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# **Teachers' Reflection on Personalized Learning**

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#### **ABSTRACT**

Personalized learning as a new trend in inclusive education is undoubtedly influenced by teachers' reflections before and after its implementation. The carried-out reflection allows each teacher to change previously established positions for the implementation of the educational activity, to reach the ability to change his points of view according to the strengths and potential of the students, and thus achieve greater efficiency in the learning process. Through realized reflection, each teacher creates creative attitudes towards and for the learning process and undoubtedly a more complete unity between consciousness and responsibility for the learning process and behavior.

A focused study was conducted with three groups of teacher-respondents. The groups are structured accordingly: the first group of 15 primary teachers, the second group of 15 high school teachers, and the third group of 15 resource teachers. The reflective activity of the three groups of teacher-respondents at different levels of reflection towards personalized learning is investigated: intellectual reflection in learning, personal reflection, reflection as dialogue, reflection in problem situations, and undoubtedly praxeological reflection in the two variants of manifestation: professional and technological reflection. The results demonstrate higher levels of reflection as dialogue and praxeological reflection in primary and resource teachers compared to primary teachers, and higher levels of reflection in problem situations and intellectual reflection in primary teachers compared to primary teachers. It turns out that the reflection of the teacher-respondents on personalized learning is strongly influenced by the cultural and existential reflection in the three groups of respondents. With all the teacher-respondents, the critical reflection towards personalized learning is very vividly demonstrated, which finds expression in the presentation of one's own pedagogical experience and one's own pedagogical intuition. There is a dynamic from a-reflection to reflection to personalized learning with the A-effectiveness of both respondents and students.

Keywords: inclusive education, personalized learning, reflection, self-efficacy, teachers

## Introduction

Inclusive education develops in the direction of developing an approach to identifying the strengths and potential of each student and each teacher. Personalized learning makes it possible to implement this approach, in which the teacher, according to his own strengths, teaches the whole class in a way that each student can perceive, understand, make sense of and learn the learning content according to his strengths and the capabilities he possesses. The implementation of personalized learning is unthinkable without teachers' reflection on it. The carried out reflection allows each teacher to realize more and more creative attitudes towards and for the learning process, and more complete unity between consciousness and responsibility for the learning process and behavior according to the student's potential. By applying the personalized learning model, each teacher can and does achieve greater effectiveness in the learning process for each student.

## **Main Text**

As a relatively new learning model, personalized learning does not present a uniformly accepted definition of personalized learning. According to Bray and McClaskey (2015), personalization is learner-centered and learner-driven. According to them, there is a difference between personalization, differentiation, and individualization. The definition they derived is multi-layered and aimed at favoring in leadership "learners who:

- know how they learn best, and participate in the design of the curriculum and the learning environment.
- have flexible learning anytime and anywhere;
- have the right to vote and choose about their studies;
- have quality teachers who are partners in learning;
- use a competency-based model to demonstrate mastery;
- independently direct their studies;
- design their academic path for college and career." (Bray & McClaskey, 2015).

The stated leadership favoring of learners is actually essential in personalized learning and is associated with the active participation of each learner in the learning process and becoming an expert in their own learning. The teacher in personalized learning is transformed from a teacher from the department, from a sole and undisputed provider of knowledge into a facilitator and partner in the learning process. In personalized learning, each learner has perceptual, cognitive, and emotional-social access to learning content and has the right and freedom to choose his own most effective learning style, to learn at his own pace, and achieve academic success that he can easily transfer to live outside of school and throughout life.

At the same time, as noted by Schmid and Petko (Schmid & Petko, 2019), "a clearly defined concept of personalized learning is still missing. Rather, it serves as an umbrella term for educational approaches that attempt to meet the individual abilities, knowledge, and learning needs of each student." In this aspect, phenomenological profiles of personalized learning are more common, in which personalized learning is considered to be an optimizing process of school learning with the achievement of synchronicity between the educational context and the active participation of each student according to his characteristics and abilities.

Undoubtedly, personalized learning does not offer ready-made recipes for application in the learning process, and even as a general term for educational approaches, suitable and corresponding to the needs and strengths of learners already has its specificity. The most essential feature of personalized learning is targeting the strengths of the learners and the strengths of the trainers. In this apparent shift from the medical model that has long dominated education to an inclusive model of education lies the power and values of personalized learning. Identifying, understanding, and matching students' strengths is possible through the structuring of individual student profiles, which are sometimes formalized to the questionnaires used. In a qualitative aspect, the individual manifestations of teachers' reflection are much more valuable for outlining the trajectories of students' strengths and for the realization of personalized learning.

"Reflection is a complex concept subject to many interpretations with subtle variations" (Dahlberg et al., 2002). Reflection is defined as:

- "a process, an intellectual procedure that requires active engagement on the part of the individual;
- a phenomenon that occurs when an individual finds himself in a confusing, difficult-to-solve situation (dilemma) or experience;
- a process that involves examining one's own cognitive activity or one's personality traits, one's responses, beliefs, and assumptions in the context of one's situation and available means of action;
- the result of complete integration of new concepts (understandings) about the performed cognitive actions and personal qualities." (Hadjiali, 2011).
- "socio-culturally determined, instrumental integral procedure (process, set of conscious and controlled mental actions), directed and meaningful to self-knowledge;
- knowledge of one's own cognitive activity and one's own personality.
- mental dialogue with the other, in which the logic and content of the partner's thinking is reproduced, and the subject becomes self-aware through the control and awareness of the impact of his own behavior on the partner.
- mental tracking, and control over the realization of the subject's knowledge and qualities in his practical activity (reflexive control over the objectification and technologization of his own knowledge and qualities)" (Vasilev et al., 2005).

It could be synthesized that reflection is a multidimensional construct of mental activity for self-knowledge, self-acceptance, self-evaluation, and self-development.

In this context, each teacher carries out personalized intellectual reflection in its two main manifestations: retrospective reflection (interpretation of own professional competencies with a view to past learning situations – conventional and extreme) and prospective reflection (creating a predictive cognitive scheme for solving a possible learning situation in the future). The two spaces of intellectual reflection can function as a critical reflection that establishes an already implemented or constructs a new pattern of learning activities. Critical reflection is realized through the freedom each teacher has as a leader in the classroom and through which they can implement personalized learning at different speeds in each individual class and with each student.

In both manifestations of intellectual reflection, the teacher considers his own self-efficacy. Undoubtedly, intellectual reflection is impossible without personal reflection.

Personal reflection bases the self-determination of professional self-efficacy and focuses both on the outcome of one's own teaching style and personal qualities. Personalized reflection is not a personal reflection. Personalized reflection is an umbrella term that covers the intellectual, personal, and praxeological (professional and technological) reflection of the teacher. The teachers' reflection on personalized learning presents the crossing of the barrier from misunderstanding or incomplete understanding of inclusive education to a full understanding and rationalization of inclusive processes through personalized learning. The reflection is "the practice of a rigorous self-examination, through which to investigate the processes of meaning-origination" (Moran, 2000).

Thanks to personalized reflection, each teacher realizes and interprets not only cognitive information about his own professional activity in the direction of educational inclusion. Moreover, each teacher in the personalized reflection realizes and makes sense of his social professional acceptance, i.e. how others perceive and interpret his demonstrated professional competencies in relation to inclusive education.

For the implementation of personalized learning, Watson and Watson (2016) derive universal principles: personalized instructional goals, personalized task environment, personalized scaffolding of instruction, personalized assessment of performance and learning, and personalized reflection. The principle of personalized reflection stands out quite clearly.

Personalized reflection is a foundation for realizing the universal principles of personalized learning because they cannot be realized without reflection on their application, reflection on the results of the application, and reflection on the manifested personal qualities. In the modern pragmatic world, there is little time left for reflection, evaluation of results and experiences, consideration, and

overall judgment of behavior i.e. activities as required by reflection, including reflection on personalized learning. Teacher reflection is not only awareness, evaluation, and rethinking of one's own behavior in a school environment. The teacher's reflection is a significant psychological resource for the implementation of educational activities and for the expression of creative thinking and the creative potential of the teacher.

## Methodology

The research was conducted using the focus group method.

In July 2021, a training session on "Personalized Learning in the Classroom" was held. Teachers implemented personalized learning with one class during the 2021–2022 school year, which went through learning models: distance in an electronic environment, face-to-face learning, and blended learning. In June 2022, training with additional information on the topic "Personalized learning in the classroom" was conducted again, after which research was conducted using the focus group method.

## Participants in the study

Participants in the research are 45 teachers, who are structured into three groups:

- first group of 15 primary teachers,
- second group of 15 high school teachers
- third group of 15 resource teachers.

In the selection of the participants in the study, two criteria are followed: voluntary participation and results of traditional interview. When conducting the research, each group was differentiated into three sub-groups of 5 teachers. There are a total of 9 focus sub-groups in the study.

## **Procedure**

Each sub-group is assigned 2 tasks.

The first task is to identify five strengths and five weaknesses of personalized learning through experiential learning and expertise. There is a requirement to arrange the answers in order of importance.

The second task is carried out by a whole group and asks the respondents to determine the type of reflection that is brought out when conducting personalized learning in a percentage ratio: intellectual reflection in learning, personal reflection, reflection as dialogue, reflection in problem situations, and undoubtedly praxeological reflection in the two variants of manifestation: professional and technological reflection.

The execution time is limited to 30 minutes for each task.

## Results

The results show aggregated responses ranked first, second and third in order of importance from the three sub-groups of the primary teacher group. The responses that the group of primary teachers considered to be most significant is listed first, the responses of lower importance are listed second, and the responses that the group of primary teachers considers least significant are listed third. The responses from the three subgroups are summarized for the whole group of primary teachers and are presented in Table 1.

Table 1. Frequency-ranked responses from the primary teacher group

Primary teachers			
	Strengts	Problematic side	
1	Unleashing the potential of every student	More time for teacher preparation	
2	Greater teacher commitment	A large number of students in a class	
3	A more accessible and interesting way of learning	Difficult application in distance learning	

Figure 1 presents the correlations between the individual types of reflection from the group of primary teachers. The results are summarized from the responses of the three sub-groups of the primary teacher group.

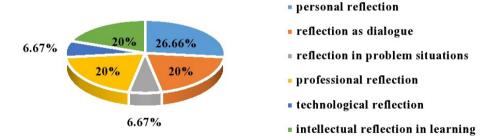


Figure 1. Reflection in the group of primary teachers

The results show aggregated responses ranked as first, second and third in order of importance from the three sub-groups of the high school teacher group. The answers that the group of high school teachers considered to be most significant is listed first, the answers of lower importance are listed second, and the answers that the group of high school teachers considers least significant are listed third. The responses from the three subgroups are summarized for the entire group of high school teachers and are presented in Table 2.

High school teachers			
	Strengths	Problematic side	
1	Learning at different speeds	It cannot be applied to all subjects	
2	Peers work with peers	Teacher overload	
3	An opportunity for self-expression and to reveal potential	Lack of criteria for evaluating student achievements	

Table 2. Frequency-ranked responses from the high school teacher group

Figure 2 presents the correlations between the individual types of reflection from the group of junior high school teachers. The results are summarized from the responses of the three sub-groups of the high school teacher group.

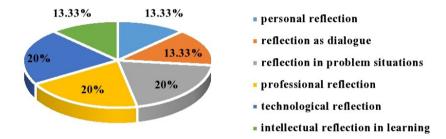


Figure 2. Reflection on the group of high school teachers

Only responses ranked first, second, and third in importance by the respective sub-group of the resource teacher pool are displayed in the results. The responses that the resource teacher group considered to be most significant are listed first, the responses of less importance are listed second, and the responses that the resource teacher group considers least significant are listed third.

*Table 3.* Frequency-ranked responses from the resource teacher group

Resource teachers			
	Strengths	Problematic side	
1	Unlocking the potential of every student	Teacher overload	
2	Implementation of project-based learning	A difficult application in distance learning	
3	Teamwork	It cannot be applied to all students with SEN (special educational needs	

Figure 3 presents the correlations between the individual types of reflection from the group of resource teachers. The results are summarized from the responses of the three sub-groups of the resource teacher group.

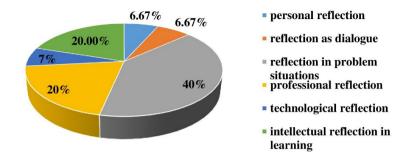


Figure 3. Reflection in the group of resource teachers

#### **Discussion**

The presented results (Table 1, Table 2, and Table 3) demonstrate a reflexive delineation of the strengths and problematic aspects of personalized learning. It is noteworthy that there is a dynamic in the realized reflexive potential regarding personalized education both in the individual subgroups and in the entire groups. In two of the subgroups of primary teachers, "greater teacher commitment" and "More time for teacher preparation "were perceived as both a strength and a problem. This, at first sight, the contradiction in the two separate sub-groups is related to a reflection of the primary teachers' own professional behavior as independent subjects of pedagogical activity. Primary teachers work with the individual class more time, almost throughout the school day. In the educational process, they can and do manage the reflective space of the class more holistically than high school and resource teachers. "Reflective space" can be understood as a space constituted by socially established arrangements that enable and hold reflecting practices in place. In this sense, creating a "reflective space" means creating arrangements to support such practices (Thelin, 2020). High school teachers teach more than one class and many more students and spend much less time with the individual class than primary teachers. In addition to having more minimized opportunities to manage the reflective space of the class, they also have significantly more limited time resources for reflection on learning activities with individual students. At the same time, high school teachers have much more methodological resources for innovative learning activities due to the older age of the students. Resource teachers have the opportunity to manage the reflective space of students with SEN in two trajectories: in the classroom (with joint teaching) and in the resource office (with individual work), i.e. reflective dimensions of a different model of learning activities are present. The triggering of praxeological reflection (knowing oneself through and in one's actions and the results obtained) in the three groups is based on different kinds of social

interactions with students, and reflection as a dialogue demonstrates differences that influence praxeological reflection. Another interpretation of the obtained differences could be given in the direction of the personal and existential reflection of the teachers from the three groups, which find expression in self-determination, self-efficacy, and possibly in motives for self-affirmation. In the case of primary teachers, due to the nature of their professional activity and due to their acceptance as the Significant Other of the students in this age period, the reflexive responsibility (expressed in personal and existential reflection) for self-knowledge in the context of "greater commitment of the teacher" is activated and "more preparation time" that "may or may not" take place. While a similar existential reflexive dilemma is not manifested in high school and resource teachers. But, the appearance of the two statements in dichotomous positions gives reason to argue that primary teachers bring socio-professional acceptance of personalized learning and realize it by continuing to look for strong and problematic aspects of "greater self-engagement". Personal and praxeological reflection raises questions about ways to reduce engagement, about optimizing the personalized learning process, and about specifying which engagement is high: cognitive, emotional, or social. An analogous reflection is also manifested regarding "more time for preparation" with self-analysis and self-knowledge of personal and professional qualities. Obviously, self-efficacy provokes further reflexive dilemmas. A spiral effect occurs: the acceptance and implementation of personalized learning by primary teachers provoke personal reflection, which leads to an increase in self-efficacy manifested in the implementation of personalized learning, which in turn again gives rise to personal and individual reflection, etc. It manifests itself as "reflection as learning about the self" (Frick et al., 2010).

"Teacher overload" appears to be a favored problematic aspect of a reflective position among high school and resource teachers. Obviously, the respondents demonstrate personal reflection at a relatively lower level, where cognitive and emotional engagement with regard to personalized learning is not brought to the level of independence and activity. Answers about problematic aspects such as "a large number of students in a class", "cannot be applied to all subjects", and "cannot be applied to all students with SEN" speak in favor of this argument. The pedagogical arsenal of the respondents still shows resistance to a holistic application of personalized learning. The location of this resistance can be sought in personal reflection and in the reflection on problem situations. The explanatory models differed for the two groups of teachers. While for high school teachers, the large number of students and the different classes can cause difficulties in the reflection in dialogue and in praxeological reflection, it is likely that for resource teachers the difficulties in these two types of reflection are related to the different types and the different degree of disabilities that provoked SEN. The interpretation of the reflexive answers to the problem aspect of "difficult application in

distance learning in an electronic environment" is analogous. Existential reflection is not strongly manifested and rather tends to non-acceptance of personalized learning among high school teachers.

In the nine subgroups, "unfolding the potential of each child/student" by primary and resource teachers and "opportunity for self-expression and revealing potential" by high school teachers are reported as strengths. On the one hand, interpretation can be brought in the direction of mastered knowledge about personalized learning, but on the other hand, interpretation can be brought in the direction of socially relevant motivation or momentary self-actualization. The reflexive consideration of the statements: "more accessible and more interesting way of learning", "learning at a different speed" among primary teachers; as well as the statements: "peers work with peers" among high school teachers, and the statements: "applying project-based learning", "teamwork" among resource teachers testify that as the sovereign implementation of personalized learning increases, a personal and professional reflection of the respondents.

It can be seen from the results of the second task (Figure 1, Figure 2, and Figure 3) that personal reflection is shown to be the highest among primary teachers - 26.66%, while among high school teachers it is 13.33% and among resource teachers, it is 6.67%. These diverging results are interesting because there is a decreasing dynamic in terms of increasing educational attainment and the use of special learning support methods engaged in by the three groups of respondents. In an explanatory model, the manifestation of a reflexive thinking strategy with the search for new knowledge and skills, new goals, and tasks based on mastered information about personalized learning can be indicated. The highest result obtained among the respondents from the group of primary teachers can be explained by realized professional pragmatics for personalized training. While for the respondents from the groups of high school and resource teachers, the results are lower probably because for the respondents there is no categorical evidence of self-actualization in the direction of personalized learning, and new questions and new hypotheses about the process of personalized learning are provoked.

Professional reflection is the same for all three groups – 20%. The result obtained is surprising, but not entirely unexpected. Reflection is a demonstration of an objective self-assessment of subjectively possessed capabilities. Apparently, the respondents consider that the implementation of personalized training is not yet carried out by themselves at the expected level of their professional competencies. It is possible to show metacognitive reflection on one's own knowledge and skills in taxonomized levels: acquired and mastered, missing and necessary professional knowledge and skills. Respondents "know and are able to recognize the gaps and advantages of their level of knowledge and skills" (Levterova, 2018). Realized professional engagement with personalized learning processes

elicits a higher order of reflective metacognitive regulation. Reflection, in fact, is a process of preparation for ever higher self-efficacy, including the implementation of personalized training by teachers.

The low score obtained for technological reflection (6.67%) among resource teachers is surprising because they use the most assistive and adaptive technologies in the process of supporting learning. At the same time, the obtained result has its logic of explanation related to reflection as making sense of the experiences of the present, and reflection as making sense of the goals of the future. For respondents from the group of primary teachers, "technological reflection" is 6.67%, and for respondents from the group of high school teachers, it is 20%. The latter, in turn, have to make most often technologically based decisions in the educational process, and reflection on already achieved goals increases the optimistic disposition for the future. The so-called reflection towards the past and the present with the "future self-continuity" hypothesis is observed. "Individuals who felt more similar to their future selves may have made more prudent decisions because of their perceived connectedness to a future self ... Although it is turned to the past ..., this reflection does not remain chained to the past ..., but continues in the future" (Ersner-Hershfield et al., 2009).

The result obtained for "reflection as dialogue" was definitely a surprise with results for the respondents from the group of resource teachers (6.67%), high school teachers (13.33%), and primary teachers (20%). Expectations for high "reflection as dialogue" among resource teachers are not justified. For "reflection as a dialogue", the lower values of the result for the respondents from the group of resource teachers can be linked to the more limited contact with the student community, individual contacts are more frequent, mainly with students with SEN. Obviously, the high "reflection in problem situations" (40%) weighs more than the low "personal reflection" (6.67%) and the low "reflection as dialogue" (6.67%) among the resource teachers. This burden of a formed strong space of "reflection in problem situations" can be explained by the fact that resource teachers encounter in their work very often problem situations of a different nature when working with students with SEN. The fact that "reflection as a dialogue" includes external and internal dialogue should not be overlooked, i.e. both with others and with oneself. With resource teachers, the socio-temporal dimension of external dialogue is narrower, i.e. social interactions with students are more minimized at school, and accordingly, reflection as dialogue presents a low result. Reflection as dialogue is usually closely related to and cultivates "intellectual reflection", and this theoretical postulate is also observed in the respondents from the group of primary teachers, who are most often in a wide dialogic space with high temporality with their students.

"Intellectual reflection in learning" (personalized learning) manifested results of 6.67% in the group of primary teachers and in the group of resource teachers,

while high school teachers provided a result of 13.33%. The higher score of the high school teacher respondents can be attributed to an awareness of the knowledge bases and practice-proven teaching methods related to the acquisition of knowledge by their students. Overall, the "intellectual reflection" on personalized learning among respondents from all three groups is imbued with critical intentionality. Apparently, the reflective self is not yet fully ready for the implementation of personalized learning, despite the knowledge and experience it possesses.

Regarding "reflection in problem situations", the result of the respondents from the group of primary teachers was 6.67%, that of high school teachers was 20%, and that of resource teachers was 40%. Obviously, the respondents from the group of resource teachers were most often in effective reflective situations towards personalized learning, and the reflection was shaped as norm-determining and resulted in acceptable subjective self-efficacy.

It would not be possible to study reflection as a whole, but only in its differentiated manifestations. The results obtained for the individual taxonomic units of reflection in the study were variable among respondents from the three groups, and this fact provides an optimistic perspective for personalized learning.

## **Conclusion**

It turns out that the reflection of the teacher-respondents on personalized learning is strongly influenced by the knowledge, skills, and practical experience of the three groups of respondents. With all the teacher-respondents, the critical reflection towards personalized learning is very vividly demonstrated, which finds expression in the presentation of one's own pedagogical experience and one's own pedagogical intuition. There is a dynamic from a-reflection to reflection to personalized learning with the A-effectiveness of both respondents and students. "Reflection is a core quality of effective teachers" (Frick et al., 2010). In this context, any study of reflection, even in general, provides facts, concepts, and ideas for the development of innovative methods and models of learning. Teachers' reflection on personalized learning follows the explainable path of any educational reform. At first, there is resistance, followed by gradual acceptance until the innovative reform becomes current and traditional. When teachers' personal reflection on personalized learning is synchronized with teachers' professional reflection, then personalized learning will be the natural educational model.

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#### REFERENCE

Bray, B., & McClaskey, K. (2015). Make learning personal: The what, who, wow, where, and why. Thousand Oaks, CA: Corwin.

Dahlberg, K., Drew, N. & Nystrom, M. (2002). Reflective lifeworld research. Lund, Sweden: Studentlitteratur.

Ersner-Hershfield, H., Garton, M. T., Ballard, K., Samanez-Larkin, G. R., & Knutson, B. (2009). Don't stop thinking about tomorrow: Individual differences in future self-continuity account for saving. *Judgment and Decision Making*, *4*(4), 280–286.

Frick, L., Karl., A. & Beets, P. (2010). Reflection as learning about the self in context: Mentoring as a catalyst for reflective development in pre-service teachers. *South African Journal of Education*, *30*(3). https://doi.org/10.4314/saje.v30i3.60038

Levterova, D. (2018). Metacognitive reflection in educational neuroscience for students with special educational needs. In *The Reflection Book*. Paisii Hilendarski University Publishing House [Левтерова, Д. Метакогнитивна рефлексия в образователните невронауки за ученици със специални образователни потребности. В: Книга за рефлексията. Университетско издателство "Паисий Хилендарски"]

Moran, D. (2000). Introduction to phenomenology. London, England: Routledge.

Schmid, R. & Petko, D. (2019). Does the use of educational technology in personalized learning environments correlate with self-reported digital skills and beliefs of secondary-school students?. *Computers & Education*, *136*(1), 75–86. Elsevier Ltd. Retrieved April 25, 2022. https://www.learntechlib.org/p/208395/.

Thelin, K. (2020). Creating a reflective space in higher education. The case of a Swedish course for professional principals. *Learning and Teaching*. https://doi.org/10.3167/latiss.2020.130302

Watson, W. R., & Watson, S. L. (2016). Personalized instruction. In C. M. Reigeluth & B. Beatty (Eds.), *Instructional-Design Theories and Models*, 4, 93–120. New York: Taylor & Francis.

Hadjiali, I. (2011). Model of reflexive approach in high school stage of biological education. [Хаджиали, И. Модел на рефлексивен подход в гимназиален етап на биологичното образование]. http://compass.uni-plovdiv.bg

Vasilev, V., Dimova, Y. & Kolarova-Kancheva, T., (2005). Reflection and training – 1 part. Plovdiv: Makros. [Василев, В., Димова, Й. & Коларова-Кънчева, Т. Рефлексия и обучение – 1 част. Пловдив: Макрос]

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