.233	2.416	0.041	<b>Significant</b>
Within Groups (i.e. Teaching Experience)	8080.047	97	83.299			
Total	9086.214	102				

$F\text{-Critical} = 2.30$ ;  $F\text{-cal} < F\text{-critical}$ ;  $p = 0.041 < 0.05$

Table 8 displays different evidence than Table 7 and is statistically significant due to the obtained p-value of 0.041, which was less than the statistical measure of 0.05. While, the F-calculated was greater than the F-critical. Therefore, teachers' attitude towards inclusive education was significantly affected by their years of teaching experience.

**Table 9:** *Average (Mean) of Teachers' Attitude based on Teachers' Professional Training in Special Educational Needs*

Teachers' Professional Training in SENs	Number of Teachers	Average Influence	Std. Error of the Mean
Yes	11	73.91	1.95
No	89	80.79	1.01
Unidentified Respondents	3	82.00	5.51
Total	103	80.09	0.93

Table 9 shows that teachers who have not received professional training in SEN are more in favour of inclusive education than those who claimed to have received professional training.

**Table 10:** *Analysis of Variance (ANOVA) in Teachers' Attitude based on their Professional Training in Special Educational Needs*

Sources of Variance	Sum of Squares	d.f.	Mean Square	F-calculated	Sig.	Remark
Between Groups (i.e. Professional Training in SEN)	474.361	2	237.180	2.754	0.068	<b>Not significant</b>
Within Groups (i.e. Professional Training in SEN)	8611.853	100	86.119			
Total	9086.214	102				

$F\text{-Critical} = 3.09$ ;  $F\text{-cal} < F\text{-critical}$ ;  $p = 0.068 > 0.05$

The difference in teachers' attitude towards inclusion observed in Table 9 was not statistically significant as seen in Table 10, because the obtained p-value of 0.068 was greater than the statistical benchmark of 0.05. Likewise, the F-calculated was less than the F-critical from the statistical Table. Consequently, teachers' attitude towards inclusive education was not significantly affected by their professional training in SEN.

**Table 11:** *Average (Mean) of Teachers' Attitude based on their Exposure to people with Special Educational needs*

Teachers' Exposure to people with SENs	Number of Teachers	Average Influence	Std. Error of the Mean
Yes	27	77.30	1.65
No	64	81.80	1.20
Unidentified Respondents	12	77.25	2.61
Total	103	80.09	0.93

From Table 11, teachers who were not exposed to people with SEN displayed a better attitude towards inclusion than those who claimed to have been exposed.

**Table 12:** *Analysis of Variance (ANOVA) in Teachers' Attitude based on their Exposure to people with Special Educational Needs*

Sources of Variance	Sum of Squares	d.f.	Mean Square	F-calculated	Sig.	Remark
Between Groups (i.e. Exposure to people with SENs)	493.975	2	246.987	2.875	0.061	<b>Not significant</b>
Within Groups (i.e. Exposure to people with SENs)	8592.239	100	85.922			
Total	9086.214	102				

$F\text{-Critical} = 3.09$ ;  $F\text{-cal} < F\text{-critical}$ ;  $p = 0.061 > 0.05$

Table 12 reveals that the difference in Table 11 was not statistically significant, as a result the obtained p-value of 0.061 was greater than the statistical benchmark of 0.05, and the F-calculated was less than the F-critical. Hence, teachers' attitude towards inclusive education was not significantly affected by their exposure to people with SEN.

## 4 Discussion

The findings reveal that Nigerian primary school teachers in Lagos state have negative attitudes towards the inclusion of learners with SEN, mainly because of inadequate knowledge and training for inclusive education. This finding corresponds with the findings of Agbenyega (2007), Fakolade et al. (2009), Chhabra et al. (2010) and Mukhopadhyay (2014). More concerning is that primary teachers do not support the inclusion of all pupils into regular schools; that their attitudes are influenced by a student's disability and perceived severity. There is, however, a preference amongst regular primary teachers for children with physical disabilities in addition to those with mild to moderate learning disabilities. Children with severe speech difficulties,

behavioural difficulties and severe learning disabilities however are less favourably perceived, which is supported by the findings of Boer et al., (2011).

Additional findings reveal that teachers' understanding about inclusion is limited. In defining inclusive education, some teachers have a solid explanation, while the majority did not. What is noticeable is that teachers' understanding of inclusive education takes no cognizance of the need for differentiation of curriculum, pedagogy, learning environment and society to facilitate the learning of all pupils. Similar findings to Al-Natour et al., (2016) are found where teachers' opinions about the beneficiaries of inclusive education are students with SEN, moreover these benefits are only social and psychological in nature.

The exploration of the inclusive teacher's role for most of the teachers within the study is their ability to sympathize and be patient with students with SEN and not teach these children. This finding is supported by Gaad and Khan (2007), and similarly teachers in the study felt their knowledge on how to adapt instructions for students with SEN was inadequate. Other teachers believe that teaching children with SEN is the sole responsibility of the special education teachers, which was a finding of Al-Natour et al., (2016). A recommendation then is for accurate and sufficient information and knowledge to promote a better understanding of inclusion, in addition to increasing teacher awareness of the new policy on inclusive education. Findings indicate a mixed reaction amongst teachers towards the Nigerian policy for inclusive education, which ranges from the idea of IE as difficult, to the noble, to the requirement for a solid foundation before its implementation. These findings reflect those of Hunter-Johnson and Newton (2014).

Teachers' negative attitudes towards IE implementation centre on constraints such as excessive workload, difficulty in covering the scheme of work, class and time management, choosing appropriate pedagogy and coping with a variety of students' learning pace. They point out prerequisites for the success of inclusive education as being; environmental and facilities restructuring, adequate training of mainstream and SEN teachers, creating a suitable curriculum, provision of teaching and learning materials, in addition to Societal and Parental enlightenment. These findings are reflected globally in the works of Avramidis and Norwich, (2002), Gilmore, Campbell and Cuskelly (2003), Gaad and Khan (2009), Peters and Forlin (2011), De Boer, Pijl and Minnaert, 2011), Anati (2012), David and Kuyini (2010), and Ahmed et al., (2012).

The findings of this study's report on years of teaching experience and TAtt towards inclusion, contradict the results of pre-existing studies (e.g., Ross-Hill, 2009; Muhanna, 2010; Batsiou et al., 2008; Gyimah et al., 2009; Kalyva et al., 2007; Ahmed et al., 2012). Moreover, academic qualifications, years of teaching experience with students with SEN, professional training or exposure to people with SEN show no significant effect. Overall, teachers expressed their years of teaching experience

have not equipped them to teach children with SEN, thus the need for training at initial teacher education level. These findings reflect those of Kuyini and Mangope (2011) and Galovic et al. (2014). Findings also indicate that years of teaching students with SEN are insignificant in determining teachers' attitude towards inclusion, which aligns with Rajovic and Jovanovic (2010) and Galovic et al., (2014). The emphasis is when teachers have pleasant experiences of teaching children with SEN alongside genuine support, knowledge and the acquisition of pedagogical skills for inclusion. In this research, professional training in SEN did not influence teachers' attitude towards inclusive education. This finding is consistent with Kuyini and Mangope (2011) and Ahmed et al., (2012). The substantial number of teachers without professional training on SEN in the current research could have influenced the teachers' feelings about the lack of professional training and its effect on teacher attitude.

## 5 Conclusion

The Lagos State government has taken a bold step towards the inclusion of students with SEN into the regular classroom by the enactment of the 2015 State Policy on Inclusive Education. As a result of conducting the research the following recommendations have emerged;

- A positive change in teachers' attitude is requisite for the success of inclusion.
- Primary teachers need to be trained with relevant knowledge and skills to educate learners with SEN.
- The government must ensure that the curriculum of all Colleges and faculties of Education teach the fundamental aspects of special educational needs and inclusion that will empower future teachers to creatively respond to the demands of inclusion.
- Incorporation of teaching practice that will expose pre-service teachers to the experience of teaching students with SEN in teacher training programs.
- Special and general education courses at higher institutions should stress and encourage collaboration between general teachers and special educators, in order to enhance their teaching skills and provide them with appropriate strategies to work together in an inclusive classroom.
- Every primary school in Lagos State should have an inclusive unit. This would increase access to education and help the government obtain information on school age children with SEN.
- Provision of adequate resources and support for SEN teachers and exposure of regular teachers to learners with SEN to help develop a positive attitude from the teachers towards inclusion
- The physical structure of the learning environment should be inclusion friendly.

- Government and non-governmental organizations should partner to provide the needed human, financial and training resources needed to encourage learners and teachers in the system.
- Responsibilities of school staff toward inclusion should be made explicit.
- Proper sensitization, collaboration and a positive change in attitude of stakeholders such as teachers, students, school administrators, families and community towards inclusive education.

The current study was highly useful in giving a snapshot of some of the primary school teachers in Lagos State. It will be essential to change Teachers' negative perceptions towards inclusive education and introduce more robust and expansive teachers' education programmes that support teachers' development for inclusive education if the policy is to succeed. Beyond providing more insight into the situation in Lagos state, the implications of the study show the need for education for all to ensure that Inclusive education development is successful for all. Inclusion agendas therefore, should be tailored to localities so that teachers are enabled in developing culturally appropriate strategies to overcome barriers.

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# The challenges and opportunities of foreign-born professors and their students

(science paper)

Gabriela Smečková

**Abstract:** *The focus of this article is the challenges and opportunities that foreign-born professors at U.S. universities face along with their students who also encounter challenges and opportunities. A survey that was done by the author of this article is included as well. The article concludes with recommendations for foreign-born professors.*

**Keywords:** *foreign-born professors at U.S. universities, students of foreign-born professors, challenges, opportunities*

## 1 Introduction

According to the 2020 Open Doors report, there were 123, 508 international scholars in the USA during the 2019–2020 academic year. Compared to the prior academic year (2018–2019) there is a 9,6% decrease in the number of international scholars. There are probably a couple of reasons that could explain this reality (e.g., drastic changes in foreign policies under the Trump administration) but it is not the intent of this article to cover that.

*“Foreign-born faculty – all faculty members who were not born in the United States and earned their undergraduate or graduate degree or both in their home country – are an invaluable asset to U.S. higher education institutions”* (Goodroad, 2002, p. 20). There are many benefits that foreign-born professors bring to U.S. universities. According to O’Hara (2009, p. 41), *“U.S. institutions, research programs, scholars and students benefit significantly from the perspectives, research methods and skills visiting scholars bring”*. According to Kim, Wolf-Wendel, Twombly (2011) international faculties tend to be more productive than their local counterparts. Kim, Twombly, Wendel (2012) talk about the importance of defining what constitutes international faculty. Many studies define them by place of birth (foreign – born) or by citizenship

(non-U.S. citizens). These definitions can bring some issues such as underestimating or overestimating such faculty members which affect studies' results. For instance, studies that take citizenship as a factor do not include faculty members that were born abroad and completed their studies abroad, but who eventually became U.S. citizens. The author of this article conducted a survey and used the term foreign-born professors. The survey will take place later in this article. The term foreign-born professors, is used by the author of this article, in case of citation of other sources, the original terms are kept.

## 2 Literature review

Many studies have been done on the topic of international faculty and their students; some of which focus on the challenges that international faculty face (e.g., Hutchinson et al., 2018; Omiteru et al, 2018) while others focus on students' perceptions of international faculty solely (e.g., Clay, 2020). *"Few studies have examined issues from both the students' and instructors' perspectives"* (e.g. Alberts, 2008). This article includes both the challenges and opportunities of foreign-born professors and their students.

It is clear that foreign-born professors face challenges when teaching at U.S. universities. As Stigler and Hiebert (1999) pointed out, teaching is a cultural activity. Our cultural background influences our teaching style, teaching strategies, etc. Hutchinson, et al., (2018) conducted a survey of expected versus actual pedagogical challenges experienced by international faculty. The purpose of the study was to compare what international faculty members expected before arriving at their respective institutions and what challenges they actually ended up experiencing during their first three years of working at U.S. institutions. The most frequent issues that international faculty expected to face were ease of scholar-student communication, proficiency of spoken English, and cultural differences. *"These three issues were also the most frequently reported pedagogical issues that they experienced, along with a sense of being unprepared for different institutional strategies that they did not anticipate"* (Hutchinson, et al., 2018, p. 56). Support for different instructional methods was the most frequently reported support. Specifically, international professors needed support with teaching (lectures vs. seminars), guidance in using peer observation in teaching, and a broad overview of academic expectations in the U.S. universities (grading system, assessments, etc.). Cultural background influences how people see the world, how they learn, how they are evaluated, etc. It is clear that professors coming from traditionalist societies (e.g., Europe, China) will more likely use lectures and therefore need assistance with adaptation to western pedagogical teaching styles (in *ibid*).

Alberts (2008) looked at both the challenges of foreign-born instructors and the students' challenges. Professors' foreign accents were the biggest issues for students

in this study. Over 70% of students reported that the accent of their foreign-born professors made understanding harder at the beginning, but to their surprise they ended up adjusting and understanding their professors. It is not actually the accent by itself that has a negative impact on the learning experience, but the students' attitudes towards the accent. On the other hand, some students took the professor's foreign accent as a learning experience. Some students reported that professors' vocabulary was not complex enough to explain certain topics clearly. Also, how the foreign-born instructor handled the language issues influenced the students' attitudes toward the accent. Many students appreciated having PowerPoint presentations along with the lecture so they could have a visual aid to offset the presence of the accent. The foreign-born instructors reported language as an issue as well. However, they did not mention accent as excessively as the students did, instead they mentioned the ability/decreased ability to express themselves in a way they wanted. Also, they reported that this issue was only temporary. Furthermore over 10% of students reported that foreign-born professors have different teaching styles and interact with them differently. For some students this was an advantage and for others a disadvantage. The reason for using a different teaching style is probably influenced by receiving a degree in a different country than the U.S. The foreign-born faculty mentioned different teaching styles much more frequently. For instance, they were not accustomed to multiple-choice questions, and they would rather teach their students critical thinking. Many foreign-born professors were frustrated about students' behaviors (being dressed appropriately, feeling entitled to receive a good grade, etc.). It is clear that foreign-born instructors have to adjust to teaching styles in the U.S. because they teach in the U.S. Some students found foreignness as a disadvantage but many found it as an advantage. Many students reported that it was important to get different perspectives on certain topics, and they enjoyed the unique viewpoints that foreign-born professors brought to the classroom discussion. The majority of professors reported that they felt uncomfortable about criticizing the United States. Some of them stayed away from potentially problematic topics or presented it in a neutral way (in *ibid*).

Collins (2008) conducted surveys that focused on challenges that foreign-born faculty and their students face. The faculty members reported three major challenges: obtaining the 'Green Card', addressing cultural differences, and coping with loneliness. Getting the legal document(s) including employment rights is fundamental to getting hired. Every case is different, but obtaining a permanent resident card can be very difficult and expensive. Faculty reported stress related to cultural differences. They came to the U.S. with different worldviews, religious beliefs, familial relationships, expectations and social and cultural conventions. Those cultural differences in educational practices can lead to misunderstanding between faculty members and students. More than half of faculty members who completed this survey, did not cope well with loneliness. They reported feelings of isolation, loss of relating

to friends, family and past lifestyle. Students who completed this survey in general appreciated having a foreign-born professor and listed more positive aspects than negative. Higher education is definitely benefiting from having foreign-born faculty members, but these faculty members are missing support from their departmental chairs, international offices and administration. Mentoring and facilitating networking for foreign-born faculty members could be a solution.

Alsulami and Sherwood (2020) conducted a multi-country scoping review about the experience of culturally diverse faculty in academic environments. Based on this review faculty members did not feel they got enough support in ways that promote their professional development. *“Intercultural communication challenges and tensions existed among faculty members from different cultural backgrounds in current work environments. These challenges have negatively impacted job satisfaction levels, which in turn, have led some faculty members to leave their school”* (Alsulami and Sherwood, 2020, p. 9). Most of the studies from this review concluded that faculty diversity can benefit all faculty members, administrators, and students if implementing a number of evidence-based strategies to assure all are treated equally, respectfully, and hospitably.

Omiteru, Martinez, Tsemunhu and Asola (2018) conducted a study about the experiences of international faculty in the southern part of the U.S. where authors of this article work. This study focused on *“international faculty’s perceptions and examined both their positive and negative experiences to help explain why the rural Southeast might be a uniquely challenging environment for them”* (in *ibid*, p. 2). There were four themes: perceptions about administrators, perceptions about their communities, perceptions about their colleagues and co-workers, and finally perceptions about students they teach. The survey was available either face-to-face or online. *“All the international faculty interviewed had positive and negative experiences, not only with colleagues, staff, and students, but also with top administrators. From the online survey, almost 48% of international faculty described their experiences as positive, and almost 16% of international faculty reported their experiences as negative, and almost 37% claimed they had both positive and negative experiences since working in the South”* (in *ibid*, p. 7). Participants dealt with prejudice from colleagues and administrators. Some participants mentioned that students were too laid-back and did not prioritize school, course workload. Most faculty perceived students as pleasant and respectful. The international faculty felt pressure in some aspects of their work. They had to adapt to their new environment and work twice as hard as their colleagues. International faculty bring their unique diversity, but they must adapt, learn, and adjust to the culture of their new surroundings (in *ibid*). We have to take into account that American students pay for their education, either with their parents’ money, scholarship or bank loan. It is clear that they expect much more from their professors, more than students in other countries (Gahungu, 2011).

Very interesting contribution to this topic was brought by Williams and Case (2015). Their article describes the use of videotaping during teaching classes by international teaching assistants. First, initial interviews were conducted where the international teaching assistants were asked about their learning experiences to teach in the U.S. After that each participant was recorded when teaching his/her class. *"The second interview focuses on clarifying information from the first interview and events from the observations. As the participants watched the video, the interviewer used 'stopping points' to pause the tape and elicit further descriptions or clarifications about what was happening in the video"* (Williams, Case, 2015, p. 438). Each question was designed either to get more information from the instructor or to help the instructor notice different elements of his/her teaching. For many instructors the observations were a great source of gaining self-awareness of how they appeared in the classroom. During the observations the participants were able to notice an event that could have stayed unnoticed during their teaching. *"Reviewing an incident allowed the international teaching assistant to move from recount to analysis through focusing more on interpreting student behavior because they already knew their own mindset as the teacher"* (Williams, Case, 2015, p. 439). Authors of this study recommend using videotapes as a basis for teaching training for international teaching instructors. The international teaching instructor should watch and discuss his/her tape with a mentor so he/she is trained to recognize noticing.

The relationship between students and their foreign-born professors could be another issue that both parties can face. Wang (2000) conducted a study about American students' rapport with their foreign-born non-native-speaker college instructors. She interviewed forty-nine university students who had experience with foreign-born professors. All students believed that verbal and nonverbal behaviors in and outside of the classroom were important because they both contributed to the whole picture of the faculty member. It is important that foreign-born faculty members pay attention to their attitudes and behaviors in and outside of the classroom if they want to maintain good rapport with their students. *"In order to be competent and effective, it is crucial for these faculty members to acquire a deep understanding of the American culture with which they are then able to compare and contrast their own cultures with that of their students"* (Wang, 2000, p. 42). Intercultural sharing will increase mutual understanding between the instructor and his/her students and students will gain something compensatory from their foreign-born instructors. Goodroad (2020) concluded her study about foreign-born faculty at two-year U.S. institutions with similar results. *"Although the majority of participants in the study stated they experienced socialization barriers, all participants were bridging cultural gaps through creating awareness about the differences in value systems and cultural norms between students' and instructors' home cultures"* (Goodroad, 2020, p. 49).

The author of this article has been teaching at U.S. universities since August 2018, first psychology and later communication disorders. Before that, she was an assistant professor at Palacky University in Olomouc, Czech Republic where she taught communication disorders. Also, she used to work as a certified speech-language pathologist and a psychologist at a private clinic in the Czech Republic. Having experiences of teaching at European and American universities gives her a unique opportunity to compare both educational systems. She had to adjust in many ways because the U.S. style of teaching is very different compared to European style of teaching.

This article mentions some of the challenges and opportunities that she has faced when teaching at U.S. opportunities:

- **Language issues:** accent could be an issue when teaching as a foreign-born faculty. She does not feel that her accent is a problem for her students, but she is aware that maybe at the beginning of the semester before her students get used to it, they may have a difficult time understanding every word. The author suggests that the reason her accent may not be a big issue in her classrooms is because her students' major is communication disorders and they have to be trained for working with clients from different cultural and linguistic backgrounds. She recognizes that at the beginning of her teaching career in the USA, she struggled with vocabulary sufficiency and fluency of spoken English, but it was temporary.
- **Teaching style:** the author of this article had to definitely change her teaching style. In the USA, students have to be engaged. They like discussion and engaging in different activities. Solely lecturing as the sage on the stage is not efficient. Also, the U.S. grading style is different. During the entire semester, students are expected to complete a series of graded assignments that help the students learn and have more chances to positively affect the final grade. Also, teacher and course expectations have to be made clear from the beginning of the semester – grading system, grading rubrics for each assignment. A syllabus is extremely important! Multiple-choice tests are very common at U.S. universities. This was something new that the author of this article had to learn and got used to quickly. Creating tests with precise wording and question clarity is extremely important and it could be problematic for a foreign-born faculty professor. At the beginning of her career, this part was challenging for her.
- **Communication and interaction with students:** the professor – student relationships are very different in the USA. It is more open and more personal. Professors have to be approachable and willing to help their students. Even when they both meet outside of the classroom, openness and kindness is expected. It was not difficult for the author of this article to adjust to this style of interacting with students. The author does admit that some students are sometimes too friendly and do not seem to be aware of the teacher-student boundaries. Also, sometimes



students can be too laid-back and dress inappropriately. In Europe, it is expected that when the professor or a student enters a classroom, they greet each other. This is not a norm in the USA, and it was problematic for the author of this article to accept the lack of an acknowledgement of others when entering the classroom.

- **Communication and interactions with colleagues, administrators:** culture plays a big role when communicating with others. In this case the relationships are more personal, but still respectful. The choice of words plays an important role when communicating with administrators (chair, dean, provost, president). At the beginning of the authors' career, she felt anxious when communicating with administrators, but just like with other challenges, with time, experience, and practice, she was able to overcome it.
- **Requirements of the U.S. institutions:** the requirements are different compared to Czech universities, and it really depends on the U.S. institution, too. At Valdosta State University, teaching is expected to be excellent, the students' evaluations count as well. Research, publishing and service are other requirements that have to be met. Each college has some differences as well.
- **Foreignness:** the author of this article does not feel that coming from a different country is an issue for her and her students. She likes to share her culture, customs, language, and teaching experience with her students which they find interesting and appreciate.

Clay (2020) conducted a study solely about college students' perceptions of instructors whose language is not English. Specifically, the intent of this study was to "*discover any positive or negative beliefs that students may have toward instructors who speak with foreign accents and how those beliefs can influence the students' behaviors in the classroom*" (Clay, 2020, p. 24). Most participants had issues with comprehending the lectures of these instructors, but they did not believe that their instructors are less intelligent and effective than their native-born counterparts. The comprehension issues did not cause most students to drop the class, pay less attention or even skip the class. The author of this article had the same experience. Her students did not drop the class because she was a foreign-born professor. In one of her students' evaluations, one student mentioned that the professor's accent was actually a plus.

The studies above establish that foreign-born professors and their students face some challenges and opportunities. The study that was done by the author of this article focused only on students' challenges and opportunities when having foreign-born professors. The research question was "What challenges and opportunities students of communication disorders face when having foreign-born professors during their undergraduate program?"

### 3 Foreign-born Professors at Valdosta State University

As mentioned above, the author of this article used to teach communication disorders at Palacky University in Olomouc, and she worked as a certified speech-language pathologist as well. Since August 2018, she has been teaching communication disorders at Valdosta State University. As a foreign-born professor she was always interested in this topic (foreign-born professors and their students). In April and May 2021, she conducted a survey. The survey was created for the authors' students – seniors who were majoring in communication disorders at Valdosta State University (VSU). VSU is located in southern Georgia, USA. In the last academic year, approximately 12,500 students studied at VSU.

### 4 Research method

Participants could choose an online or a paper version of the survey. All students ( $N = 45$ ) received an email at the beginning of April 2021 informing them about this survey, the format, etc. The survey was approved by the Institutional Review Board (IRB) for the protection of human research participants. This survey contained 26 questions. In total 45 students were asked to complete the survey and 24 students completed it ( $N = 45, n1 = 24$ ). This represents a 53% response rate.

#### 4.1 Results of the survey

**Question 1:** What is your age?

- **20 years** ( $N = 24, n1 = 1$ )
- **21 years** ( $N = 24, n2 = 7$ )
- **22 years** ( $N = 24, n3 = 14$ )
- **25 years** ( $N = 24, n4 = 1$ )
- **30 years** ( $N = 24, n5 = 1$ )

The majority of students' age was 22.

**Question 2:** What is your gender?

- **Male:**  $N = 24, n1 = 1$
- **Female:**  $N = 24, n2 = 23$

As was expected, females dominated (twenty-three students were females).

**Question 3:** Were you born in the USA?

- **Yes:**  $N = 24, n1 = 24$

All participants were born in the USA. This question was asked because VSU has a good number of students who were born outside of the USA, and this reality could



definitely influence their experience with different cultures (open minded versus close minded, etc.).

**Question 4:** If you were not born in the USA, where were you born?  
All students were born in the USA.

**Question 5:** Were your parents born in the USA?

- **Yes:**  $N = 24$ ,  $n1 = 23$
- **No:**  $N = 24$ ,  $n2 = 1$

In one case, student's parents were not born in the USA. We think that having parents who were born overseas can affect the exposure to different cultures and openness to different cultures.

**Question 6:** If your parents were not born in the USA, where were they born?

- **Mexico:**  $N = 24$ ,  $n1 = 1$

Parents of one participant were born in Mexico. This result was not surprising because if VSU students' parents were not born in the USA, usually they were born in South or Central America.

**Question 7:** Do your parents speak other language(s) than English?

- **Yes:**  $N = 24$ ,  $n1 = 2$
- **No:**  $N = 24$ ,  $n2 = 22$

Two participants mentioned that their parents speak other language(s) than English. We believe that exposure to different languages is beneficial and it can be accompanied with exposure to different cultures as well.

**Question 8:** If your parents speak another language(s) than English, what language(s) do they speak?

- **Spanish:**  $N = 24$ ,  $n1 = 1$
- **No answer:**  $N = 24$ ,  $n2 = 1$

One student reported Spanish, in one case there was no answer.

**Question 9:** Do you speak other language(s) than English?

- **Yes:**  $N = 24$ ,  $n1 = 1$
- **No:**  $N = 24$ ,  $n2 = 23$

The majority of participants do not speak any other language than English, only one student speaks another language other than English.

**Question 10:** If you speak other language(s) than English, what is/are the languages you speak?

- **Spanish:**  $N = 24, n1 = 1$

One student speaks Spanish in addition to English. Being a bilingual speech-language pathologist is very beneficial. In this case, one student speaks Spanish and in some US states it means a big advantage, including Georgia.

**Question 11:** Have you had a foreign professor at VSU (not in your major)?

- **Yes:**  $N = 24, n1 = 21$
- **No:**  $N = 24, n2 = 3$

The majority of participants (twenty-one) reported that they had a foreign professor at VSU (outside of their major). The results are not very surprising because VSU is quite diverse in terms of foreign faculty.

**Question 12:** What was his/her gender?

- **Female:**  $N = 21, n1 = 7$
- **Male:**  $N = 21, n2 = 12$
- **Both:**  $N = 21, n3 = 2$

The majority of students' foreign professors were males (twelve), only seven students reported that their professors were females (seven) and two students reported that they had both, males and females.

**Question 13:** What was his/her age? Approximately.

- **30–40 years old:**  $N = 21, n1 = 2$
- **41–50 years old:**  $N = 21, n2 = 8$
- **51–60 years old:**  $N = 21, n3 = 9$
- **61 years old and older:**  $N = 21, n4 = 4$

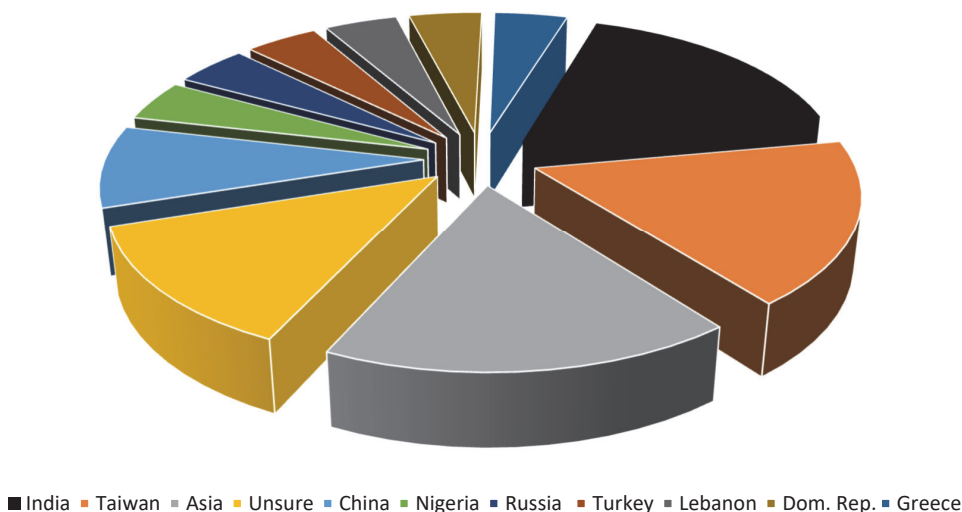
In total, nine students reported that their foreign professors' age was between 51 and 61 years.

**Question 14:** What was his/her country of origin?

- **India:**  $N = 21, n1 = 4$
- **Taiwan:**  $N = 21, n2 = 4$
- **Asia:**  $N = 21, n3 = 4$
- **Unsure:**  $N = 21, n4 = 3$
- **China:**  $N = 21, n5 = 2$
- **Nigeria:**  $N = 21, n6 = 1$
- **Russia:**  $N = 21, n7 = 1$
- **Turkey:**  $N = 21, n8 = 1$
- **Lebanon:**  $N = 21, n9 = 1$

- **Dominican Republic:**  $N = 21, n_{10} = 1$
- **Greece:**  $N = 21, n_{11} = 1$

The majority foreign professor's countries of origin were India, Taiwan, and Asia. We have decided to keep all the categories that students mentioned even though some countries (e. g. China and Taiwan) are Asian countries.



**Chart 1:** *Countries of origin*

**Question 15:** In your opinion what was the fluency level of spoken English of this professor?

Non fluent in English 0 1 2 3 4 5 6 7 8 9 10 Excellent fluency in English

- **Level 1:**  $N = 21, n_1 = 1$
- **Level 3:**  $N = 21, n_2 = 3$
- **Level 4:**  $N = 21, n_3 = 2$
- **Level 5:**  $N = 21, n_4 = 2$
- **Level 6:**  $N = 21, n_5 = 3$
- **Level 7:**  $N = 21, n_6 = 4$
- **Level 8:**  $N = 21, n_7 = 3$
- **Level 9:**  $N = 21, n_8 = 1$
- **Level 10:**  $N = 21, n_9 = 4$

Four students reported that the fluency level of spoken English of their foreign professors was 7 out of 10 and another four students reported level 10 out of 10. It is a very high level of fluency of spoken English which is expected from a college professor.

**Question 16:** Was fluency a positive or negative factor of your learning experience with this professor?

- **Positive:**  $N = 21, n1 = 12$

- **Negative:**  $N = 21, n2 = 9$

Twelve students out of twenty-one reported that their experience with foreign professors was positive.

**Question 17:** List positive factors related to the international background of this faculty member if any:

- *Very kind & cooperative.*
- *Willing to help with anything.*
- *Empathetic.*
- *Made sure class understood directions.*
- *Wrote directions.*
- *Always asked for class feedback.*
- *Perspective on education from other cultures, perspectives on parenting from a different culture.*
- *Bringing different perspective.*
- *Knowledge about other cultures.*
- *I learned about a different culture.*
- *Sharing his/her experience coming from a different culture Did projects that related to her culture.*
- *Open to new ideas, accepting non-discriminatory.*

There are some participants' comments about positive factors related to their foreign professors. Many students reported that their professors not only brought different perspectives to the class content, but they were also helpful, open minded, empathetic, etc.

**Question 18:** List negative factors related to the international background of this faculty member if any:

- *Sometimes trying to understand certain terms was difficult.*
- *Sometimes the accent was hard.*
- *Communication barriers.*
- *It was difficult to understand certain words.*
- *He spoke very fast so if you were not paying attention you could miss what he said.*
- *Zero tolerance for being unprepared (unless death situations).*
- *Hard to hear and understand as a hard of hearing individual.*
- *Very quick speech, difficulty understanding social cues.*
- *Difficult to understand, sometimes problems with comprehension, extremely low speech volume.*

- *Difficult to understand.*
- *Difficult to understand sometimes. Sometimes did not consider other backgrounds besides hers.*
- *Hard to understand, instructions were not clear.*
- *She could not spell well – causing some confusion and misinformation. She did not speak well and did not understand well English. She looked down on American parenting.*
- *Broken English affected the assignments. The answers would be wrong due to misunderstanding. It was hard to communicate with her.*
- *We could not understand and we did very poorly in this class because of this.*
- *Hard to understand at times. Took longer to explain topics.*
- *Heavy accent.*

Many comments were related to pronunciation, accent and vocabulary usage. Students had issues with understanding some words, terms due to these issues.

**Question 19:** Have you had a foreign professor at VSU in your major (Communication Disorders)?

- **Yes:**  $N = 24$ ,  $n1 = 23$
- **No:**  $N = 24$ ,  $n2 = 1$

Twenty-three students reported that they had foreign professors when taking their classes in the major of communication disorders.

**Question 20:** In your opinion what was the fluency level of spoken English of this professor?

Non fluent in English 0 1 2 3 4 5 6 7 8 9 10 Excellent fluency in English

- **Level 6:**  $N = 23$ ,  $n1 = 1$
- **Level 7:**  $N = 23$ ,  $n2 = 2$
- **Level 8:**  $N = 23$ ,  $n3 = 8$
- **Level 9:**  $N = 23$ ,  $n4 = 6$
- **Level 10:**  $N = 23$ ,  $n5 = 6$

The majority of participants (eight) reported that the professor's fluency level of spoken English was 8 out of 10. Level eight is a really high level and again it is expected from a college professor to be fluent in English when teaching in the USA.

**Question 21:** Was fluency a positive or a negative factor of your learning experience with this professor?

- **Positive:**  $N=23$ ,  $n1= 21$
- **Negative:**  $N=23$ ,  $n2 = 2$

Twenty-one students reported that fluency was a positive factor of their learning experience with this foreign professor. We believe students are aware of the reality

that they will be working with clients who speak other languages than English and having a professor with an accent could be actually helpful for them.

**Question 22:** List positive factors related to the international background of this faculty member if any:

Shared their experiences about their background and were open to discuss their lives.

- *Made some words easier to pronounce/remember.*
- *The professor is also interested in my culture and I feel easily relatable to her.*
- *Not completely influenced by mainstream American/Southern American culture. Ability to see from diverse viewpoints.*
- *She shared many interesting facts about her culture and how many things in her culture relate to our culture.*
- *Knowledgeable, experienced, gentle teaching style.*
- *Continues to educate us about being culturally competent.*
- *Accepting, invested in learning, took time explaining.*
- *Cultural perspectives in education, parenting and our field, resources beyond the USA.*
- *Learned more about her background, culture. It was cool to hear her experience. She compared her experience from her country and the USA.*

Many participants enjoyed that the foreign-born professor shared his/her experiences, cultural perspectives, was knowledgeable, accepting, etc.

**Question 23:** List negative factors related to the international background of this faculty member if any.

- *N/A – 11 times.*
- *Some words used by the professors could have been substituted for a word that better expressed their intent.*
- *Test questions/assignments were sometimes difficult to comprehend because of the word uses.*
- *Heavy accent. Rhythm of speech slightly altered.*
- *It was difficult to understand certain words if you could not read their lips.*
- *Cultural differences.*
- *Had to re-ask questions if not understood.*
- *Some communication errors.*
- *As a hard of hearing individual, it was hard to understand at times, especially with the requirement of masks.*
- *If we do not have a PowerPoint to read, sometimes certain words are hard to understand.*
- *Sometimes misspelling or broken English on exams.*

- *Some errors in grammar or word choice.*
- *Made some words easier to pronounce.*

Almost half of the participants (eleven) did not mention any negative factors related to this foreign professor. Some of them mentioned heavy accent, mispronunciation, misspelling and grammar errors or difficulties to comprehend assignments/questions.

**Question 24:** Do you think having a foreign professor who teaches courses in CSD is beneficial for you?

- **Yes:**  $N = 24$ ,  $n1 = 23$
- **No answer:**  $N = 24$ ,  $n2 = 1$

Twenty-three students thought that having a foreign professor in their major was beneficial for them.

**Question 25:** What are the benefits of having a foreign professor in the field of CSD in your opinion?

- *We will have patients with other accents/cultural practices.*
- *Learning more about different cultures helps students to be more culturally responsive. Hearing individuals speak with an accent is always good practice for the future.*
- *They can offer different experiences & perspectives when coming from a different culture & country. Contributes to diversity representation in a field where diversity in ethnicity, gender, and national origin is low.*
- *We need a global perspective on communication disorders. We need to be culturally aware.*
- *Has different experiences/ knowledge. Cultural competence is first hand.*
- *Better knowledge on how to deal with future clients who may be foreign.*
- *Able to hear about differences in other countries. Cultural competence.*
- *Shared knowledge on dealing with clients of different cultures.*
- *Cultural competence.*
- *Language exposure. Resources.*
- *Wide variety of experience. Growing our cultural competence. Adding diversity. Allows us as students to be open-minded.*
- *Able to teach about the CSD in other countries. Real life examples when discussing cultural/dialectical issues. How to communicate appropriately.*
- *Totally new perspective on all we cover.*
- *Alternative experience in practicing.*
- *Help to gain respect for other cultures.*
- *Can answer questions from a different viewpoint.*
- *Prepares us for working with diverse clients.*
- *Allows us to see other cultures and languages.*

- *It is an excellent opportunity to learn more about multicultural perspectives in the field of Communication Sciences and Disorders.*

Participants were aware of the importance of being exposed to different cultures through foreign-born professors because they will probably have clients from different cultural and linguistic backgrounds. They understand that having a professor with an accent can help them to be better prepared for their future career. Students know that they must be culturally competent when working with their clients and having foreign-born professors can help them reach this goal.

## 5 Discussion

Having a foreign-born professor as a student can bring some challenges and opportunities to grow. The results of this survey presented results that resonate with results of other studies that were mentioned above. Students reported some challenges, e. g. issues with understanding some terms, accent and vocabulary usage. They appreciated foreign-born professor that included a Power-Point presentation along with the spoken content of the lecture. This way the students could see the words that were pronounced by the professor. Benefits or opportunities to grow when having a foreign-born faculty included being exposed to different cultures, languages, and perspectives in addition to answering questions about practicing speech-language therapy overseas and dealing with clients from different cultural and linguistic backgrounds.

## 6 Limitations of this survey

The results of this study are valuable and bring important information, but the study has its limits. First, the number of participants was forty-five. Second, the study was done at one college in the southern part of the USA. Third, the participant pool only contained undergraduate students. We can't generalize the study's results due to these limits.

## 7 For future research

There are plenty of studies about foreign-born professors at U.S. universities, but there is a lack of research specifically related to foreign-born professors at U.S. universities who teach communication disorders. The USA is a very diverse nation and speech-language pathologists must be culturally competent when providing services to their clients. More studies have to be conducted about this topic and the studies have to be on a larger scale. It is very important to have foreign-born professors in the major of communication disorders because they can enrich their students not only in the regular topics, but specifically about different cultures.



We found the recommendations published by Alberts (2008) for foreign-born professors very helpful. The recommendations are about how to prepare students, adjusting their expectations and using their foreignness.

### **7.1 Recommendations for foreign-born professors: preparing for students**

- Be honest with students. Acknowledge that you have an accent and that you may mispronounce some words.
- Encourage students to raise their hands if they do not understand you.
- Speak slowly.
- When lecturing, have extra notes on the blackboard as a visual aid for the students who may have difficulty adjusting to the accent.
- Assign “language police” – you can assign some students to help you with correcting you or finding words you can’t remember or you do not know.

### **7.2 Recommendations for foreign-born professors: adjusting expectations**

- Get as much information about your institution before you start teaching there. If possible, visit your colleagues’ classes so you get a feeling for how classes are taught in the USA.
- Accept that standards are different than in your home country. Ask your colleagues for samples of syllabi, tests, and different assignments.
- Do not let your students lower your standards. If you need to make some adjustments, do not give up your standards completely.
- Explain your syllabus and your expectations clearly. Your syllabus is your contract between you and your students.
- Create a network with other foreign-born professors to exchange your concerns, ideas, etc. You get support from them as well.

### **7.3 Recommendations for foreign-born professors: using “foreignness”**

- Make your foreignness a resource for your teaching. The majority of students appreciate hearing about different cultures, languages, etc., but do not overdo it.
- You can mention that you want to learn more about the USA and you want them to learn more about your home country.
- You can invite your students to come to your office when they have questions about your home country, culture, language.
- Tell your students that it is fine not to always agree with what was said but respect is very important.

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# Sexuality education from the perspective of teachers and pupils with intellectual disability

(science paper)

Zdeňka Kozáková, Petra Hermanová

**Abstract:** *The purpose of the paper is to present the selected results of a research study aimed at sexuality education of pupils with intellectual disability (ID). The main objective of the research was to examine the perspective of teachers and pupils with intellectual disability concerning sexuality education in a school setting. Another aim was to identify the degree to which sexuality education is implemented in classes and whether teachers and pupils consider such implementation sufficient. The opinions and practical experience of teachers and pupils were investigated by means of semi-structured individual interviews.*

*The results of the research suggest that from the perspective of both teachers and pupils the implementation of school-based sexuality education is insufficient. Pupils report that sexuality education was little discussed and that the information they received was insufficient. Therefore, sexuality education should be more supported in schools and should be more frequently implemented in classes. This is especially important in the case of pupils with mild ID who have had fewer practical subjects in the past years. These subjects used to provide sufficient space for topics such as sexuality education. The research revealed several ideas and suggestions for improvement. They mostly relate to high-quality school equipment including visual aids as well as spatial arrangement. Greater attention should also be paid to further training of teachers and their methodological guidance in this area.*

**Keywords:** *sexuality education, teacher, pupil with intellectual disability, special elementary school, elementary school*

## 1 Introduction

School-based sexuality education should be an integral part of preparation for future life. However, the most studies report a low level of knowledge in the area of sexuality in persons with ID compared with the common population (Whitehouse & McCabe, 1997; McCabe, 1999; Thompson, 2001; Aunos & Feldman, 2002; Galea et al., 2004; Kijak, 2013; Bernert & Ogletree, 2013; Jahoda & Pownall, 2014). Servais (2006) concludes that the knowledge among persons with ID is fragmentary, inaccurate and inconsistent. Similarly, according to a research study by Galea et al. (2004), persons with ID do not take any formal education in the area of sexuality, their education does not include all significant aspects and the information presented is not understood or remembered. A large number of individuals with ID have insufficient knowledge in the area of sexuality. In her study, Schaafsma et al. (2014) claims that the reason for not providing education in the area of sexuality to persons with ID might be the fact that other people think that these individuals are not sexually active or that they do not need this information.

However, practice shows that persons with ID need to acquire information as well as practical competences and skills. The information, competences and skills should be related to ordinary life in terms of relationships, sexuality as well as prevention of sexually transmitted diseases or sexual abuse (Volfová, Kozáková & Velemínský, 2008).

It is therefore important for the school to fulfil its role and for the teachers to know how to approach this aspect of life in persons with ID. At the same time, the parents (guardians) of these children should be provided with adequate information.

Presently, there is an overall trend suggesting that sexuality education should primarily be provided in the family but at the same time admitting that this is not always possible. An ideal environment seems to be the school. The advantage of the school setting is the long-term, continuous as well as interdisciplinary effect. It not only educates but also shapes and develops the learners' attitudes. Sexuality education, as recognized by the International Planned Parenthood Federation (IPPF) in accordance with the World Health Organization (WHO) "is not a mere preparation for sexual life but also supports the development of interpersonal and family relationships. It emphasizes contraception as well as the prevention of sexually transmitted diseases and sexual crime. It also addresses psychological and psychosexual issues associated with any partnership" (IPPF, 2008).

According to the Framework Education Programme (FEP) for Elementary Education, sexuality education is not a separate subject but is implemented in the following educational areas: Man and his world (educational subjects Basic humanities and Natural science), Man and society (Citizenship education), Man and nature (Natural history) and Man and health (Health education). Sexuality education can also be

included in the following cross-curricular subjects: Moral, character and social education and Civic education for democracy (Kozáková, 2013). If possible, the extent of the knowledge and skills provided should not differ from the common population.

## **1.1 Aims**

The main objective of the research was to examine the perspective of teachers and pupils with intellectual disability concerning sexuality education in the school setting. Another aim was to identify the degree to which sexuality education was implemented in classes and whether teachers and pupils considered such implementation sufficient. The research was conducted in two selected special elementary schools and in an elementary school established pursuant to Section 16, Sub-section 9 of the Education Act No. 561/2004 Coll. designed for pupils with mild ID, multiple disabilities and autism spectrum disorders.

Following the operationalization of the objective, the following three research questions (RQ) were formulated:

RQ 1: In what way is sexuality education implemented?

RQ 2: From the teacher's perspective, is the implementation of sexuality education sufficient?

RQ 3: From the pupil's perspective, is the implementation of sexuality education sufficient?

## **1.2 Sample and Methods**

The research was based on a mixed design. The qualitative part was conducted by means of semi-structured interviews, while the quantitative part used questionnaires.

The main research method was the semi-structured interview, which can be defined as non-standardized inquiry with a predefined structure (Miovský, 2006). This method allows the interviewer to change the order of questions or add questions as required (Reichel, 2009). Its flexibility allows the researcher to obtain additional information and ask questions that arise during the inquiry. The method of individual interviews enables a direct contact between the researcher and the respondent and allows additional explanation by both the researcher and the respondent. It provides a deeper insight into this sensitive issue, offering greater authenticity and close understanding of the attitudes of the research participants. At the same time, its flexibility allows the researcher to obtain additional information and ask questions that arise during the inquiry. Other advantages include the possibility to obtain personal or sensitive information, analyse verbal as well as non-verbal responses and adapt the course of the interview accordingly (Skoutil, 2011).

The data for the analysis were obtained by verbatim transcriptions of the interviews into a text format. This was followed by open data coding. Miovský (2006, p. 219) describes the process of coding as “assigning keywords or symbols to text fragments in order to allow an easier and faster analysis of these fragments and to facilitate at any time the use of larger semantic units by means of the codes assigned.” The term coding refers to an operation the purpose of which is to “analyse, conceptualize and reassemble the data, which is the central process in the development of a new theory” (Miovský, 2006, p. 228).

The transcribed text was divided into units and each unit was assigned a code. The codes were entered directly into the transcribed text (pencil and paper method) and revised and modified after repeated reading. This was followed by categorization during which a list of codes was produced and the codes were categorized into subcategories. These subcategories were then classified into categories. In total, three main thematic units were defined. These units included the following categories:

- **Implementation of sexuality education in the school:** Implementation of sexuality education in the SEP; Implementation of extracurricular activities; Background for the realization of sexuality education (designated room, visual aids, methodology).
- **Sufficiency of the implementation of sexuality education from the perspective of the teacher:** Sufficiency of the implementation of sexuality education in classes; Sufficiency of the content of sexuality education; Sufficiency of the implementation of extracurricular activities.
- **School-based sexuality education from the perspective of the pupil:** 5<sup>th</sup> graders aged 10–13 years; 6<sup>th</sup> and 7<sup>th</sup> graders aged 12–13 years; 9<sup>th</sup> graders aged 15–16 years.

The research included 14 teachers (T 1–14) of pupils with ID and 25 pupils diagnosed with mild ID educated in an elementary school established pursuant to Section 16, Subsection 9. The pupils were investigated by means of individual semi-structured interviews and structured questionnaires. Prior to the research, the investigators obtained the consent of legal guardians concerning the pupils’ participation in the discussions, interviews, research as well as anonymous data processing and publication. The pupils indicated their gender and age. The class teacher added information about the class, education programmes as well as ID severity. The pupils were divided into three groups (see the Table 1 below). This division was necessary in order to adapt the research methods to the capabilities and intellectual maturity of the pupils.

**Table 1:** *Structure of the research sample*

Elementary school class		ID	Age	Number	Of whom	Of whom
<b>Group 1</b>	5 <sup>th</sup> grade	Mild ID	10–13 years	8 pupils	5 boys	3 girls
<b>Group 2</b>	6 <sup>th</sup> and 7 <sup>th</sup> grade	Mild ID	12–13 years	7 pupils	4 boys	3 girls
<b>Group 3</b>	9 <sup>th</sup> grade	Mild ID	15–16 years	8 pupils	8 boys	0 girls

Mild ID was very often combined with attention, comprehension and speech disorders. The semi-structured interviews and structured questionnaires examined the level of knowledge, personal experience and the degree of interest in the issue as well as the acquisition of new information in the area of sexuality. Due to the wide age range between 10 and 16 years and the large differences in the pupils' intellectual abilities and maturity between the groups, a different alternative of the structured questionnaire was produced for each group. The way of answering the questions was adapted in order to reflect the needs of the pupils. The development of the questionnaires was based on interviews with the teachers (including class teachers), observation of the pupils in their classes and an analysis of the content of the school's SEP performed prior to the research. For each group, the research tool and the course of the investigation was adapted to the pupils' individual capabilities. The questionnaires contained three types of questions: knowledge questions focused on the extent of the respondents' knowledge; experience questions focused on the respondents' experience in the area concerning their own relationships and sexual experience; experience with sexuality education. The third type of questions focused on the respondents' interest in the area and methods of obtaining new information. The questionnaires were completed individually with each pupil. For each question, understanding of its content was checked. In the case of knowledge questions, the pupils' responses were checked by means of feedback and additional questions in order for the respondents to demonstrate their understanding. In the case of pupils who had difficulty reading or understanding the text, the questions were read out, explained and reformulated in order to ensure the pupils' understanding. Following the questionnaire survey and individual interviews, discussions on sexuality education and healthy lifestyle were held during which the pupils had the opportunity to ask about anything they were interested in. Given the extent of the paper, focus is on a specific part of the results concerning the pupils' experience with sexuality education.

Regarding the nature and sensitivity of the topic, the whole research was anonymous. The respondents gave their consent to the provision of the basic data necessary for the processing of the research and ensuring its validity.

The research was carried out in February-March and September-November 2020. Between April and August the research had to be interrupted due to the emergency



closure of schools. At the same time, the course of the research had to be changed and the number of elementary schools involved in the research had to be decreased due to the emergency measures against the spreading of Covid-19.

## **2 Results**

The results of the research are presented for the three thematic areas. The first area focuses on school-based sexuality education, the second on the sufficiency of its inclusion, while the third is aimed at the experience with sexuality education from the perspective of pupils with ID.

### **2.1 Implementation of sexuality education in the school**

#### **Implementation of sexuality education in the SEP**

Pupils with mild ID are educated according to the FEP for elementary education which defines the minimum recommended level of expected outcomes in the context of relevant support measures concerning sexuality and interpersonal relationships. According to the teachers, sexuality education classes comply with the SEP in the following subjects: Basic humanities, Natural science, Health education, Citizenship education. Sexuality education is delivered on a cross-curricular basis. “Naturally, sexuality education is mostly included in Health education in the 8<sup>th</sup> and 9<sup>th</sup> grades” (T1).

Pupils with moderate and severe ID are educated according to the FEP for special elementary schools, Volume I and II. According to the teachers, sexuality education is included in the SEP in the following educational areas: Man and his world – Material learning, Man and society, Man and health – Health education.

#### **Implementation of extracurricular activities**

All of the teachers confirmed that their schools held regular lectures with experts on sexuality: “Yes, about once every two years we have a lecture given by a sexologist. The lecture has two parts—one for the pupils and the other one for the parents and teachers” (T7). The schools also organize project days: “We regularly organize project days on cyberbullying and bullying” (T5).

#### **Background for the realization of sexuality education (designated room, visual aids, methodology)**

All of the teachers suggested that their school did not have a special room designated for relaxation, privacy and satisfaction of sexual needs, especially for pupils with more serious ID. “There is no special room for these purposes in the school” (P 14). “Sexual satisfaction very often takes place in school where pupils attempt



masturbation. Any efforts to suppress this behaviour often lead to the development of unrest, aggression, the pupil's willingness to cooperate decreases." In terms of visual aids, all of the teachers agreed that they lacked high-quality visual aids. "I have to make or provide all materials myself... Our pupils require visuals and the pictures we use are sometimes insufficient" (T4). All of the teachers agreed that a significant problem was missing or insufficient methodology for teaching sexuality education and recommended procedures for addressing situations associated with sexuality behaviours among pupils with ID. Most of the teachers use their own experience, understanding and personal attitudes. However, this may be extremely difficult for a beginning teacher without experience.

## **2.2 Sufficiency of the implementation of sexuality education from the perspective of the teacher**

### **Sufficiency of the implementation of sexuality education in classes**

The teachers in elementary schools established pursuant to Section 16, Sub-section 9 agreed that the implementation of sexuality education was absolutely insufficient. "Compared with for example ten years ago, today there is much less time and space for these topics. One of the main reasons is the change in the time allocation of individual subjects" (T1). All of the teachers agreed that the greatest risk related especially to pupils with mild ID. They are usually able to have an independent life but their decreased cognitive abilities often compromise their ability to make correct judgments, evaluate various situations and assess risks. "We often have to solve problems such as classmate groping incidents, sexual harassment, cases of cyberbullying with sexual undertones, over the past few years there were several cases of taking intimate photographs of classmates, there was even a case of abuse of a schoolgirl by a foreign person. We also had pupil pregnancy" (T13). According to the teachers, their pupils are overwhelmed by the number of subjects that are not so important in terms of their future careers. On the other hand, there is little space for practical and educational subjects. "Overall, both students and teachers are now under great pressure on their knowledge but there is little space for practical skills" (T2). Therefore, teachers try to address sexuality education beyond the scope defined by the SEP, especially in the context of informal class sessions. A major problem is the insufficient provision of information to pupils in their home environment: "This frequently results in unpleasant situations and a high level of risk caused by the lack of information" (T13). The situation is different in special elementary schools where pupils with moderate to severe ID are educated. All of the employees agreed that in this setting the topics relating to sexuality education were sufficiently represented and that they had sufficient time and space.

### **Sufficiency of the content of sexuality education**

The content of sexuality education is disproportionate to the time allocation. The content requirements are increasing; over the past years, the content has expanded and includes a number of new terms such as “hebephilia, ephebophilia, frottage and many others. Similarly, in the field of prevention, greater attention is paid to new phenomena such as cybergrooming and other media issues” (T12). According to the teachers’ responses, in the past there was no need to address situations in relation to digital technology among pupils with mild ID. Recently, there has been an increase in offences relating for example to cyberbullying. Four of the teachers believe that their classes should include practical topics and visual teaching using appropriate pictures, pictograms and aids. This could relate for example to using means of protection, clear and illustrative instructions on masturbation and subsequent hygiene, etc.

### **Sufficiency of the implementation of extracurricular activities**

The teachers agree that it would be desirable to organize discussions, project days and other activities in addition to the curriculum. These activities should be frequent and regular. According to most of the teachers, sexuality-related information is much more important for pupils with ID compared with intact pupils. Pupils with ID are not only very susceptible to abuse but at the same time it is much more difficult for them to search for the required information compared with intact pupils. Most of them require additional explanation in order to facilitate understanding. They need the information to be visual and illustrative, which most commonly available resources do not provide.

## **2.3 School-based sexuality education from the perspective of the pupil**

The results are presented for the three groups of pupils (see the Table 1 above).

### **Pupils in the 5<sup>th</sup> grade aged 10–13 years**

Seven out of eight pupils reported that they had never had sexuality education or similar topics in school. Only in Basic humanities and Natural science they spoke about the human body, identified female breasts but the differences between men and women were presented on a picture of dressed figures according to their clothes, hairstyles and appearance. They also learned about the different stages of human life and about the family. One of the pupils indicated that this topic had been discussed very little. This pupil came from a different elementary school not established pursuant to Section 16, Sub-section 9. Seven pupils suggested that they would like to know more and showed a great interest in a discussion on this topic.

### **Pupils in the 6<sup>th</sup> and 7<sup>th</sup> grades aged 12–13 years**

As far as school-based sexuality education is concerned, three pupils confirmed their participation in this type of education or lecture, but this was in a different school not established pursuant to Section 16, Sub-section 9. Three pupils have not had this type of education, while one pupil reported very little involvement in this area. Three pupils consider the information they have received in school to be sufficient, while according to four pupils no information has been received. The three pupils who had participated in this type of education or lecture said that they understood the information presented.

### **Pupils in the 9<sup>th</sup> grade aged 15–16 years**

In the question focused on sexuality education, only two respondents suggested that they had participated in a lecture on sexuality education. According to one student, this topic was discussed in different subjects, mainly in the context of Health education. Three pupils said they had discussed this topic very little, while four pupils reported that they had not participated in any sexuality education or lecture and they had not been instructed in this area in any way. Four pupils indicated that they had not learned anything in school and that the information they had was insufficient. Three pupils said that they had learned very little, while only two pupils reported that the information they had received in school was sufficient. Three pupils did not fully understand the information they had received in school, while one pupil did not understand at all. Only two pupils fully understood the information concerning sexuality that they had received in school.

In this group of pupils, an anonymous collection of questions on sexuality was performed. For this purpose, a worry box was provided and was available for 14 days in the classroom. The pupils could throw in any questions about sexuality. A total of 63 questions were thrown in. These questions were answered in a subsequent discussion. The pupils showed great interest in and gratitude for this topic being discussed with them. They appreciated the possibility to ask anonymous questions. Gradually, they lost their inhibitions and the questions started to be more intimate. These questions were subsequently processed and a list of the most popular topics was made. Very often, the pupils' questions related to problems associated with their first sexual intercourse attempts as well as relationship issues. The questions suggested problems with partnership communication and uncertainty about appropriate behaviour in different situations. Practical questions prevailed over theoretical ones. After the questionnaires had been evaluated, a discussion was held in all classes during which the pupils had the opportunity to ask any questions. The discussions were held in groups and the pupils were divided according to their knowledge so that one group could go into details that other pupils would probably not understand. The pupils were positive and enthusiastic about the discussions.

### 3 Discussion

The results of the research are “typical of and valid” for the schools involved and cannot be generalized to all schools. The results suggest that from the perspective of both teachers and pupils, school-based sexuality education should be provided with more space and attention. This topic should be included more in classes. This is especially important in the case of pupils with mild ID who have had fewer practical subjects in the past years. According to the respondents, this change is negative. The research suggests that pupils are interested in the topic and in gaining new information. Most of the pupils appreciated the possibility to discuss the topic openly, ask questions and have somebody to turn to in this area. In the future, this position could be held by a school psychologist or designated teacher. This position would be close to that of a sexual confidant in social services. The topics should be implemented on an extracurricular basis and the parents should be informed in an adequate manner. The research revealed several ideas and suggestions for improvement. They mostly related to high-quality school equipment including visual aids as well as spatial arrangement. Greater attention should also be paid to further training of teachers and their methodological guidance in this area. Teachers usually use their own experience, understanding and personal attitudes, which may be extremely difficult for a beginning teacher without experience. Last but not least, attention should be paid to providing appropriate and dignified conditions for the purposes of satisfaction of sexual needs or release of sexual tension, especially in the case of pupils with severe ID.

#### **Ethical Aspects and Limitations of the Study**

The study was limited by its main theme, which is of a very personal and intimate nature. The research and the interviews required a very sensitive approach. At the beginning of the research, seven elementary schools and special elementary schools were addressed, of which only three consented to their participation in the research. Not all teachers and pupils in these schools took part in the research. Given the focus of the research, pupil respondents had to be carefully selected and their legal guardians' consent had to be provided. One of the teachers refused participation with the whole class. Another limitation was the period in which the research was performed. Due to the emergency measures, elementary schools were closed down in the spring and autumn and the research could not be carried out as planned.

Another limitation was caused by the structure of the respondents. The research instrument had to be individualized for each pupil due to their different capabilities in the area of cognition and comprehension. The last significant limitation is the impossibility to verify the veracity of the responses in the experience part of the pupils' questionnaires. However, each response was validated during an individual interview. One of the interviews was eliminated due to a high degree of improbability. However,

given that the questionnaires were anonymous, the pupils did not have a reason to exaggerate or boast with false information.

## 4 Conclusion

The results of the research suggest that sexuality education should be paid more attention from the perspective of both teachers and pupils and sexuality topics should be more frequently implemented in classes. This is especially important in the case of pupils with mild ID who have had fewer practical subjects in the past years. This is related to the overall decrease in the time allocation of subjects with a predominance of practical and educational subjects. These subjects used to provide sufficient space for topics such as sexuality education. According to the teachers, this change is negative. Moreover, in some families this topic is still a taboo and pupils with ID are totally reliant on other sources of information, including the school. The research suggests pupils' interest in the topic and in gaining new information. Most of the pupils in the research believe that school-based sexuality education is insufficient. They say that individual topics were little discussed and that the information they received was insufficient. This is clearly a challenge for schools to try to support this frequently neglected educational area. In this context, schools should focus on increasing sexuality awareness and physiology but also on developing practical skills and competences in the area of relationships and emotions. The research has also revealed that schools are insufficiently equipped in terms of visual aids and educational materials as well as rooms that would ensure pupils' privacy or relaxation. A positive finding is the responsive attitude of most of the teachers in the research to sexuality of pupils with ID. They accept this topic very openly and are interested in improving education in this area. Also, the school directors promised to try to improve their attitude and implement sexuality education in classes. Further discussions have already been planned and the pupils themselves seem to be interested in these events. The research has suggested a more open attitude of parents, although there is still room for improvement. A problematic area seems to be the training of teachers and their methodological guidance in this area. Teachers do not feel sufficiently competent and qualified to teach sexuality education and primarily use their own experience and understanding. However, this is very difficult for beginning teachers without prior experience. In the context of sexuality education, this is even more difficult as teachers are confronted not only with the general standards and requirements of their schools but also with their own values and attitudes to sexuality as well as the values of the pupils' families.

The aim of the paper is to emphasise the fact that relationships and sexual needs are an integral part of the life of every individual and therefore, sexuality education of pupils with ID should be a natural part of preparation for future life.

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# Discernment of special school students on the application of low-technological devices for learning

(scientific paper)

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**Abstract:** *One thing is for technologies to be introduced into the teaching and learning process to boost instructional delivery; another thing is for users to have good attitude towards the use of these technologies. This study therefore investigates the discernment of special school students on the application of low-technological devices for learning. This research thus hires the survey method and 150 special school secondary students were purposively sampled. The research instrument was validated by experts for both face and content validity. The findings established that students have good perception towards the utilization of low-technological devices for learning notwithstanding their gender and age. The study concluded that special students' discernment towards the adoption of low-technological devices influence their readiness to use those devices. It was, however, recommended that the development of basic skills in the design and production as well as utilization of assistive technology devices from readily available materials to reduce the cost incurred from importing them from other countries should be encouraged.*

**Keywords:** *special school students, application, gender, learning, low-technological devices, age, discernment*

## 1 Introduction

### 1.1 Background to the Study

Low-technology (LT), which is highly important for learning in special schools, overtime, cannot be overestimated in terms of its educational benefits for disabled learners as it has proven helpful in growing, sustaining or improving their functional capabilities. Today's innovations have the ability to change the lives of students with

disabilities significantly, allowing them to access the curriculum, engage alongside their peers in learning events, personalize their learning and reach their full potential.

Most students with disabilities can benefit from technology in the classroom because incorporating technology increases students' motivation to learn and personalizes lessons to a student's individual needs. Even the students with the most severe and profound disabilities can use low-technology to join a classroom of typical students, and their potential can be reached in ways we didn't have before (Kirk, Gallagher, Coleman, & Anastasiow, 2008).

Over the years, the availability, accessibility, and use of low-technologies in special schools have raised questions among researchers. The main reason for offering school-based low-technology is to allow students to achieve their educational goals. School administrators will look at the tasks that each student needs to achieve, the challenges that the students are facing, and the ways in which different devices may help the students better perform such tasks (Massachusetts Department of Elementary and Secondary Education, 2012). There is a need for professional development for teachers, parents, and students of how to best utilize low-technology for students. Research has shown that assistive technology can be imperative to students' achievement in tasks that would otherwise be inaccessible. However, many times assistive technology is not implemented correctly or is not used because of the lack of professional development or training for teachers, parents, and students.

Low achievement in special school could be attributed to various barriers facing the use of these low-technological devices. Bell (2012) states that these barriers were found to include lack of appropriate staff training and support, negative staff attitudes, inadequate assessment and planning processes, insufficient funding, difficulties procuring and managing equipment, and time constraints. However, these may result to low or non-availability, accessibility and utilization which can hinder the effectiveness of these devices.

Varieties of innovations are providing innovative options for differentiating instruction in today's learning environments, promoting the involvement of children with learning disabilities. With the several assistive devices available for teachers and parents to choose in the stores and on the internet, there is no simple rule in selecting the correct ones for children with learning disabilities. Even though, the availability of these tools poses problems for teachers and parents in the developing world like Nigeria, as the tools are scarce and not provided for in schools, and not available in most of the local shops and markets (Liman, Adebisi, Jerry & Adewale, 2015). However, the few stores and markets found in the cities and metropolis sell at high cost for parents and schools.

## 1.2 Statement of the Problem

Using technology can help students with disabilities to enhance and improve their independence in academic and employment tasks, their participation in classroom discussions, along with helping them to accomplish some difficult academic tasks (Alnahdi, 2014). Special education teachers, especially in middle and high school, should be exposed to technological tools that can help students to bypass their academic weaknesses (Mull & Sitlington 2013). Teachers will help students by training them to use low Assistive Technology that, in most cases, could make students live and behave more independently when they leave high school, which will increase their chances of maximizing their degree of achievement and independence, though it will still be behind their peers without disabilities (Blackorby & Wagner 2006).

## 1.3 Research Questions

The study provided answers to the following questions:

1. What is the perception of student on the utilization of low-technological devices?
2. What differences existed in the perception towards the utilization of low-technological devices among students based on gender?
3. What differences existed in the perception towards the utilization of low-technological devices among students based on age?

## 1.4 Research Hypotheses

$H_{01}$ : There is no significant difference between the perception of males and female special student on available low-technological devices

## 2 Methodology

Descriptive survey research design was used for this study. Descriptive research is aimed at casting light on current issues or problems through a process of data collection that enables them to describe the situation more completely than was possible without employing this method. A survey was done by a researcher in order to elicit information from the sample of a population so as to draw references about the entire population.

Population comprised of all the inhabitants of a particular town, area or country. The populations for this study consisted of 150 students of the special need secondary students at Kwara State School for Special Needs, Apata Yakuba. Sample is a selected group which is a fair representation of the entire population of interest which will be adhered to. A sample of population comprises of a specific number in which the researcher is interested in among the entire population. Sampling is the process of selecting a number of individuals for a study in such a way that each individual

represents the population from which they will be selected. From the target population, one hundred students were sampled. These are people truly capable of providing all the responses required to be able to prove or disprove my hypotheses.

Instrument is often called assessment or evaluation instrument in research. The instrument that will be used in collecting data for this research is a questionnaire. A questionnaire allows the researcher to collect required information quickly and accurately from a large number of people at the same time. The questionnaire titled “Perception on the utilization of low-technological devices for special needs secondary schools in Ilorin metropolis” consists of two (2) sections.

Section A contains demographic information of the respondents while Section B comprised of structured questions which is in scale response mode on perception on the use of low-technological devices in special schools. The items will be based on the 4-points likert scale of Strongly Agreed (SA), Agreed (A), Disagreed (D) and Strongly Disagreed (SD).

Validity is the extent to which an instrument measures what it is supposed to measure and performs as it is designed to perform. The questionnaire was validated by the supervisor and four other lecturers in the Department of Educational Technology, University of Ilorin. They were required to perform corrections on the content of the instrument. Their comments and suggestions were used to improve the contents of the questionnaire.

The letter of attestation was collected from the Department of Educational technology and the researcher administered the questionnaire to one hundred (100) respondents. On spot collection of the questionnaire was made to achieve high retrieval rate. Ethical issues were considered as the respondents were not forced to participate in the study. All their data were only used for the purpose of the research and nothing else.

The data collected was coded and subjected to proper statistical analysis of which frequency count and percentage was used to analyze the demographic data of the respondents and the research questions. T-test was used to test the research hypotheses one while ANCOVA was used to test hypotheses two at 0.05 significance level.

### 3 Results and Findings

#### 3.1 Demographic Information

Table 1: Respondents data based on their gender

Gender	Frequency	Percent	Cumulative Percent
Male	86	57.3	57.4
Female	64	42.7	100.0
Total	150	100.0	

Table 1 shows that male and female respondents formed the study of the total sampled respondents with 86 (57.3%) are male while 64 (42.7%) females formed different percentage of the total sampled respondents respectively. This is also shown graphically in Figure 1.

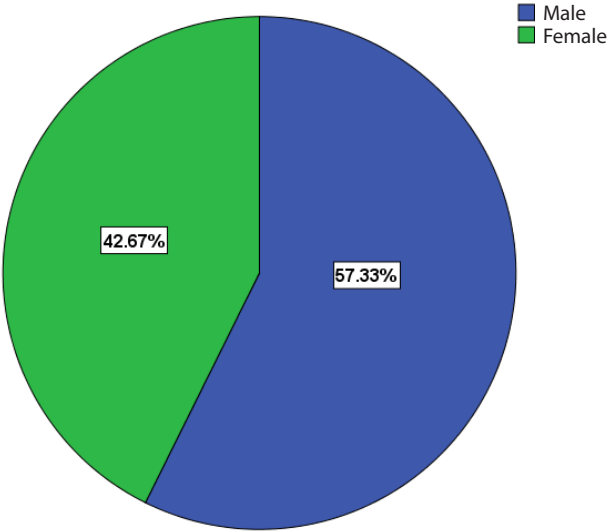


Figure 1: Graphical Illustration of Respondents' Gender

Table 2: Respondents data based on their age

Age	Frequency	Percent	Cumulative Percent
10–15 Years Old	67	44.7	44.7
15–20 Years Old	70	46.6	91.3
20 Years Old and Above	13	8.7	100.0
Total	150	100.0	

The respondents' age was shown in Table 2. It indicated that 67 (44.7%) of the respondents were within the age range of 10 to 15 years old, 70 (46.6%) of the respondents were within the age range of 15 to 20 years old and the rest 13 (8.7%) of the respondents were within the age range of 20 years old and above 20 years old.

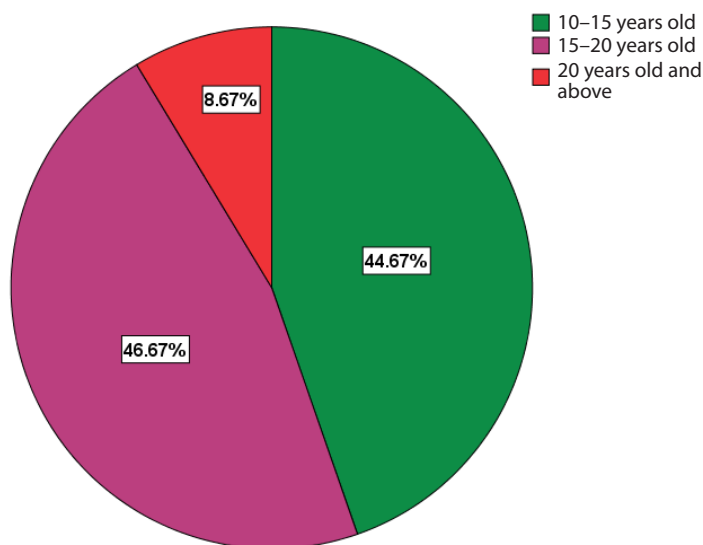


Figure 2: Graphical Illustration of Respondents' Age

The pie chart in figure 2 indicated that majority of the respondents are within 10 to 15 years of age. Others are as shown in Figure 2.

### 3.2 Research Question One

What is the perception of student on the utilization of low-technological devices?

In response to this research question two, mean and standard deviation was employed to direct the perception of student on the utilization of low-technological devices. The result is shown in Table 3.

Table 3: Perception on the utilization of low-tech devices for learning

S/N	Items on Perception	$\bar{X}$	SD
1	Low-tech has helped to develop my reading competence.	3.23	1.050
2	Low-tech has helped me to develop my writing skill.	2.87	.960
3	I cope easily with the challenges posed by the use of these low-technologies.	2.73	1.028
4	Low-tech has improved my academic performance.	2.71	1.132
5	Lack of confidence affected me in the use of low-tech devices for learning.	2.85	1.091
6	Low-tech devices make teaching and learning easier.	2.70	1.040
7	I relate better with my teachers in the classroom when they use low-tech devices to teach.	2.71	1.067
8	My school encourages the use of these low-tech devices by both student and teacher.	2.66	1.122
	<b>Perception on the utilization of low-tech devices for learning</b>	<b>2.81</b>	

The perception of students on the utilization of low-technological devices was also examined and reported in Table 3. It displayed that majority of the students agreed that low-tech has helped to develop their reading competence and it has helped them to develop their writing skill with mean scores of 3.23 and 2.87 respectively. Also, respondents submitted that they cope easily with the challenges posed by the use of these low-technologies with a mean score of 2.73. In addition, majority of the respondents perceived that low-technological devices improved their academic performance with a mean score of 2.71 and a mean score of 2.85 established that the lack of confidence affected the respondents in the use of low-technological devices for learning.

In addition, students perceived that the low-technological devices make teaching and learning easier and the school encourages the use of these low-tech devices by both student and teacher with mean scores of 2.70 and 2.66 accordingly. Others followed suit as shown in Table 4. The grand mean score of 2.81 established that students have good perception towards the utilization of low-technological devices.

### 3.3 Hypothesis One

There is no significant difference between the perception of males and female special student on available low-technological devices.

Independent samples t-test was conducted to determine if there is any significant difference between the perception of male and female special students on available low-technological devices. The result is shown in Table 4.

**Table 4:** *t-test on significant difference between perception of male and female*

Gender	N	Mean	Std. Deviation	df	T	Sig. (2-tailed)
Male	86	2.829	.479			
				148	.533	.595
Female	64	2.786	.494			
Total	150					

Results in Table 4 show that the calculated t-value was 0.53 with significant value of 0.60 was not significant at 0.05 alpha levels because p-value was greater than 0.05. This implies that the null hypothesis one was not rejected: hence, there was no significant difference between the perception of male and female special students on available low-technological devices.

### 3.4 Hypothesis Two

There is no significant difference between the perception of special students on the use of low-technological devices based on age.

In response to this, an analysis of covariance was conducted to determine if there is any significant difference between the perception of special student on the use of low-technological devices based on age. The result is shown in Table 5.

**Table 5:** ANCOVA on significant difference between perception based on age

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.005 <sup>a</sup>	1	.005	.022	.882
Intercept	153.415	1	153.415	649.978	.000
Age	.005	1	.005	.022	.882
Error	34.225	145	.236		
Total	1195.266	147			
Corrected Total	34.230	146			

a: R Squared = .000 (Adjusted R Squared = -.007)

The result in Table 5 shows the significant difference in the interest mean scores on the perception of special students on the use of low-technological devices based on age. It indicates that  $F(1, 146) = 0.022$ ,  $P > 0.05$ , which means that there is no significant difference in the interest mean scores of special students on their perception towards the use of low-technological devices based on age. Hence, the null hypothesis is hereby retained. Thus, there is no significant difference in the significant difference in the mean scores of perceptions of special students on the use of low-technological devices based on age.

## 4 Discussions

The findings established that students have good perception towards the utilization of low-technological devices. Adegunju, Onivehu, Odetunde & Oyeniran, (2017) concluded that the success of the integration of assistive technology in any educational system is hinged on the quality and quantity of teachers as the prime implementers of the curriculum. It is important to choose an appropriate and efficient device or tool, which does not necessarily have to be an expensive device designed just for educational purposes or for students with disabilities (Alnahdi, 2014).

In addition, there was no significant difference between the perception of male and female special students on available low-technological devices. Soetan, Onojah, Alaka and Aderogba (2020) stated that there was no significant difference between



male and female hearing impaired students' attitude towards the utilization of hearing assistive technology for learning.

Majority of the students adopt the low-technological devices to improve learning. This implies that the adoption of the technological devices is influenced by the availability which in turn could arouse students' readiness to use it. Students have good perception towards the utilization of low-technological devices. Their perception could influence students' motivation to use these low-technological devices by special students. There was no significant difference between the perception and utilization of male and female special students on available low-technological devices. The implication of this is that the low-technological devices have impact on the academic performance of both male and female special students.

No noteworthy statistical difference existed between the perception of special students on the use of low-technological devices based on age. There was no significant difference in the utilization of low-technological devices for learning based on age. Students have good perception towards the utilization of low-technological devices. Their perception could influence students' motivation to use these low-technological devices by special students. There was no significant difference between the perception of male and female special students on available low-technological devices. The implication of this is that the low-technological devices have impact on the academic performance of both male and female special students.

## 5 Conclusion

This study concluded that students have good perception towards the utilization of low-technological devices for learning notwithstanding their gender and age.

## 6 Recommendations

From literature review and findings from this study, it is recommended that:

1. The government should develop a multi-sectoral taskforce across Ministries of education, health and social welfare (or similar ministries) to ensure that children with disabilities have access to appropriate assistive technology; and
2. The Ministry of Education should put in place seminars, workshops, conferences and trainings for special education teachers and experts in the field of assistive technology and educational technology to ensure collaboration among several special schools and the development of basic skills in the design and production as well as utilization of assistive technology devices from readily available materials to reduce the cost incurred from importing them from other countries.

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# Languages in the communication of deaf people: Czech Sign Language and Czech

Macurová, A.; Zbořilová, R. a kol. *Jazyky v komunikaci neslyšících: český znakový jazyk a čeština*.

Praha: Karolinum, 2018. ISBN 978-80-246-3412-8

**Reviewed by Jana Grohmannová**

The research on Czech Sign Language started in the Czech Republic at the beginning of the 20th century, which was more than 30 years later in comparison to the USA, where the first fundamental research of W. Stokoe was published, and other countries, where the research on national sign languages was initiated shortly afterwards. According to the author, Czech Sign Language started to be the point of interest of Czech linguistics thanks to the initiative of the Institute for deaf people in Beroun and Parents and friends of the hard-of-hearing which attempted to view the hearing impairment from a different angle contrary to the view common back then.

Even though a lot of years have passed since the beginning of the research, it still can be said that some of its issues have not been fully explored yet, as it is mentioned several times in the publication. The characteristics of Czech Sign Language have been the focus of very few publications. They were mostly articles in professional magazines, the theses of Charles University students of Czech language in communication of deaf people, and the publications of the Czech Chamber of Sign Language Interpreters.

The monograph called *Languages in the communication of deaf people: Czech Sign Language and Czech* by Alena Macurová, Radka Zbořilová et al. was published in 2018 by Karolinum Press.

The monograph provides a partial look into languages which are used in communication of Czech people with hearing impairment, namely Czech Sign Language and written Czech. It was based on former publications, which had been adapted and updated to serve its purpose in the monograph.

The publication includes 316 pages and it is divided into two sections. The first section is focused on Czech Sign Language and it comprises 12 chapters. The reader acquires basic insight into the specifics of Czech Sign Language, such as its simultaneity and the presence of manual and non-manual units of meaning. There are also

examples of non-manual expressions of quality, degree of intensity, and information about communicative value of an utterance. Each expression is supplemented with an example in Czech Sign Language (CD annexed) and Czech translation. Simultaneous existence of the components of manual characteristics of the sign and simultaneous articulation of two one-handed signs is described there as well. Besides, the reader is informed about several types of so-called negative signs and that the negation in Czech Sign Language has not been explored in detail in comparison to Czech language. Another specific feature of Czech Sign Language is the expression of plurality, which is significantly different compared to Czech, since additional information about place, location, and organisation is included.

The book further supplies the reader with an insight into adjectives in Czech Sign Language. According to the publication, there are two types of means that express the qualities of substances, i.e. adjectives (without more detailed specifications regarding shape and size) and specifiers of shape and size. Then, the book defines so-called specific signs which are typical for the community of deaf people and their sign languages. The origin and classification of name signs is included as well. We are informed that no comprehensive research on this area has been conducted in the Czech Republic yet, therefore, all relevant data about its characteristics are mainly found in foreign sources.

Next, there is information about specific features of language adoption of a deaf child. There are differences in communicative strategies adopted by deaf mothers in comparison to mothers with no hearing-impairment. Then, the reader learns that influences in spoken languages permeate the system of sign languages as well, namely dactylogogy, initialized signs, calques, and speech components which are described in more detail. The first remarks about the cognitive linguistics of Czech Sign Language, which has started to be analysed only recently, can be found there too.

The book deals with the way of approaching the concept of colours in Czech Sign Language and it compares it with the concepts of other sign languages. Another interesting phenomenon is metaphors in sign languages, which has been studied by students of Czech in communication of deaf people at Charles University in Prague only. At the end of the first part of the monograph, one could find the ways of recording Czech Sign Language. There are various notation systems as well as the research on the notation of Czech Sign Language conducted in 2006–2012 mentioned.

The second part is devoted to the issue of written Czech of Czech deaf people and it is divided into six chapters. This part deals with the literacy of Czech deaf people and it refers to the fact that, in the Czech Republic, there has only been one area research on testing the literacy of Czech deaf pupils in elementary schools conducted, namely it was the research done by the Czech school inspectorate in 1997. The diploma thesis of Poláková from 2000 focused on the level of functional literacy of Czech deaf people, in which a different type of testing contrary to the Czech school

inspectorate's one was chosen. The results of Poláková's work are presented in the book. In connection to the topic of literacy, the book approaches the communication in letters of Czech deaf people as well. The reader may get a clearer idea about this phenomenon thanks to the examples included. The publication further develops the topic of prepositions in written language of Czech deaf people and spatial relationships in a text. The diploma thesis of Makovská from 2013 and her analysis of textbooks for students with hearing impairment including their comparison to the textbooks for students without hearing impairment are part of these chapters too.

There are numerous demonstrative examples in Czech Sign Language (the videos can be found in the CD annexed), which are supplemented with Czech translations.

The monograph is aimed at a wide variety of readers, including students, teachers, professionals in centres of special education and associations for early intervention, parents and families of children with hearing impairment, and other professionals who encounter the issue of communication of deaf people. Finally, the book is aimed at the general public and the community of Czech deaf people.

The monograph is truly beneficial due to a limited number of Czech publications dealing with this topic. As it is mentioned several times in the book, some areas of Czech Sign Language are still awaiting its exploration, therefore, one may expect similar publications coming soon. The monograph also significantly contributes to support the identity of deaf people and their pride of their language.

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# STEPS: group therapy-educational program for siblings of children with autism spectrum disorders

Havelka, David (2020). *STEPS: Skupinový terapeuticko-edukační program pro sourozence dětí s poruchami autistického spektra*. Praha: Pasparta

## Reviewed by Petr Kosek

The sibling relationship is one of the longest and most important relationships in life. However, this relationship can get very specific when one of the children is diagnosed with autism spectrum disorder. And what does it feel like to be a healthy sibling? As the care of a child with disability is demanding, it is often the healthy sibling who has to help with care, and thus becomes another carer. David Havelka calls those siblings “special”, and together with Kateřina Bartošová (2019) already wrote about their needs in their earlier book “Speciální Sourozenci” (Special siblings). In the book STEPS: Skupinový terapeuticko – edukační program pro sourozence dětí s poruchami autistického spektra (STEPS: group therapy-educational program for siblings of children with autism spectrum disorders) he introduces the first manualised supportive program in the Czech Republic for special siblings. The book has been published by Pasparta publisher and is 200 pages long. The author has also attached to the book an online manual containing 160 pages of other materials useful for leading this program.

## Supportive programs

There are two main types of supportive programs named after the country of origin: French and North American. The first one comes from psychodynamic approaches and the content and the length of these programs are not defined in advance. The French programs are completely open to the needs of children as they appear in the process of the group and the length of this type of programs is not defined in advance. The North American programs come from a cognitive – behavioral approach and are structured and the length of these programs is limited. These programs combine education with the practice of problem solving, discussion about troubles and worries of the children and learning how to work with emotions.

## The STEPS program

The STEPS program belongs to North American programs. It has been created by the author who got inspired in the foreign countries. The STEPS program is founded on four pillars: screening study of the needs of parents in the Czech Republic (Havelka, 2015), cognitive – behavioral therapy, foreign supportive programs and on the experience pedagogy. The whole STEPS program has been further evaluated, and the methodology of the evaluation is part of the last chapter of the book.

The book as a whole is divided into five parts: about the siblinghood of children on the autism spectrum, theoretical and philosophical foundation of the program, description of each of the meetings, the research summary and possible alternatives to the STEPS program.

The first part describes the difficulties of siblinghood and cites a research on the mental health of healthy siblings. According to the research cited by the author, the special siblings are 3–4× more in danger of the emotional and behavioral disorders. Also there is a bigger chance of insomnia, enuresis, depression and behavioral problems in the family. The common problems which confront special siblings are: the lack of understanding the troubles of the sibling, changes and difficulties in the life of the family and confrontation with the troublesome behavior of the siblings. Also there is a fear of getting infected by the autism spectrum disorder. Those themes are incorporated into the STEPS program.

The STEPS program is divided into eleven meetings.

Main themes of the meetings	
Meeting 1	Introduction and meeting of participants
Meeting 2	Me and my sibling
Meeting 3	About autism spectrum disorders
Meeting 4	The sibling relationship and the breaking of myths about the autism spectrum disorder
Meeting 5	What do I feel and experience
Meeting 6	The problem solving
Meeting 7	The family and its context
Meeting 8	School and the world around us
Meeting 9	Revision of what we know
Meeting 10	The celebration
Meeting 11 (after three months)	The meeting again

Each of those meetings is highly – developed and described in detail. There are many tasks and games which help the children to work out the topics mentioned above. As already mentioned – there are also many materials which are part of the online manual. The access to the online manual is part of the book.

### **Who can lead this type of program?**

There is no need to pass a course, and so the author has limited the demands into the education of the leader of the program. The main leader should have a master's degree in psychology and at least 3 years of experience in work with children and with people on the autism spectrum. For the co-leader it is enough to have a bachelor's degree in education, special education or psychology. The purpose of this limitation is to protect the children from nonprofessional intervention. This can be a little limiting to spread out the use of this program, on the other hand this book can be useful even to the workers who do not qualify for this program as a big source of inspiration for creation of their own supportive program more in line with their own skills.

### **In conclusion**

This book is a great resource to anyone interested in support of the siblings of children with disabilities. While the program has been established for support of siblings of children with autism spectrum disorder, it can be adapted for siblings of children with other types of disability. There was already an alternative version for siblings children with Williams syndrome (Havelka, Hrnčířová, 2019). Overall this book helps to cover one of the blind spots of the special education in the Czech Republic, it is really needed material.

### **Resources**

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# Pedagogical psychological aspects of expressive therapies in individuals with special educational needs

Potměšilová, P., Roubalová, M. F., Víšková, A., Nagyová, K., Harčaríková, T. *Úvod do expresivních terapií, společná monografie, Pedagogicko-psychologické aspekty expresivních terapií u jedinců se speciálně pedagogickými potřebami*

**Reviewed by Katarína Majzlanová**

Expressive Therapy is a very current topic. It includes an educational, diagnostic, therapeutic-reeducational and corrective-developmental element.

From the positive effects of expressive therapies, it is essential to highlight the individual's ability to express their feelings, moods, states through art forms and support their development in changing experiences and actions to increase their quality of life.

The authors of the publication aim to point out the possibilities of applying expressive therapies to selected groups of individuals with special educational needs based on their research.

The introductory part of the monograph explains the basic concepts of expressive therapeutic approaches – Art Therapy, Music Therapy, Drama Therapy (includes both disciplines drama/theatre), Dance Therapy, Play Therapy, Bibliotherapy, Fairytale Therapy and Poetry Therapy.

The next chapter describes the professional scientific disciplines – pedagogy, psychology, psychotherapy and art as inseparable components in the client approach.

The chapters Expressive therapies in Slovakia and Expressive therapies in the Czech Republic give a specific picture of their origin and development in these countries, which can also be more widely differentiated from the so-called developmental aspects. In the next chapter, the authors describe Art Therapy from a broader perspective in terms of its application with other art forms when working with the client (see the above-mentioned expressive therapies) and also when working with the client focusing exclusively on the application of art activities. In both approaches, it is a process of creation and subsequent interpretation of its course.

The chapter Art Therapy in the international context provides information on the application of art therapy in the United States and Europe in various facilities, institutions, educational opportunities, focus, goals, and approaches.

Within the topic Diagnostics in art therapy, the authors focused on the importance of a considered approach in the interpretation of its results in the interest of client protection and safety. We can agree that the perfection of the client's artistic activities is not evaluated, but instead how the client benefits from the given approach, how they felt during the art creation, what was pleasant and what was not and so on.

The chapter Directions in Art Therapy provides much information about the possibilities of art therapeutic approaches focusing on the client in terms of psychoanalysis, holistic understanding of the art therapeutic process, cognitive-behavioural aspect. It can be agreed that "an integratively oriented art therapist, in order to be able to apply the relevant parts of the theory to the client's problems, should have a perfect overview of all the theories mentioned."

Methods in Art Therapy contain a description of activities according to the experienced author S. Šicková – Fabrici, explaining specific approaches and the possibility of their application when working with the client.

One of the other main chapters is Art Therapy in Practice in the Czech Republic, which provides information on treatment options in the medical, social and pedagogical spheres. In this part of the paper, the so-called "inducing" techniques are supposed to arouse the client's sense of confidence, security, state of relaxation, remove the fear of artistic expression, and calm strong emotions.

The next part of the paper presents possible problems, techniques and approaches focused on working with clients with special educational needs, specifically for clients with hearing impairment, visual impairment, impaired communication skills, mental, physical, combined disabilities and educational problems.

As part of a practical demonstration using art therapy when working with a client with special needs, a restructuring method was chosen – called a picture, suitable for individuals with behavioural disorders with the possibility of various variations of its application.

In the next part – Research possibilities – description of the implementation of research methods in art therapy is supplemented by pictures. The approaches and findings also describe Work at the Clay Field Method, which provided information on traumatic experiences and "self-healing" resources in expressive therapies. The therapeutic process using the method "Work at the clay field" with a client with developmental trauma is described in a case study (20 meetings).

The chapters Play as a therapeutic tool in special education and Play Therapy contain a description of the meaning of play activity, the theory of child-centred games, types, application and description of techniques – Sandtray/Sandplay, Metaphors and Stories of Expressive Arts, drama in play therapy and board games in play therapy.

Metaphors and stories are used to discover, change, create and model concepts for a complex change in behaviour and strengthen relationships between parents and children. Within them, various theories apply, e.g. Cognitive-behavioral, Rogerian, Jungian, Adlerian and others. Identification with a story and metaphor can be suitable for clients with emotional problems to realize their behaviour and existence. In this part of the paper, there are several interesting topics and information about the possibilities of approaches in prevention and treatment. This part's end is a description of a case study from a therapeutic meeting conducted in 2018. It was a 13-year-old boy diagnosed with cerebral palsy. The case report contains a description of meetings with recommendations in practice and a description of non-directive play in a hospital environment. In Bibliodrama, where the book is the mediator of information, it provides a deeper understanding of the text through experience. The Bibliodrama finds a relatively wide application in the possibility to focus on the text, which is also the Pastoral Bibliodrama, Hagiodrama and Mimesis. A specific method of Bibliodrama is the work with biblical characters, having a conversation, creating scenes, and so on.

This paper presents a comprehensive case study with the application of biblical characters in the story with students with a detailed description of the course and results of the creative process during the meetings.

A relatively comprehensive part of the paper is The Creative Writing Method for people with multiple disabilities in the intervention program, which aims to develop and strengthen the person's communication skills, where the choice of activities is a crucial multisensory approach.

Research on "Me and my family", which aims to develop vocabulary, is focused on composing sentences from pre-selected words, developing creativity and increasing the level of communication abilities for the client. Instances of games with a detailed breakdown of their content, techniques and approaches and the client's reflection are inspiring.

It turns out that creative writing with many different variations and approaches has significant importance for clients with multiple disabilities in developing communication skills and overall development (literary comprehension, vocabulary development, communication skills).

## **Conclusion**

The monograph represents comprehensive professional material in the application of expressive therapies in people with specific educational needs. It provides several ideas for working with children, youth and adults, answers many questions when searching for new opportunities and approaches with these clients.

In addition to the therapeutic focus – counselling and diagnostic centres can be used as an occasional element of expressive therapies to enrich the learning material in schools and meetings within extracurricular activities. The findings in the

publication are clear and easily applicable, based on a detailed description of the course of expressive activities and experiences from working with the client within the research.

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# Information for authors



## Basic information about the JEP

*Journal of Exceptional People (JEP)* should be based on 2 twice a year publishing period in both electronic and traditional – printed form. To guarantee professional standards of the Journal we have applied to the front of special needs teachers, psychologists, therapists and other professionals in the U.S., Finland, Spain, Slovakia, Hungary, China, Russia, Poland and other countries. Above mentioned scientific journal aspires to be registered into the international database of impacted periodicals (Journal Citation Reports).

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