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**SPECIĀLĀ PEDAGOĢIJA**  
*Special Pedagogy*

## **PROFESSIONAL READINESS OF FUTURE SPECIAL EDUCATION TEACHERS FOR INCLUSIVE EDUCATION IN UKRAINE**

**Olena Martynchuk**

Borys Grinchenko Kyiv University, Ukraine

**Tatiana Skrypnyk**

Borys Grinchenko Kyiv University, Ukraine

**Mariia Maksymchuk**

Borys Grinchenko Kyiv University, Ukraine

**Nataliia Babych**

Borys Grinchenko Kyiv University, Ukraine

**Karina Biriukova**

Borys Grinchenko Kyiv University, Ukraine

**Abstract.** *The article is devoted to the problem of compliance of special education teachers training in Ukraine with the implementation of inclusive education in accordance with international standards. It was found that despite many years of inclusive policy experience in Ukraine, inclusive practice is not implemented properly. The assumptions about gaps in the staffing of inclusive education are made. The level of professional readiness among future special education teachers for practice in inclusive educational environment is investigated and analyzed in the article. The comprehensive questionnaire developed by the authors was used as a diagnostic tool in current study. The questionnaire was designed in accordance with the content of such educational guidelines as the “Professional Development Tool for Improving the Quality of Work of Primary School Teachers” and the “Profile of Inclusive Teachers”. The main professional readiness criteria for practice in inclusive educational environment among future teachers are defined: Interactions; Family and Community; Inclusion, Diversity, and Values of Democracy; Assessment and Planning; Teaching Strategies; Learning Environment; Professional Development. The developed questionnaire is aimed to identify the level of development of different professional readiness components, such as: theoretical-cognitive and practical-active. The results showed low and medium levels of professional readiness for practice in inclusive educational environment among future special education teachers, that is insufficient to meet the social demand for training specialists to work in the new professional conditions of inclusive education.*

*Correlation analysis revealed the leading role of the practical-active component in the system of professional training, which require increased attention to its practical component, based on both university practical training centers and pedagogical internship. The current study concludes on the necessity of transformation of professional training content for future special*

*education teachers in accordance with international scientific achievements in the field of providing quality services to children with special educational needs.*

**Keywords:** *inclusive practice, inclusive education teachers, professional readiness for practice in inclusive educational environment, special education teachers, the ISSA Pedagogical Standards.*

## **Introduction**

Educational system in Ukraine is currently being reformed as part of New Ukrainian School Concept realization, which provides an active implementation for inclusive education (Cabinet of Ministers of Ukraine [CMU], 2016). It gives rise to a social demand for training pedagogues, who are able to engage quickly and efficiently in professional activities in inclusive educational environment (Martynchuk, Skrypnyk, Naida, & Sofiy, 2020; Skrypnyk, Martynchuk, Klopota, Gudonis, & Voronsca, 2020).

Lack of consideration of the social demand during the development of professional training system for Special Education Program students leads to the problem, that educational institutions are inconsistently staffed with *professionals competent in the implementation of inclusive education*. One of the reasons for this situation is the content of educational programs, which does not fully cover such issues as: conditions of professional activity in educational institutions, as well as modern international requirements for teachers to be capable of effective professional activity in inclusive educational environment (Martynchuk, 2018).

Currently, the international scientific and educational space contains a sufficient amount of researches on what a modern teacher should be in order to work effectively in inclusive educational environment (Deppeler, Loreman, & Smith, 2015; European Agency for Development in Special Needs Education, 2012; Florian & Linklater, 2010; International Step by Step Association [ISSA], 2010; Takala, Pirttimaa, & Törmänen, 2009). There are also several studies (Al-Yagon & Margalit, 2001; Cole, 2005; Takala, Pirttimaa, & Törmänen, 2009), which emphasize on crucial role of abilities of special education specialists to provide effective support for children with SEN in educational process.

Ukraine has a fairly high level of awareness concerning the acceptance of inclusive values (European Research Association [ERA], 2012); developed theory of inclusive education (Kolupayeva, 2009; Kolupayeva & Taranchenko, 2016); clearly developed educational policy. Although, the implementation of effective inclusive practice is still not established in Ukraine, as evidenced by number of studies discussing the gap between policy and practice (Alishavskane, Onufrik, & Florian, 2019; Martynchuk, Skrypnyk, Sofiy, & Bahdanovich Hanssen, 2021). Studies show that the gap is linked with insufficient

level of training of special education teachers for inclusive education of children with special educational needs.

Solving this problem encourages Ukrainian scientists to find the ways to improve special education teachers training to work in conditions of inclusive education, based on international experience, and the ISSA Pedagogical Standards, in particular (ISSA, 2010). Results of the study “On the Implementation of the ISSA Pedagogical Standards and Their Impact on ECDE Policies and Practices in the Region of ISSA’s Network and Beyond (2001-2008)” proved the implementation of the ISSA Pedagogical Standards in pedagogical practice helps to improve the quality of learning and education for children with special educational needs (Howard, Tuna, Cincieli, Rajabova, Vonta, & Tankersley, 2010).

**The purpose of the study** is to investigate if the actual level of professional training for Special Education Program students meets the ISSA Pedagogical Standards, which enable teachers to realize successful professional activity in inclusive educational environment.

### **Literature Review**

There is a consensus among researchers, organizations, and politicians that the quality of education depends on well-educated and competent staff (Dumcius et al., 2014). The importance of highly qualified staff is recognized in the “New Priorities for European Cooperation in Education and Training” at European level (European Commission, 2015).

Currently, there is a sufficient amount of research results that provide a scientific basis for theoretical understanding of the phenomenon of special education specialists training for professional activities in inclusive educational environment, in particular: theoretical, methodological and philosophical aspects of inclusive education are outlined (Loreman, Deppeler, & Harvey, 2010; Bahdanovich Hanssen, Hansén, & Ström, 2021; Kolupayeva & Taranchenko, 2016); the ways of professional training, retraining and advanced training for teachers and special teachers in the field of special education in inclusive educational environment are revealed (Al-Yagon & Margalit, 2001; Florian & Pantić, 2013; European Agency for Development in Special Needs Education [EADSN], 2012; Tankersley, Braikovich, & Handze, 2010; Loreman, 2017; Martynchuk, 2018). Present studies indicate certain general and professional competencies required for the implementation of effective inclusive education. There are two studies, considered to be the most fundamental in this field. Firstly, the research conducted by the European Agency for Development in Special Needs Education within the project “Teacher Education for Inclusion” [TE4I] in



2009-2012 (European Agency for Development in Special Needs Education [EADSN], 2012), which resulted in the development of “Profile of Inclusive Teachers”, consisting of competencies, such as: Valuing Learner Diversity, Supporting All Learners, Working with Others, Personal Professional Development. Secondly, the research conducted by ISSA during the development of the ISSA Pedagogical Standards (ISSA, 2010; Tankersley, Braikovich, & Handze, 2010), which resulted in the development of ISSA quality pedagogy principles, covering seven target areas (Interactions, Family and Community, Inclusion, Diversity, and Values of Democracy, Assessment and Planning, Teaching Strategies, Learning Environment, Professional Development). ISSA quality pedagogy principles, based on the latest research in the field of quality pedagogy, identify ways to develop professional skills and meet international trends in the field of providing educational services to children 3-10 years old, and they are consistent with the research results within the project “Teacher Education for Inclusion” (EADSN, 2012).

Thus, the contextual review of the studies on modern requirements for inclusive education teachers is the basis for researchers who investigate the compliance of future teachers national training with current trends and present international requirements for specialists to be capable of effective professional activity in inclusive educational environment.

## **Methodology**

A questionnaire, developed by us on the basis of “Professional Development Tool for Improving the Quality of Work of Primary School Teachers” (Tankersley, Braikovich, & Handze, 2010), was administered in current study to investigate the level of professional readiness for practice in inclusive educational environment among Special Education Program senior students. The questionnaire is consistent with “Profile of Inclusive Teachers” developed within the project “TE4I” (EADSN, 2012).

The choice of research methodology is based on both the characteristics of professional activity of teachers of inclusive educational institution, and ISSA quality pedagogy principles (ISSA, 2010). The developed questionnaire for future inclusive education teachers is based on the professional readiness criteria, given in the “Professional Development Tool for Improving the Quality of Work of Primary School Teachers”, which are: Interactions, Family and Community, Inclusion, Diversity, and Values of Democracy, Assessment and Planning, Teaching Strategies, Learning Environment, Professional Development. It should be noted, that defined criteria support the important points of practice, such as: the compliance of education with a child’s developmental level, individual approach, and understanding that learning takes place in the process of interaction,

as it is considered as a dialogue between children and adults, between children themselves, which is characterized by respect for each other, encouraging children and ensuring independence for them.

An important role in professional readiness development of special education teachers for practice in inclusive educational environment play components, characterized by *knowledge* about the object of professional activity (theoretical-cognitive component) and *skills* for qualitative and successful professional activity in inclusive educational environment (practical-active component).

To study the theoretical-cognitive and practical-active components of the professional readiness of future special education teachers we designed an inventory, based on the criteria of “Professional Development Tool for Improving the Quality of Work of Primary School Teachers” (ISSA, 2010), taking into consideration the national context (conditions of learning, education, and development of children with special educational needs in national educational environment), as well as, students’ point of view. The questionnaire examined future special education teachers’ self-reports on their knowledge about inclusive educational process and the level of their professional skills development.

The questionnaire contains two sections for the evaluation of theoretical-cognitive and practical-active components. Each section has seven scales: Interactions, Family and Community, Inclusion, Diversity, and Values of Democracy, Assessment and Planning, Teaching Strategies, Learning Environment, Professional Development, according to the seven criteria of the “Professional Development Tool for Improving the Quality of Work of Primary School Teachers” (ISSA, 2010). Each scale has from 20 to 60 statements with 5 answer options: “never or very rarely” (0 points), “rarely” (1 point), “from time to time” (2 points), “often” (3 points), “very often or always” (4 points). Scores were calculated for each of the seven criteria for the two sections separately.

To facilitate comparisons between scales the score on each scale was divided by the coefficient (the maximum score for the scale is divided by 100). Totaling the final scores on each scale the level of the development of each professional readiness criterion for practice in inclusive educational environment was obtained. Thus, 76-100 points indicated high level; 26-75 points indicated medium level; 0-25 points indicated low level.

The total sample contains 300 senior students of Special Education (Speech Therapy) Program. Among them, 260 fourth-year bachelor’s degree students and 40 master’s degree students from 6 Ukrainian universities (Borys Grinchenko Kyiv University, National Pedagogical Dragomanov University, Kamianets-Podilskyi National Ivan Ohienko University, Pavlo Tychyna Uman State

Pedagogical University, V.O.Sukhomlynskysi National University of Mykolaiv, Oles Honchar Dnipropetrovsk National University).

## Research Results

The results obtained in current study were analyzed and interpreted to identify the level of professional readiness of future special education teachers for practice in inclusive educational environment in accordance with the ISSA Pedagogical Standards.

The survey results showed a low level of theoretical-cognitive component of professional readiness for practice in inclusive educational environment. Thus, most students have a low level of knowledge and understanding of theoretical basis for organization and implementation of inclusive education in accordance with ISSA international standards (Table 1).

***Table 1 The Developmental Level of Theoretical-cognitive Component of Professional Readiness for Practice in Inclusive Educational Environment among Special Education Program Students***

Criteria	Developmental level (percentage)		
	High	Medium	Low
Interactions	-	25	75
Family and Community	-	16	84
Inclusion, Diversity, and Values of Democracy	-	19	81
Assessment and Planning	-	18	82
Teaching Strategies	-	17	83
Learning Environment	-	26	74
Professional Development	-	34	66
General result		22	78

Thus, 78% of respondents demonstrated a low level of knowledge and understanding of qualitative pedagogical practice in inclusive educational environment; 22% of respondents showed a medium level of knowledge and understanding of quality pedagogy in the XXI century, which determines the principles of quality education for all children, including children with special educational needs. None of the respondents demonstrated *a high level*, characterized by knowledge and understanding of quality of practice, as well as awareness of their own active professional roles in an educational institution in order to promote changes in educational process to ensure the quality of educational services to all children, according to the “Professional Development Tool for Improving the Quality of Work of Primary School Teachers” (ISSA,

2010). *A medium level* of theoretical-cognitive component of professional readiness for practice in inclusive educational environment is characterized by knowledge and understanding on how to put into daily practice the maximum opportunities of learning, education, and development for children with special educational needs. *A low level* of theoretical-cognitive component of professional readiness for practice in inclusive educational environment is characterized by lack of knowledge on creating of quality practice that meets the needs of children and their families.

The correlation analysis results for theoretical-cognitive professional readiness component among Special Education Program students are shown below. Spearman's rank correlation coefficient was used for correlation analysis.

The correlations within the criteria of professional readiness of future special education teachers for practice in inclusive educational environment, according to the ISSA pedagogical standards, were investigated (Table 2).

**Table 2 Correlation Analysis of Criteria of Theoretical-cognitive Professional Readiness Component for Practice in Inclusive Educational Environment, According to the ISSA Pedagogical Standards**

	Interactions	Family and Community	Inclusion, Diversity, and Values of Democracy	Assessment and Planning	Teaching Strategies	Learning Environment	Professional Development
Interactions	-	0,192***	0,339***	0,171***	0,376***	0,346***	0,133**
Family and Community	0,192***	-	0,335***	0,419***	0,216***	0,331***	0,266***
Inclusion, Diversity, and Values of Democracy	0,339***	0,335***	-	0,321***	0,387***	0,322***	0,188***
Assessment and Planning	0,171***	0,419***	0,321***	-	0,391***	0,259***	0,316***
Teaching Strategies	0,376***	0,216***	0,387***	0,391***	-	0,345***	0,212***
Learning Environment	0,346***	0,331***	0,322***	0,259***	0,345***	-	0,197***
Professional Development	0,133**	0,266***	0,188***	0,316***	0,212***	0,197***	-

\*\* Sig. level  $p < 0.05$

\*\*\* Sig. level  $p < 0.01$

The correlation analysis results on criteria of theoretical-cognitive professional readiness component for practice in inclusive educational environment among Special Education Program students showed direct correlation within all criteria of the component. It points out the necessity of providing knowledge for students concerning all the criteria.

Thus, quantitative and qualitative analysis results on theoretical-cognitive component of professional readiness for practice in inclusive educational environment among Special Education Program students confirmed the necessity of content transformations in professional training for future special education teachers, according to both international scientific achievements in the field of providing quality services to children with special educational needs, and a social demand for a special education teacher capable of effective professional activity in inclusive educational environment.

The survey results indicated a low level of practical-active component of professional readiness for practice, namely, skills and abilities for organization and implementation of inclusive education, in accordance with ISSA international standards (Table 3).

**Table 3 The Developmental Level of Practical-active Component of Professional Readiness for Practice in Inclusive Educational Environment among Special Education Program Students**

Criteria	Developmental level (percentage)		
	High	Medium	Low
Interactions	-	31	69
Family and Community	-	28	72
Inclusion, Diversity, and Values of Democracy	-	25	75
Assessment and Planning	-	31	69
Teaching Strategies	-	23	77
Learning Environment	-	40	60
Professional Development	-	38	62
General result		31	69

Thus, 69% of respondents demonstrated a low level of skills of qualitative pedagogical practice in inclusive educational environment; 31% of respondents showed a medium level of abilities to implement the quality pedagogy principles of the XXI century and technologies of inclusive education of children with special educational needs. None of the respondents demonstrated a high level of practical-active component of professional readiness for implementation of inclusive education for children with special educational needs. According to the “Professional Development Tool for Improving the Quality of Work of Primary School Teachers” (ISSA, 2010), *a high level* of practical-active component of

professional readiness for practice in inclusive educational environment is characterized by several skills and abilities, such as: empowering children, families and local communities in determining and implementing an individual educational trajectory of a child with special educational needs; promoting children's understanding of democratic values, as well as, developing their life skills in a world of diversity; evaluating children's special educational needs and planning their educational process in inclusive educational environment; knowing the teaching methods for cognitive, emotional and social development of children with special educational needs; creating a safe inclusive environment; and a continuous willingness to improve the professional skills in accordance with the requirements of modern world. *A medium level* of practical-active component of professional readiness for practice in inclusive educational environment is characterized by skills and abilities to realize the inclusive education technologies promoting the development of children with special educational needs and the use of their potential in learning environment of inclusive educational institution. *A low level* of practical-active component of professional readiness for practice in inclusive educational environment is characterized by lack of skills and abilities to ensure the quality of practice, that meets the needs of children and their families.

The correlation analysis results for practical-active professional readiness component among Special Education Program students are shown below. Spearman's rank correlation coefficient was used for correlation analysis.

The correlations within the criteria of professional readiness of future special education teachers for practice in inclusive educational environment, according to the ISSA pedagogical standards, were investigated (Table 4).

The correlation analysis results on criteria of practical-active professional readiness component for practice in inclusive educational environment among Special Education Program students showed direct correlation within all criteria of the component. It demonstrates that improving of abilities and skills within all the outlined criteria is highly required for students.

Thus, quantitative and qualitative analysis results on practical-active component of professional readiness for practice in inclusive educational environment among Special Education Program senior students confirmed the necessity of transformations in professional training technologies for future special education teachers, as well as creation of educational environment for professional training in higher education institutions, considering the international and national experience in the field of vocational education, and the social demand for a modern special education teacher capable of effective professional activity in inclusive educational environment of the New Ukrainian School.

**Table 4 Correlation Analysis of Criteria of Practical-active Professional Readiness Component for Practice in Inclusive Educational Environment, According to the ISSA Pedagogical Standards**

	Interactions	Family and Community	Inclusion, Diversity, and Values of Democracy	Assessment and Planning	Teaching Strategies	Learning Environment	Professional Development
Interactions	-	0,410***	0,485***	0,427***	0,367***	0,385***	0,424***
Family and Community	0,410***	-	0,439***	0,358***	0,300***	0,351***	0,382***
Inclusion, Diversity, and Values of Democracy	0,485***	0,439***	-	0,609***	0,313***	0,581***	0,561***
Assessment and Planning	0,427***	0,358***	0,609***	-	0,384***	0,721***	0,476***
Teaching Strategies	0,367***	0,300***	0,313***	0,384***	-	0,324***	0,223***
Learning Environment	0,385***	0,351***	0,581***	0,721***	0,324***	-	0,652***
Professional Development	0,424***	0,382***	0,561***	0,476***	0,223***	0,652***	-

\*\* Sig. level  $p < 0.05$

\*\*\* Sig. level  $p < 0.01$

Table 5 presents the results of correlation analysis between theoretical-cognitive and practical-active components of professional readiness for practice in inclusive educational environment among Special Education Program students. Spearman's rank correlation coefficient was used for the statistical analysis.

The results indicate direct correlation between theoretical-cognitive and practical-active components on almost all the criteria. Although, there is no significant correlation between "Family and Community" criterion of the theoretical-cognitive component and the criteria "Family and Community" (0,110), as well as "Professional Development" (0,030) of the practical-active component (Table 5).

Thus, the intrasystem connections between the structural components of professional readiness turned to be moderate and strong with the leading role of the practical-active component. The correlation analysis results showed a possible impact on the theoretical-cognitive component by developing the practical-active component of professional readiness among future special education teachers for practice in inclusive educational environment.

**Table 5 Correlation Analysis of Practical-active and Theoretical-cognitive Components of Professional Readiness for Practice in Inclusive Educational Environment among Special Education Program Students**

		theoretical-cognitive component						
		Interactions	Family and Community	Inclusion, Diversity, and Values of Democracy	Assessment and Planning	Teaching Strategies	Learning Environment	Professional Development
practical-active component	Interactions	0,253***	0,204***	0,143**	0,148**	0,267***	0,215***	0,189***
	Family and Community	0,254***	0,110*	0,162***	0,159***	0,342***	0,327***	0,316***
	Inclusion, Diversity, and Values of Democracy	0,323***	0,131**	0,243***	0,177***	0,234***	0,355***	0,226***
	Assessment and Planning	0,307***	0,237***	0,290***	0,203***	0,207***	0,358***	0,174***
	Teaching Strategies	0,251***	0,212***	0,231***	0,218***	0,252***	0,246***	0,194***
	Learning Environment	0,361***	0,201***	0,304***	0,254***	0,307***	0,333***	0,167***
	Professional Development	0,258***	0,030*	0,264***	0,157***	0,238***	0,153***	0,192***

\* Sig. level  $p > 0.1$

\*\* Sig. level  $p < 0.05$

\*\*\* Sig. level  $p < 0.01$

## Conclusions

The study results allow us to conclude that professional training of special education specialists, based on the nosological point of view does not meet modern requirements for both a competent pedagogue of the XXI century (the ISSA Pedagogical Standards), and inclusive education teacher (Teacher Education for Inclusion, EADSN, 2012). Therefore, current professional training system does not provide enough opportunities for future special education specialists to realize successful professional activity in inclusive educational environment.

The actual conditions of higher education with lack of specially organized work on the development of professional readiness for practice in inclusive educational environment in accordance with international requirements, proved to show low and medium levels of professional readiness for practice in inclusive



educational environment among most senior students, that is insufficient to meet the social demand for vocational training of specialists to work in the new professional environment of inclusive education.

Correlation analysis results turn to be quite informative for the development of professional training strategy for future inclusive education teachers, as they identified the leading role of the practical-active component in vocational training system. The study points out that increased attention should be paid to the practical part of vocational training, based on both university centers for practical training, and pedagogical internship.

To conclude, the study results indicate the necessity of content transformations in professional training for Special Education Program students to practice in inclusive educational environment, considering the characteristics of the practice at professional services global market. Implementation of the above issues requires professional training system in higher education institutions to be flexible in order to update and/or improve regularly the content of educational programs, considering actual trends and modern requirements for professional training of special education specialists for practice in inclusive educational environment.

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