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Teacher (Indirect) Cognition of Students at a Younger School Age. Summary of Research Findings

Nauczycielskie (pośrednie) poznanie uczniów w młodszym wieku szkolnym. Komunikat z badań

Summary: The article is devoted to teacher cognition of students at a younger school age. It refers to indirect cognition, which can be located between scientific and clinical cognition. It is characterized by the stages from initial cognition through symptomatic and causal cognition to the synthetic one. It also presents the factors that hamper teachers' cognition.

The article likewise presents the results of research conducted among a group of early childhood education teachers and their students. The research refers to teacher cognition in several areas: students' attitude to learning, their participation in lessons, individual perception skills, perception skills in relation to the peer group, as well as students' attitudes towards tasks, and their social behaviour. The image of teacher cognition that emerges from the conducted analyses indicates high compatibility of assessment results in relation to very good students, and high incompatibility of assessment results in relation to students with learning difficulties and special educational needs.

Such a diversity may indicate the absence of temporary and substantial modification of the preliminary data and the lack of progression of teacher cognition – its blockage at the stage of symptomatic cognition and the "labelling" of students.

Streszczenie: Artykuł jest poświęcony nauczycielskiemu poznaniu uczniów w młodszym wieku szkolnym. Odnosi się do poznania pośredniego, które można ulokować między poznaniem naukowym a klinicznym. Charakteryzuje stadia nauczycielskiego poznania od poznania wstępnego przez poznanie objawowe i przyczynowe po syntetyczne. Przedstawia czynniki utrudniające nauczycielskie poznanie.

Artykuł prezentuje ponadto wyniki badań przeprowadzonych wśród grupy nauczycieli i uczniów edukacji wczesnoszkolnej. Badania odnoszą się do nauczycielskiego poznania w kilku obszarach: stosunku uczniów do nauki, ich udziału w lekcjach, zdolności percepcyjnych indywidualnych i na tle klasy, postawy uczniów wobec zadań oraz zachowań społecznych. Obraz nauczycielskiego poznania wyłaniający się z przeprowadzonych analiz świadczy o dużej zgodności nauczycielskich ocen w stosunku do uczniów bardzo dobrych oraz dużej niezgodności ocen w odniesieniu do uczniów z trudnościami w uczeniu się oraz ze specjalnymi potrzebami edukacyjnymi. Takie zróżnicowanie może świadczyć o braku czasowej i merytorycznej modyfikacji „pierwszych danych" oraz braku stadialności nauczycielskiego poznania – jego zatrzymaniu na etapie poznania objawowego oraz „etykietowaniu" uczniów.

Introduction

Daily school situations are an important source of knowledge about the pupil, but a routine treatment of the subject raises concerns. Namely, conclusions are often drawn on the basis of preliminary data on the learner and then cognitive inertia leads to the formulation of simplified judgments consisting in the so-called labelling of pupils (Ablewicz, 2004). Within the framework of teaching cognition, one can distinguish its individual types: scientific, clinical and professional (Kunowski, 1961). Scientific cognition has a discursive

character and proceeds from the analysis of facts and phenomena to a conclusion which is based on methodological rigour and becomes a basis of scientific knowledge. Clinical cognition is similar to the scientific one, but with a notable increase in the role and importance of specialist cognition based on the use of standardised diagnostic tools. Professional cognition, on the other hand, is intermediate in nature, namely, located between scientific and clinical cognition.

The specificity of teacher cognition is largely due to the involuntary, fragmented and subjective nature of judgment (Kunowski, 1961; Szuman, 1947). In the process of teacher cognition, four stages can be distinguished (Diagram 1).
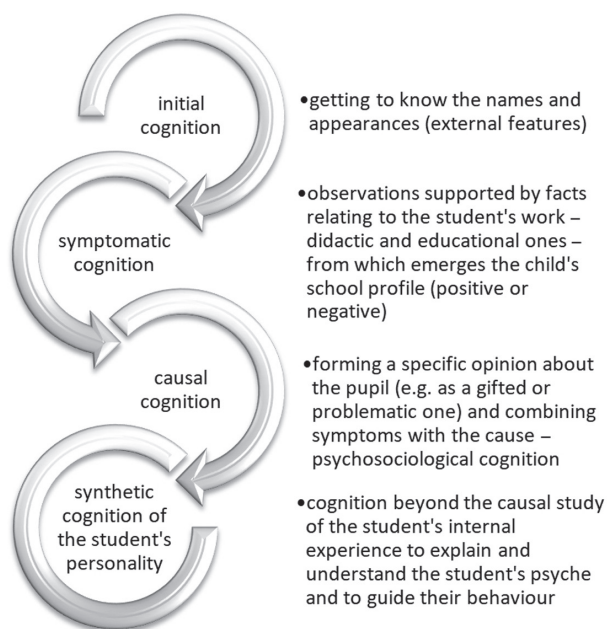

initial cognition
• getting to know the names and appearances (external features)

symptomatic cognition
• observations supported by facts relating to the student's work – didactic and educational ones – from which emerges the child's school profile (positive or negative)

causal cognition
• forming a specific opinion about the pupil (e.g. as a gifted or problematic one) and combining symptoms with the cause – psychosociological cognition

synthetic cognition of the student's personality
• cognition beyond the causal study of the student's internal experience to explain and understand the student's psyche and to guide their behaviour

Diagram 1.
Stages of teacher cognition.
Source: own study on the basis of Kunowski, 1961, pp. 50–63.

Initial cognition consists in learning about the external characteristics of the student, while symptomatic cognition is built on the recognition of their school and extracurricular activities in connection with learning and behaviour. The third stage refers to the deeper knowledge of the reasons – motives – for

the student's actions and the conditions on which they depend. The fourth stage involves getting to know the "dispositional sphere of personality", that is, the life plans and life history of the child. It is the deepest type of cognition based on the teacher's expertise (Kunowski, 1961).

However, it can be difficult for the teacher to get to know their pupils, and the reasons for this can be found in the following problems:

– Limited possibilities of observation resulting from the enclosure of the pupil and teacher in the classroom. As only selected characteristics of the pupil are revealed in the classroom environment, particular value is attributed to situations relating to cognition outside the classroom, which make it possible to modify the teacher's opinion on a given child;

– The teacher's view of the world, or the teacherly way of seeing the pupil, which is limited to only two aspects – proper learning and good behaviour. In this perspective, the richness of the child's mental qualities becomes irrelevant. Such a view of the pupil can be all the more dangerous if the above-mentioned aspects (i.e., proper learning and good behaviour) start mixing and merging, resulting in the pupil being seen as if in the distorting mirror: whoever behaves badly is also seen as a bad learner;

– Excessive power over communication in the classroom, which happens when teachers grant themselves the right to send "metacommunications", the purpose of which is to direct attention, supervise and confirm understanding (Janowski, 2002).

Therefore, the foundation of pro-quality work with the student should be the improvement of the teacher's competence in the field of teacher cognition and their critical approach to the knowledge, skills and experience they have already acquired. The teacher who prepares the student for life in modern society needs new competences, namely, the competences of tomorrow (Lemańska-Lewandowska, 2009). Twenty-first century education, in other words, expects a new type of teacher – a creative optimist, an excellent didactician with reliable and in-depth knowledge and the skills necessary to become a guide and to motivate students to make an effort to learn, experience and act (Walenda, 2009; Miłkowska-Olejniczak, 1998). Today's education needs a teacher who will support students in becoming open-minded and inquisitive innovators (Żeber-Dzikowska, Wysocka-Kunisz & Szydłowska, 2016). The teacher of the twenty-first century is, therefore, one whose priority is to shape attitudes and openness to the world of values, to teach how to think and use knowledge, to humanise the educational process, and to prepare for a variety of functions

and tasks, including continuing self-education. The modern teacher must be more reflective, creative, and open to cooperation (Szempruch, 2006). This new quality will contribute to a more conscious and purposeful cognition of students optimize the development activities undertaken for the benefit of each student.

Method

The aim of the empirical research was to analyse "everyday – indirect cognition", that is, the perception of students representing particular groups (very good students, those with learning difficulties and those with special educational needs [SEN]) by early childhood education teachers, and to verify the consistency of these assessments. The following research problems were formulated:

1. How do early childhood education teachers perceive their students representing particular groups – namely, very good students, those with learning difficulties, and those with special educational needs – in the areas studied (attitude towards learning, participation in lessons, individual perception skills, perception skills in relation to the peer group, attitude towards tasks, and social behaviour)?
2. How do the pupils representing the different groups – very good students, those with learning difficulties and those with special educational needs – perceive the teachers' opinions about them?
3. Are teachers' opinions on pupils from different groups – very good students, those with learning difficulties and those with special educational needs – convergent or divergent?

In the study of teacher cognition, the diagnostic survey method, the interview technique and the observation and categorised observation technique were used. The tools used were a student interview questionnaire and a student observation in task situations sheet, filled in by two teachers.

The choice of methods and tools was dictated by the intention to reliably identify the issues related to the teaching of students at a younger school age by obtaining information about the children from various teachers and from the children themselves. Comparison of information from different sources allowed for the creation of a convergent assessment of the teacher's cognition of their pupils, thanks to which the process of triangulation contributed to the accuracy of the study.

The participants of the study included 390 teachers and 195 students. Pupils were divided into three groups: very good students with exemplary behaviour (65), students with learning difficulties (74) and students with special educational needs based on a ruling or opinion of a psychological and pedagogical counselling centre (56).

A statistical test was used to compare the data obtained in individual groups for the proportions whose results were determined: [VALUE] ABC.

Results

Teacher's perception of pupils at a younger school age. In the assessment of the surveyed early school education teachers, a positive attitude towards learning (Figure 1) is shown by very good students who have no major difficulties in acquiring knowledge. As far as the teacher's assessment of students with learning difficulties is concerned, in the opinion of 23% of the respondents the attitude is still positive, however, in the assessment of 22% it is negative, and in the opinion of 27% it is changeable. Similarly, as regards the group of students with special educational needs, 29% of teachers rated their attitude to learning as positive, 13% as negative and 34% as changeable.
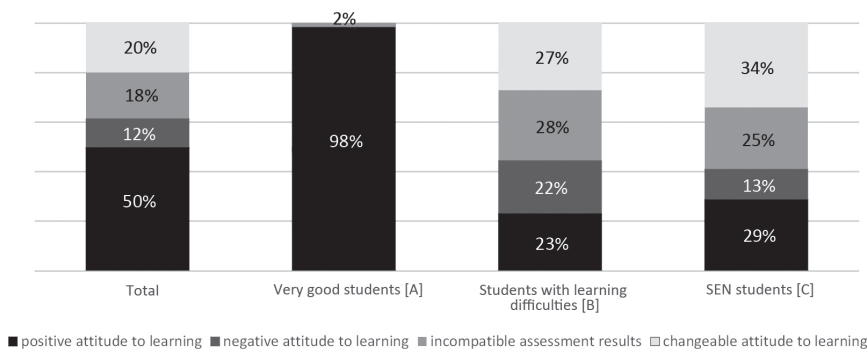

Figure 1.
Attitudes towards learning of particular groups of students in the assessment of the teachers surveyed.
Source: own research.

The vast majority of teachers (72%) considered very good students to be active and involved in classroom work, and their input as qualitative and well thought-out (Figure 2). In the case of students with learning difficulties and special educational needs, teachers' assessments are dominated by opinions that their participation in classes is passive and dependent on teacher support (both groups 43% each, n = 32 and n = 24, respectively). In the assessment of the teachers surveyed, pupils from both groups participate spontaneously in the lessons, but only a small group of students engage in the lesson in a qualitative and thoughtful way.
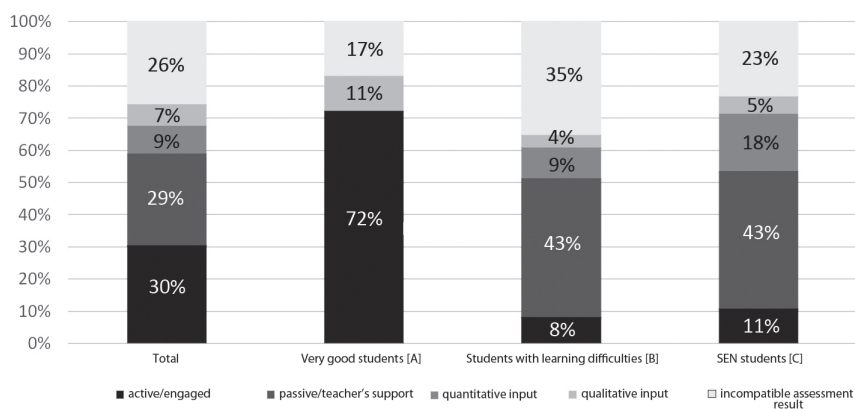

Figure 2.
Participation in lessons of particular groups of students in the assessment of the surveyed teachers.
Source: own research.

In the opinion of the teachers surveyed, very good students have well-developed perception skills which are independent of the teacher (97%) (Figure 3). On the other hand, in the group of students with learning difficulties, perception is assessed as slow and the teacher's help is necessary. What is more, in some task situations the ability changes and, with longer intellectual effort, weakens. In the case of SEN students, 21% of respondents indicated good perception, judged to be independent of the teacher; 34% of the teachers, however, felt that it is slow, that the pupils need support, and that with longer intellectual effort it gradually weakens (18%).
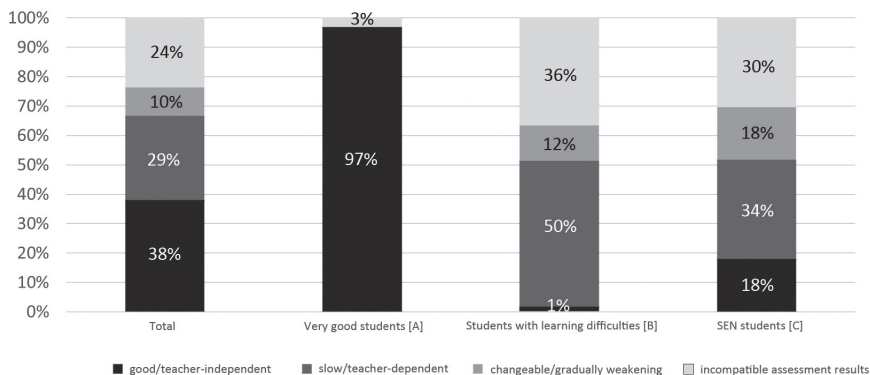
Figure 3.
Individual perception skills of students in the assessment of the teachers surveyed.
Source: own research.

In terms of the students' perception skills in relation to their peer group (Figure 4), very good students also stand out with high perception rating (94%). In the group of students with learning difficulties and SEN, the majority of pupils were assessed with average (35% and 29% of responses, respectively) or low (31% and 32% of responses) perception in relation to the peer group.
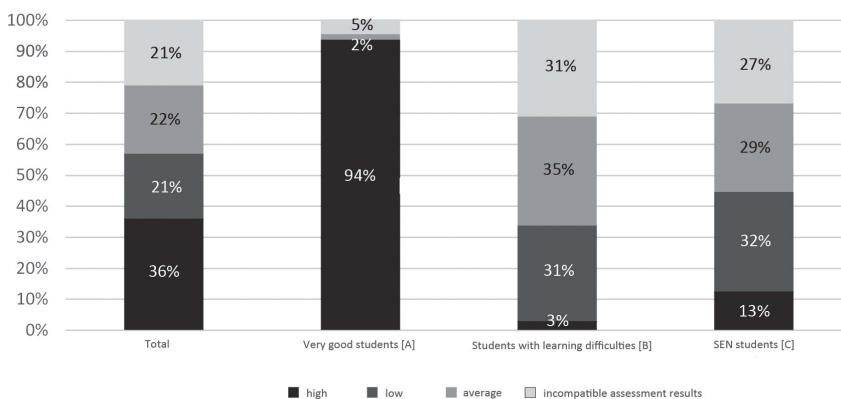

Figure 4.
Perception skills of students in relation to the peer group in the assessment of the teachers surveyed.
Source: own research.

The teachers surveyed also characterized the students' attitude towards work and tasks (Figure 5). The very good students were considered scrupulous and dutiful (95%). Among students with learning difficulties, teachers often disagreed in their assessment (39%); however, they stressed that the students perform their duties carelessly and negligibly (24%) and that they work non-systematically (19%). In turn, SEN pupils were perceived by the teachers surveyed as scrupulous and dutiful (27%), with some pupils, however, perceived as working in a non-systematic way (32%) and in a careless manner (14%).
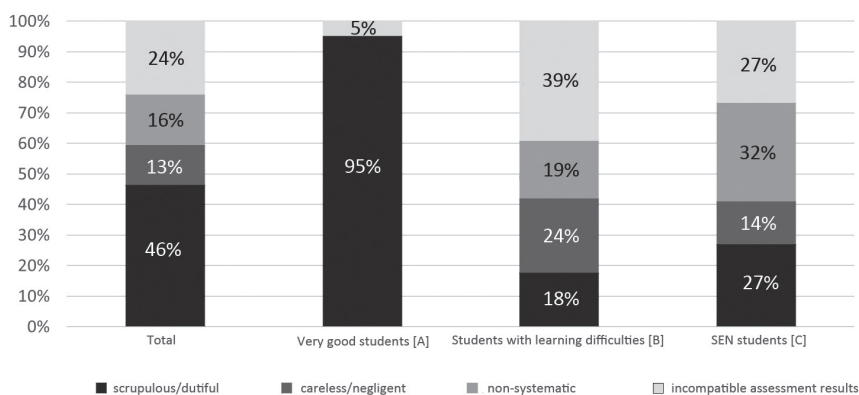

Figure 5.
Attitudes of students towards work and tasks in the assessment of the teachers surveyed.
Source: own research.

As far as the teachers' evaluation of social behaviour is concerned (Figure 6), in the opinion of the teachers surveyed, very good students are willing to cooperate and help their peers (94%). In this area, the surveyed teachers also positively assess students with learning difficulties (39%) and special educational needs (27%). In the teachers' assessment, particular attention is paid to opinions concerning the reluctance of the last two groups of students to cooperate (16% and 11% of responses, respectively) and their mood swings (20% each).
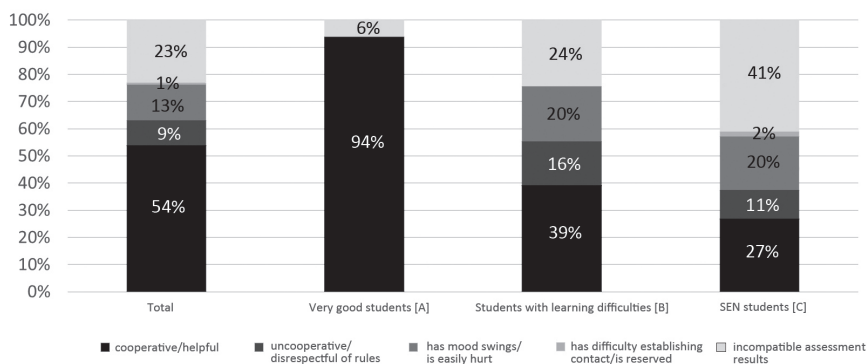
Figure 6.
Social behaviour of students in the assessment of the teachers examined.
Source: own research.

Pupils' perception of teachers' opinions. Based on interviews with pupils at a younger school age, the results of which are shown in Figure 7, it was found that very good pupils feel that their teachers have no objections to them and are convinced that they learn very well (66%). As far as the opinions of students with learning difficulties are concerned, in their opinion the teacher would point out that they should try harder (27%) and that they do not apply themselves, although the students stressed that this was not true (22%). Some of the pupils in this group (11%) indicated that the teacher would say that they were learning very well, while the same number said that the teacher would have nothing to say about them.

The opinions of SEN students are similar – in their opinion, the teacher believes that they should try harder because they can do more (34%); that the teacher thinks that they do not apply themselves, which is not true (13%); that they are learning very well (14%); and that there is an improvement (11%).
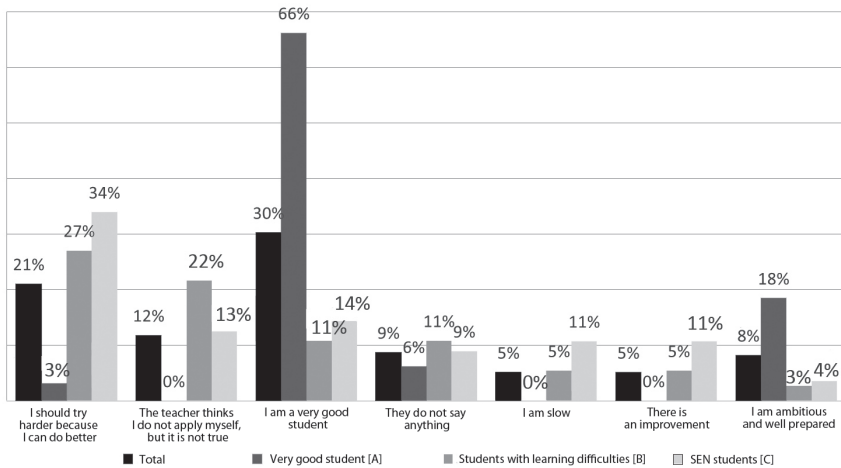
Figure 7.
Teacher's opinions in the assessment of the surveyed students at a younger school age.
Source: own research.

Consistency of teachers' opinions on the studied groups of students. On the basis of the analysis of the assessments of the surveyed teachers related to particular areas (Figure 8), one can notice one regularity – the teachers were unanimous in their assessment of very good students – because in their case, the only issue where there was a slightly higher percentage of incompatible assessments concerned opinions on the participation of very good students in lessons. On the opposite pole were the opinions of the teachers about children with learning difficulties and special educational needs, where the number of disagreeing assessments ranged from 20 to 40%.

In the case of children with learning difficulties, a particularly high number of incompatible assessments (statistically significant differences) concerned participation in lessons (35%), the students' attitude towards work and tasks (39%) and their attitude to learning (28%). The teachers also differed in their assessment of individual perception skills (36%) and perceptions in relation to the peer group (31%). A similar situation is observed in the case of the perception of SEN students by the teachers surveyed: here the assessments differed mainly in relation to social behaviour (41%) and individual perception skills (30%), perception skills in relation to the peer group (27%), and the student's attitude towards work and tasks (27%).
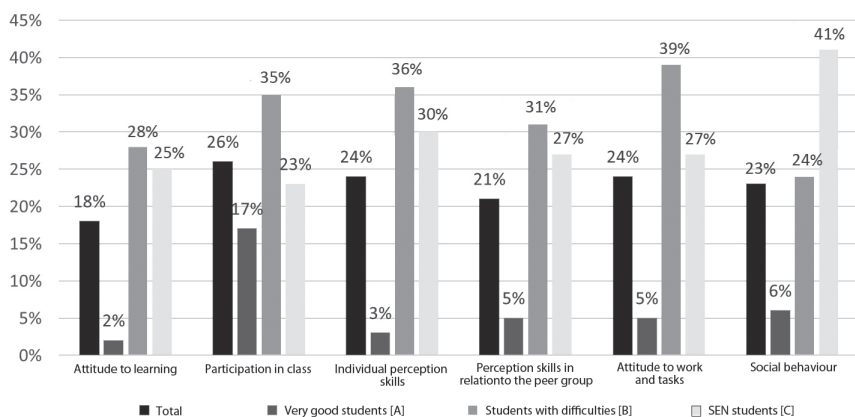
Figure 8.
Inconsistencies in teacher assessment of pupils representing different groups.
Source: own research.

Conclusions

In the Polish education system, the teacher is "forced" to grade students in various areas. This is intended to shape and develop the student, taking into account their individual abilities and needs, but is it really so? As research shows, unfortunately, it is not always the case, because we often deal with some form of categorisation – the labelling of students.

The research carried out has led to the following conclusions which, due to the size of the group, cannot be generalised:

1. Early childhood education teachers perceive their pupils representing different groups (very good pupils, those with learning difficulties, and those with special educational needs) in very different ways. The analyses show a high level of teachers' agreement in the assessment of very good students; however, their assessments of the other two groups result from a negative assessment of the surveyed students (with learning difficulties and special educational needs) and a lack of understanding of the problems often resulting from developmental dysfunctions or environmental conditions.

2. The pupils from different groups have different opinions on what the teachers think about them. The very good students think that their teacher sees them as very good learners, ambitious and always prepared

for the class; students with learning difficulties and special educational needs, on the other hand, claim that their teachers have a rather negative opinion of them ("I should try harder and put more effort into learning," "I do not apply myself, which is not true"). The teachers' assessment of the students surveyed is based on preliminary data and results from simplified judgments.

3. The teachers' assessments of students representing particular groups (very good students, those with learning difficulties, and those with special educational needs) are largely incompatible. Their assessments are divergent especially in terms of their perception of students with learning difficulties (statistically significant differences) and relate to the following areas: student participation in lessons (35%), individual perception (36%), attitudes towards work and tasks (39%), and, in the case of students with special educational needs, to social behaviour (41%). On the other hand, the teachers' assessment of very good students is consistent in over 90% of the responses, except for their rating of the attitude of very good students to learning.

The lack of compatibility in the assessments presented, especially in relation to groups of students with learning difficulties and special educational needs, may indicate the "labelling" of students, which, in turn, may stem from the absence of temporary and substantial modification of the preliminary data, and a lack of progression of teacher cognition (its blockage at the stage of symptomatic cognition).

The results of the conducted research confirm that the teacher cognition does not take the form of formative cognition (changing over time, taking into account and explaining the symptoms and causes of their students' behaviour). Such cognition would allow the teacher to become sensitive to their students' needs, motivate them to make an effort, and engage them in educational activities. Such cognition would also provide the teacher with feedback about the student which would change over time, providing information about functional factors – internal and external – and determining the quality of activities undertaken by the student. As a result, the image of the student would be constantly modified and verified; the teacher would see what they have to do to support and motivate the student to follow their own (personalized) path, and their opinions would be built on a holistic and synthetic image of the student.

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