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## **Students' Perception of Teachers' Professional Competence in Working with Pupils with Intellectual Disabilities**

### **Abstract**

The paper presents the results of research on the opinions of students of preschool and early childhood education (PECE) and special education (SE) on the importance of having various specific professional competencies by a teacher of inclusive education. The study used the diagnostic survey method and involved 202 students from both fields of study. Five categories of professional competencies were analysed: evaluative, psychological, innovative, communicative, and substantive-methodical. Both groups state that a high level of professional competence is especially expected when working with a pupil with an intellectual disability (ID).

**Keywords:** *teachers' competence, students of educational sciences, pupils with intellectual disabilities (ID), inclusive education*

### **Introduction**

The professional competence of a teacher is usually understood as a qualification needed to perform the profession effectively and as a range of entitlements. They are defined as a harmonious composition of knowledge, skills and beliefs necessary for effective teaching, upbringing, and care at school (Strykowski, 2005). Moreover, it is emphasised that competencies are a complex combination of diverse knowledge, skills, understanding, values, attitudes and desires that lead to a person's effective performance in the world in a specific field (Deakin Crick, 2008; Vitello

et al., 2021). Teaching competence is also an ongoing process constantly assessed through interactions with colleagues, students, parents and others (Bukvić, 2014; Rabi & Zulkefli, 2018).

During their university education, future teachers must develop the competencies necessary to provide inclusive education with appropriate tools and strategies that enable the education of all pupils, regardless of their level of functioning or disabilities. Appropriate knowledge and skills are needed to respond appropriately to diversity and to develop appropriate methods (Arvelo-Rosales et al., 2021). Students generally know the characteristics of teachers' socio-emotional competencies and consider them important but show somewhat less confidence in their own teaching competencies (Koludrović & Mrsić, 2021). There is a belief that initial teacher education must be treated as a step towards long-term professional development and preparation for the profession and that professional competence can only be truly mastered through practice (RFPC, 2021).

## **Research Problem**

Our research aimed to determine how students of educational sciences: PECE and SE evaluate the importance/relevance of specific teachers' competencies in working with a pupil with ID and without disabilities (NDP). These perceptions were considered as a projection of the ideas of the surveyed students about the difficulties of conducting educational activities in an inclusive classroom. They allow characterising the expectations of professional preparation for working in such a classroom and reveal the specific results of education in both fields of study. The study sought to answer the following questions:

- What is the opinion of the students about the professional competencies (evaluative, psychological, innovative, communicative, and substantive-methodical) in teaching pupils with ID and NDP?
- How are the professional competencies of the teacher in teaching pupils with ID and NDP perceived according to the field of study of surveyed students?

## **Research Focus**

The proportion of students with SEN in mainstream education in Poland is steadily increasing. According to 2019/2020 data, at the primary school stage 67% of students with SEN study in mainstream schools, and 33% in special schools. The national legislation does not define SEN, which is understood broadly as depend-

ing on a pupil's needs. The need to offer support may result from, e.g., a disability (including ID), specific learning difficulties, social maladjustment, behavioural or emotional disorders, long-lasting illness, traumatic situations, or special talents (SEP, 2020). According to the CRPD (2006, Art. 24): "Persons with disabilities can access an inclusive, quality and free primary education and secondary education on an equal basis with others in the communities in which they live". It may require special competencies and specialist skills in methodological, didactic and psycho-social areas for all teachers. Among the competencies necessary for special and general teachers to effectively educate students with disabilities in inclusive settings are those related to teachers' attitudes and belief systems (Dingle et al., 2004), and a successful inclusive education programme depends on teachers' competency to work with students with disabilities in the classroom (Rabi & Zulkefli, 2018).

Learning about the perceptions of the competencies necessary for the teacher's work in those preparing for the profession is important and can contribute to designing new, more optimal training models (Pérez Navio et al., 2019). Research on teachers' competencies from the perspective of future teachers is conducted in many countries (Lillvist et al., 2014; Hus & Koprivnik, 2016; Lipnická et al., 2019; Pérez Navio et al., 2019).

## **Research Methodology**

### **General Background of Research**

The research problem was formulated as a question about the differences in the opinions of students of PECE and SE on the importance of having specific professional competencies by a teacher working with NDP and a pupil with ID.

Many different classifications of teacher professional competencies are known. In the present research, a classification was used based on assessing the importance of many specific competencies carried out by professionally active teachers. Exploratory factor analysis using the principal components method with Varimax rotation was used to determine the five dimensions of measured competencies (Byra & Kazanowski, 2015).

The objectives of the research were the following: (1) analysis of students' opinions about professional competencies: evaluative (EC), psychological (PC), innovative (IC), communicative (CC), and substantive-methodical (SMC) to teach children with ID and without disabilities; (2) analysis perception of teacher's

professional competence to teach children with ID and NDP according to the field of study of the students surveyed (1.SE, 2. PECE).

The attempt to answer the formulated research problems seems interesting for cognitive and practical reasons. Transformations in education related to the progressive dissemination of inclusive education are closely linked to the need to prepare future teachers. Knowledge and skills needed to conduct effective work with pupils requiring additional support are essential in the education of all teachers, which will help strengthen the activities for disseminating the inclusive education system.

## **Research Sample**

The research involved 202 students: 100 students of SE (94 females and 6 males) and 102 students (101 females and one male) of PECE. The mean age of students was 21.81 (SE) and 21.01 (PECE). Most of them did not have persons with disabilities in their families (74.75%), and only 22% had experienced relationships with such persons in different education periods.

## **Instruments and Procedures**

The research was carried out using a diagnostic survey method. A two parts questionnaire was used as the research technique: 1) Teachers' Professional Competence Perception Questionnaire (Byra & Kazanowski, 2015), and 2) questions allowing for the characteristics of the study sample. Access to the survey questionnaire was given to students of SE and PECE at UMCS in Lublin and UWM in Olsztyn. The research was conducted from October 2020 to November 2021. The students were informed about the purpose of the study, and that participation was optional.

## **Data Analysis**

Data were analysed using Statistica 13.3. Significance analyses of differences between means were performed using Student's t-test for independent samples. The significance level was set a priori at  $p \leq 0.05$ .

## **Research Results**

The presentation of the research results includes both a general comparison of the views of the students surveyed on the importance of the teacher's professional

competence in working with NDP and pupils with ID (Table 1) and a comparison of views on this topic taking into account the field of study (Tables 2 and 3).

## **Students' Opinions on Professional Competencies**

Our focus turned to students' opinions about professional competencies important for working with NDP and those with ID

**Table 1.** Comparison of teachers' professional competencies in working with pupils without disabilities and pupils with ID in the opinions of students of PECE and SE

Categories of professional competencies of the teacher	Work with the pupil with non-disabled pupil (NDP)		Work with the pupil with ID (PID)		t	p
	M <sub>ndp</sub>	SD <sub>ndp</sub>	M <sub>pid</sub>	SD <sub>pid</sub>		
EC	33.48	3.80	35.31	3.70	-9.529	0.000
PC	42.03	2.75	43.13	2.52	-8.760	0.000
IC	37.50	4.46	39.15	4.73	-7.815	0.000
CC	32.52	2.37	33.63	2.26	-8.559	0.000
SMC	44.09	4.08	45.23	4.19	-6.114	0.000

Symbols: M<sub>ndp</sub> – mean of competency values in work with a non-disabled student, SD<sub>ndp</sub> – standard deviation of assessment of competency values in work with a non-disabled student, M<sub>pid</sub> – mean of competency values in work with a student with ID, SD<sub>pid</sub> – standard deviation of assessment of competency values in work with a student with ID

The importance of having competencies in the evaluation of the educational process was rated higher ( $p=0.000$ ) by the students surveyed when asked about working with a student with ID ( $M_{pid}=35.31$ ) than when asked about working with an NDP ( $M_{ndp}=33.48$ ).

In the case of psychological competencies, the students also believed that a high level of these competencies would play a greater role ( $p=0.000$ ) when working with a pupil with ID ( $M_{pid}=43.13$ ) than when working with NDP ( $M_{ndp}=42.03$ ). It can be concluded that students perceive the need for the teacher to have a specific set of personal qualities (e.g., creativity, tolerance, stress resistance). These would allow them to avoid the consequences of excessive workload accompanying working with such a child. Moreover, it seems that students expect difficult situations to occur and see in a higher level of psychological competence a chance to overcome them.

Innovative competence was assessed by students as more important ( $p=0.000$ ) in the case of teacher's work with pupils with ID ( $M_{pid}=39.15$ ) than with NDP ( $M_{ndp}=37.50$ ). The students perceive the need for non-standard interventions, individually selected and accompanied by original teaching resources. This belief may result from the assessment of the cognitive limitations of the child with ID, his/her disharmonious development, and communication difficulties.

The fact that communicative competencies are also considered particularly important in working with a pupil with ID is convinced by another analysis of the research results. The students believe that these competencies should be higher ( $p=0.000$ ) when working with a pupil with ID ( $M_{pid}=33.63$ ) than when working with NDP ( $M_{ndp}=32.52$ ). This belief may consist of perceptions about the need for knowledge of alternative methods of communication or awareness of the limitations of using symbolic communication to regulate child behaviour.

The last category of competencies was substantive-methodical ones. The students perceive the need for a higher level of substantive-methodical competencies ( $p=0.000$ ) by a teacher working with a pupil with ID ( $M_{pid}=45.23$ ) than those required to work with NDP ( $M_{ndp}=4.09$ ). Students know the need for good knowledge of special working methods or medical and psychological issues.

### **Perception of teacher's professional competence to teach pupils with ID and NDP according to the field of study of the surveyed students**

The question was raised about the teacher's professional competencies to teach pupils with and without disabilities according to the field of study of the surveyed students.

Table 2 presents an analysis of the research results by field of study. Regardless of whether the students studied SE or PECE, they agreed that a high level of professional competence is more important when working with PID than when working with NDP.

The next analysis (Table 3) presents differences between the surveyed groups of students in their opinions about the teacher's competence in working with NDP and PID. The reference of the perceived competencies to the level of the pupil's intellectual ability differentiates to a greater extent the ideas of the surveyed students about their professional role than studying the chosen field of study. Only two statistically significant differences due to this criterion were noted. Students of PECE were more convinced than students of SE of the need for a teacher working

**Table 2.** Comparison of opinions on teachers' professional competencies in working with pupils without disabilities and with ID in groups of SE students and PECE students

Categories of professional competencies of the teacher	Students of SE						Students of PECE					
	NDP		PID		t	p	NDP		PID		t	p
	M	SD	M	SD			M	SD	M	SD		
EC	33.09	4.10	34.97	3.84	-6.226	0.000	33.82	3.46	35.64	3.56	-7.411	0.000
PC	41.83	2.75	42.93	2.56	-5.549	0.000	42.23	2.75	43.33	2.47	-7.030	0.000
IC	37.15	4.51	38.47	5.19	-4.418	0.000	37.84	4.40	39.82	4.15	-6.656	0.000
CC	37.15	4.51	38.47	5.19	-4.418	0.000	32.60	2.53	33.63	2.50	-6.003	0.000
SMC	43.48	4.28	44.90	4.34	-4.988	0.000	44.70	3.79	45.56	4.03	-3.605	0.001

Symbols: NDP – working with non-disabled pupils, PID – working with pupils with ID, M – mean, SD – standard deviation

**Table 3.** Comparison of SE and PECE students' opinions on teacher's professional competencies in working with non-disabled pupils and in working with pupils with ID

Categories of professional competence of the teacher	Working with NDP						Working with PID					
	SE		PECE		t	p	SE		PECE		t	p
	M <sub>p</sub>	SD <sub>p</sub>	M <sub>n</sub>	SD <sub>n</sub>			M <sub>p</sub>	SD <sub>p</sub>	M <sub>n</sub>	SD <sub>n</sub>		
EC	33.09	4.10	33.82	3.46	-1.430	0.155	34.97	3.84	35.64	3.56	-1.282	0.201
PC	41.83	2.75	42.23	2.75	-1.023	0.308	42.93	2.56	43.33	2.47	-1.140	0.256
IC	37.15	4.51	37.84	4.40	-1.106	0.270	38.47	5.19	39.82	4.15	-2.050	<b>0.042</b>
CC	32.44	2.20	32.60	2.53	-0.473	0.637	33.63	2.00	33.63	2.50	0.008	0.994
SMC	43.48	4.28	44.70	3.79	-2.138	<b>0.034</b>	44.90	4.34	45.56	4.03	-1.119	0.265

with NDP to have high substantive and methodical competence ( $p=0.034$ ) and to have high innovative competencies ( $p=0.042$ ). No significant differences were observed in terms of assessing the importance of other categories of competence.

## **Discussion**

One of the most important factors for students' school success is the ability of teachers to teach effectively (McDonald Connor et al., 2005). The required competencies of a teacher in inclusive schools are very diverse and include, among

others, detailed subject knowledge, communication, and social competencies. The present study attempts to outline opinions on the important competencies of a teacher teaching students with and without ID from the perspective of PECE and SE students at selected Polish universities. The group of SE students surveyed is distinguished by its contact with people with disabilities in different living environments. Therefore, this is a factor that should be considered when discussing the study's results, as it may indicate different conditions and a variety of ways of developing professional competencies in both studied groups.

Based on the conducted research, it may be concluded that:

1. The groups surveyed perceive significant differences in the requirements for professional competencies in teachers working with NDP and PID. They agree that a high level of professional competencies is expected in the second group. It is supported by research that reports that teachers (both general and special) recognise that working with PID requires specific specialist knowledge in assessment, procedural matters, and legal bases, and special knowledge of disability and working methods competencies in teaching inclusive education is important in order to achieve successful inclusion for PID in school (Dingle et al., 2004; Rabi & Zulkefli, 2018).

2. PECE students more strongly emphasise the need for a high level of substantive and methodical competencies when working with NDP compared to SE students. In the case of teaching learners with ID, there is a conviction of the priority of work of a rehabilitative, therapeutic, or upbringing nature, of the need to teach practical and social skills needed in everyday life over the curriculum implementation. Pupils with moderate and severe ID in Poland follow a curriculum that is different from that of other school pupils. PECE students perceive a higher need for high innovative competencies for a teacher working with PID compared to SE students. These students may believe that there is a greater need to change the standard procedures, use special methods, or discover ways of dealing with the pupil that would effectively overcome his limitations.

Interpersonal and collaborative competencies are essential when working with other professionals and families. Universities that train future teachers need to work together to ensure that appropriate educational models are implemented – models that include interaction with SEN pupils (Dingle et al., 2004; Arvelo-Rosales et al., 2021). Some mainstream school teachers believe that inclusion requires a high level of teaching competence, knowledge of different types of SEN children, and the practical teaching strategies needed to teach them effectively in mainstream classrooms (Hornby, 2015).



The analysis of the research findings should also consider the risks resulting from the “stereotyping” of the professional role of a teacher working with PID, shaped even before the start of the students' education. The belief in the need for higher competencies may be connected with the expectation of greater problems in education and the need to look for original strategies of interaction, which may be conducive to the activation of mechanisms of the self-fulfilling prophecy (The pygmalion effect) (Woodcock & Vialle, 2011) or be connected with the declared lack of adequate qualifications and unwillingness to work with such pupils. On the other hand, it would be difficult for SE students to attribute “unawareness” or “lower awareness” of problems related to the education of PID compared to students of PECE. The lower level of perceived competence in this group may be related to a different assessment of the availability of resources and working methods used in SE than in the case of students of PECE, which may make the need to seek solutions to emerging difficulties quickly satisfied.

## **Conclusions**

The consensus between the two groups of students on teachers' professional competencies revealed in this study is particularly important in the context of the required collaboration between teachers and specialists in inclusive education. Similarities in assessing the importance of different categories of competencies should foster good communication and assist in setting goals (Shin et al., 2016). Recognising the positive relationship between skills for effectiveness in professional roles in working with NDP and PID allows us to be optimistic about the good performance of graduates from both studies in inclusive education settings.

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