

**Preservice Teachers' Views on Summative and Formative Assessments in the Czech Context**

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**Abstract**

Assessment is an integral part of every educational process. The summative assessment focuses more on the current performance of students, on a summary of previous results. The formative assessment is more continuous, providing feedback on the progress made by the pupils. The paper aims to find out how preservice teachers perceive to study the field of teaching for younger primary school level of quantitative form of assessment, on the example of summative and formative assessment, and it focuses on how both these models, one traditional and the other innovative, are perceived by students in the field of young primary school teaching, i.e. preservice teachers. 129 preservice teachers participated in the study in Czech Republic. The target group was deliberately chosen because preservice teachers do not receive much attention in this area so far. A quantitative and qualitative approach was chosen to describe the current situation, and a questionnaire of our design was used as a research tool. Results show, that as the most suitable option, respondents choose a combination of quantitative and qualitative assessment, which can cover both of the above aspects. The fact that preservice teachers are aware of the strengths and weaknesses of both assessment types and consider this fact when applying them in pedagogical practice can be described as positive.

**Keywords:** Assessment; School Assessment; Summative Assessment; Formative Assessment; Teacher Training; Preservice Teacher

**1. Introduction**

What do we want our students to know or be able to do at the end of class? What should they know at the end of the thematic block in a given subject? Knowing the answers to these questions is one of the most important aspects of teaching. Setting goals and how to control them at the beginning of teaching is a necessary step in providing a framework in which teaching will move. Student assessment is gaining an increasingly important role in education policy in OECD countries. As most OECD countries have decentralized education systems so that schools can better reflect conditions based on local tradition, many countries and regions have also developed large-scale assessments to monitor student and school performance. Schools are responsible for helping students; they are assessed according to meeting standards. National policymakers and school leaders also use assessment data to identify student and school strengths and weaknesses to improve the quality of teaching and learning (Looney, 2011).

Educational goals are a de facto set of skills or concepts that students are expected to master at the end of a given period. They are usually formulated so that it is clear how their achievement can be controlled. This is where we come to connect teaching and assessment. In this case, assessment can be defined as any measurement of the level of goals achieved. One important element is that assessment and goals must be linked (Slavin, 2000). Assessment in primary school shows the building of a picture of the progress of learning about the child's progress across the curriculum. The teacher uses various methods to obtain records of how and what the child learns on an ongoing basis. They then use this information to support the child's current learning, and then to decide on the next steps for their future learning. Assessment is a comprehensive concept that covers a wide range of areas, processes, and results. Concerning individual learning processes, this is a focus on identifying

progress in meeting goals. Teachers and students share the information needed to identify how learning and teaching can be adapted to improve it. Factors that influence whether students are more or less successful also depend on the environment where the learning takes place, the school climate as well as the education system's general setting (Gardner, 2014).

Assessment can take various forms. The assessment process can take more or less time and effort, depending on the aim and the assessment subject. We assess learning within the class because we need to know how effectively students are learning so that we can provide appropriate feedback. If the facts are not memorized, skills or concepts are sufficiently mastered, then a learning process revision must follow. Without this step, it is not possible to move further and build on the acquired curriculum. Such an approach, will not only guarantee the appropriate acquisition of the curriculum but will also support a pupil's further learning leading to success through relevant feedback. At the same time, it can be used in the assessment by the teachers themselves, which will improve teaching in the future.

The assessment process was described by Popham (Wyse, Wayward & Pandya, 2016) as one of the conclusions regarding what students know based on their answers in specific situations. These can take place either naturally, in the course of normal activities or they can be created artificially, but they are always only a small sample of the whole situation. The final assessment is justified, based on this evidence. Therefore, the assessment was described as the production and collection of data, their interpretation for subsequent assessment, followed by communication of the derived statements with their recipients (Harlen, 2013; Wyse, Wayward & Pandya, 2016).

### 1.1 School assessment

School assessment is often associated with pedagogical measurement. The concept of *measurement* expresses accuracy, unambiguity. However, if we look at this concept in more depth, we find that accuracy and unambiguity are rather rare in assessment. This does not mean that there are no mathematically defined steps in assessment, but they are a matter of standardized tests or tests of knowledge. Blenkin & Kelly (1992, p. 4) illustrated the diversity of assessment with a simple example. If we want to find out how many students know that  $2 \times 3 = 6$ , we ask the test question  $2 \times 3 = ?$  and find out what percentage of students answer correctly. However, we know nothing about students' motivation, whether they understand the question or any other factors that affect their performance. However, if we want to find out how students *understand* that  $2 \times 3 = 6$ , why this is so, even the best measuring tool will not answer this. If we want to find out if there is also an understanding of the concept behind the student's performance, then the accuracy level will be even lower. One thing follows from this, and that is that the accuracy of assessment depends on what phenomenon we assess, how comprehensively and how sophisticated. Now that education is a highly complex and sophisticated process, pedagogical assessment can only be considered as the measurement in a distant metaphor. School assessment is understood as a broader concept than measurement and testing, as it involves different ways of observing and ascertaining student skills, knowledge, and abilities. Assessment can be formal, e.g. in test form, or informal, for example, in the form of observation of who profiles themselves as a leader within the group (Woolfolk, 2010).

School assessment will also never be deprived of assessment courts, regardless of the currently used form of assessment. The pedagogical community has a moral responsibility to publicly explain the link between pedagogical assessment and judgments. It is a matter of explaining how this combination works for the benefit of the pupil's development and potential, concerning achieving the set goals. This mainly concerns the testing limit mentioned above. However, a company demands objective, mathematically verifiable data. In this context, we can use the psychological and philosophical justification for using numbers. The human psyche longs for simplicity, for sorting, for ordering. Therefore, we assign numbers for assessment and comparison. However, this is nothing more than classification by importance or urgency. We do this first, then this, then this. (Mitchel, 1992).

### 1.2 Summative and formative assessment

In discussions concerning what assessment methods mean, there are sometimes terminological ambiguities that are worth explaining. A simple but somewhat misleading definition says that formative assessment is what a teacher can do during the learning process and summative what is done after it. However, this timeline definition is highly imprecise, as it does not respect the assessment's purpose and content, and in particular how they relate to the teaching process. The most important argument is that assessment activity is not primarily formative or summative. It is primarily the purpose and method of use that determine the method. If, for example, tests are used to improve student learning, technically it is a formative use. This is an assessment *for* learning. However, if the result is used as a report on the result or score, then it is used summative assessment

of learning. Therefore, it follows that the meaning of the term formative primarily determines the assessment method that supports learning processes. The difference can also be identified using simple questions:

- How did you do that? (summative)
- How do you do this? (formative)

The main aim of summative assessment is to award marks, confirm or reject the achievement of a certain level, classify the results concerning the given criteria, etc. Since a given primary goal requires high-quality information about overall performance, tests are usually tested for their validity and reliability. Simply put, any acquisition is summative if it meets the following criteria (Andrade & Cizek, 2010):

- It is implemented at the end of a teaching unit.
- Its main goal is to categorize a student or system performance.

Compared to summative assessment, there is formative assessment. The primary aim of formative assessment is to attract and support individual interest in learning. A formative assessment is such if it meets the following criteria (Andrade & Cizek, 2010):

- It is implemented during teaching.
- Its main aim is to identify the strengths and weaknesses of a student and support their independent learning, autonomy, and responsibility for their results.

### 1.3 Summative assessment - arguments based on learning

Based on the requirements of measurability of factors and testing objectivity, testing has become the main assessment criterion in schools. Tests can be administered in a unified manner, students and teachers, as well as parents, can receive quantifiable data to indicate student progress. The assumptions of this approach are based on behavioural psychology, which is based on a stimulus-response model. Test items are taken as a stimulus, answers as a response. Because the response is the only observable factor, no attention is paid to any model of thought processes that can be a means between stimulus and response. In this case, it is not possible to speak of comprehension learning, but of atomized learning, where information is stored without a broader context (Murphy, 1999).

In response to the above, the theory of constructivist learning, which pays more attention to the mental processes involved in working with information, is, therefore, more accepted concerning school assessment. Students are involved in these processes, whether information analysis or transformation.

### 1.4 Formative assessment - arguments based on learning

Today, we understand formative assessment as a collaborative process in which students participate as well as teachers. The main aim of student learning is to identify strengths, diagnose weaknesses, find areas for improvement and together (teacher-student) find a way to success (Andrade & Cizek, 2010). This process is based primarily on active cooperation between the two actors of education. The source of information that is further worked on can be test results, activity analyses, discussions, projects, portfolios, student self-assessment, and many others. As the definition suggests, formative assessment is primarily typical of classroom assessment and is the class teacher's responsibility to complete it successfully. [Educational Measurement as cited in Shepard \(2006\)](#) describes formative assessment as a tool to help students learn while providing teachers with information that can be used to improve their teaching practice.

Formative assessment should be student-centred. As stated by Stiggins (2005), the student is the key recipient and user of formative assessment. The feedback must be accepted by the student as useful, thereby motivating them to increase desirable skills, abilities, or attitudes. This is in contrast to external assessment in the form of marks, which are usually accepted as a means of reward or punishment.

Formative assessment is often associated with a constructivist approach whereby students take responsibility for their learning, and in which they de facto construct their knowledge themselves, primarily through cooperative learning situations, open-ended questions, discussions, and meaningful information gathering. The constructivist approach requires the teacher to take risks and give up systematic control, which is inconceivable for many teachers. However, once students understand where their true position as students is and the role of the teacher as a facilitator, their efforts to fulfil the teacher's wishes intensify. In these circumstances, they take responsibility but simultaneously expect the teacher to help them find their way.

Current perspectives on learning emphasize the importance of students' active role in developing their understanding of the ideas, and ideas and skills that can lead to their further development. The mere memorization of facts and their fixation does not lead to developing the ability to further develop the acquired

knowledge, which has been acquired, to further knowledge. However, the knowledge that is also understood is useful and can be used to solve problems and make decisions (Bransford et al., 1999). The teacher's role in this context is to take measures that lead to the right experience developing the student's existing knowledge and skills, while still being able to achieve the given development of students (see e.g. Vygotsky's zone of proximal development). Therefore, the teacher takes steps to understand the meaning of what steps the student takes to lead to the learning development. For example, one possibility is discussion and reflection, which direct students to the next steps towards learning. From the above, several key areas can be deduced that are important for formative use (Gardner et al., 2010):

- Information about ongoing learning is used to decide on the pace and content of teaching
- The teacher asks in a way that supports student activity and their ability to develop their ideas, knowledge, skills, or attitudes
- Students also receive feedback that encourages them to engage in further learning
- Students take an active role in their learning and participate in deciding on the aims they will work on
- Students understand the qualitative criteria applied to their work and at the same time participate in their self-assessment and peer assessment

### 1.5 Assessment types in Czech Republic Context

These are external manifestations of the ongoing assessment process, i.e. how the teacher expresses the assessment results. In recent years, the informative function has been overestimated within the assessment at the expense of the formative function. This is a consequence of the transmissive concept of education. In this light, the assessment issue has been narrowed down to testing and classification issues. The examination has become a basic form of finding out the teaching results and the mark was the main goal (Vališová & Kašiková, 2011). We can distinguish two basic **forms of assessment** - quantitative and qualitative (Kolář & Šikulová, 2009).

- **Quantitative assessment** in Czech education is mainly represented by **classification**. The problem is that this is generalizing information, which usually does not take a number of the student's characteristics into account, which reduces its informative value. The mark is only a formal reflection of the expression of a quite complex assessment process.

Quantitative assessment in the form of marks is most often used. Although it is a Czech education system trend to gradually abandon this assessment method, this quantifying approach still prevails. The reason is the relative simplicity of its use, but also the tradition of Czech education when marking is not only required by parents but also by pupils (Skutil & Maněnová, 2021).

- **Qualitative assessment** is usually associated with **verbal or formative assessment** in the Czech context. Verbal assessment should not only contain information about the achieved learning outcomes, but also includes the attitudes of students, and their efforts. Its advantage is that it can capture the individual progress of each student better and provide more comprehensive information concerning strengths and weaknesses. Verbal assessment can be used as continuous or final. However, in addition to these positives, verbal assessment is difficult for teachers; there is a risk of slipping into using a cliché or its use as a retelling of a mark.

Many research surveys focus on assessment from the perspective of teachers, students, or parents (Hanefar et al., 2022; Özalp & Çetin, 2022; Opstad, 2021; Özdemir et al., 2021; Yoleri, 2020; Osadebe & Nwabeze, 2018; Ung, 2016; Taşkın et al., 2016). However, preservice teachers are an important category that is still outside the area of research interest (Kilmen, 2021; Akçay et al., 2021; Şahin, 2020; Yaşar & Erol, 2016). For this reason, the paper focuses on future primary education teachers.

The presented paper aims to find out how preservice teachers perceive to study the field of teaching for younger primary school level of quantitative and qualitative forms of assessment, on the example of summative and formative assessment, which represent the most mentioned categories.

## 2. Methodology

The assessment issue in education has received considerable attention in recent years. However, as mentioned above, preservice teachers are still a neglected group of respondents within the faculties of education and the process of their preparation for the profession.

## 2.1 Research goal and research questions

The primary aim of this research was to find out what types and forms of school assessment preservice teachers of young primary school teaching prefer. However, this paper focuses only on a partial part of the research survey, so research questions were redefined for their needs and adapted to the current focus of the article.

- What is the interest of preservice teachers in using quantitative and qualitative forms of assessment in their future pedagogical practice?
- What advantages and disadvantages do they perceive in summative and formative assessment?

Concerning the goal and focus of the research, a quantitative approach to research was chosen. From this essence, the paper's intention is not to penetrate the essence of the meaning of individual assessment types or forms, but to describe the current situation in the Czech Republic context, which helps to map the current state and define the framework for further research.

## 2.2 Research group

The research group consists of three groups of preservice teachers studying the field of Primary School Teacher Training at the Faculty of Education, University of Hradec Králové. The first group consists of students in the 1<sup>st</sup> year of full-time study, 54 respondents were contacted, and the return rate was 70.4%, i.e. 38 answers. The second group consists of students in the 3<sup>rd</sup> year of full-time study, 49 respondents were contacted, and the return was 55.1%, i.e. 27 answers. The third group consists of students in the 5<sup>th</sup> year of full-time study, 26 respondents were contacted, and the return rate was 55.6%, i.e. 15 answers. A total of 129 respondents were contacted. The choice of research set is intentional in this case (Gorard, 2001). The return rate was 62%, i.e. 80 responses.

## 3. Data collection method

Within the data collection method, a questionnaire of our design was chosen concerning the research aim. A questionnaire is a set of pre-prepared and carefully formulated questions that are thoughtfully arranged and whereby the interviewee answers in writing (Gorard, 2001). The questionnaire's construction is a complex procedure, so it is not just a simple set of questions. Creating the final version of the questionnaire requires several verifications that the questions that are listed are understandable and find out what they should.

The questionnaire contains a total of 21 questions, including one demographical question. It is a combination of scaling, test, and open-ended questions (Cohen, Manion & Morrison, 2007). The research tool was subjected to pre-research to ensure the research tool's validity and overall meaningfulness. This step was implemented on a set of five experts, in two steps. In the first phase, the experts analysed by filling in and commenting on the research tool, in the second phase, a discussion was held with them on the design and form of the research tool. Subsequently, the selected items were modified according to the experts' suggestions. The questionnaire's reliability was not tested concerning the structure of the questions.

The main data collection was the next step. The questionnaire was converted into an electronic form and then electronically administered to a selected group of respondents.

### 3.1 Data recording and analysis

Within the quantitative methodology, the obtained data were analysed by standard methods. Absolute frequency and relative frequency were calculated. Relative frequencies were used to compare multiple data files of different sizes.

In the case of comparisons between different classes, data is processed into bar Charts, from which, the difference between the answers is clear. The obtained data is presented in the form of relative frequencies, which have sufficient informative value. For us, higher statistical analyses would not be of sufficient value, given the unrepresentativeness of the research group and the relatively low number of respondents. For open-ended questions, which were part of the questionnaire survey, data is arranged in pie charts, which I consider to be clearer concerning the type of data. Data are presented here in the form of a frequency percentage of responses, as it was possible to list more than one term in an open answer.

### 3.2 Limits of the study and ethical issues regarding the research

Several research limits can be identified. First of all, it is an unrepresentative selection of the research group, as not all faculties preparing preservice teachers of primary schools in the Czech Republic are represented. Concerning the authors' previous research experience, as the return on questionnaires from other faculties was very low, the current strategy for selecting a research group was chosen. Based on the above reasons, despite the possibilities of quantitative investigation, the obtained results cannot be generalized to the entire Czech Republic.

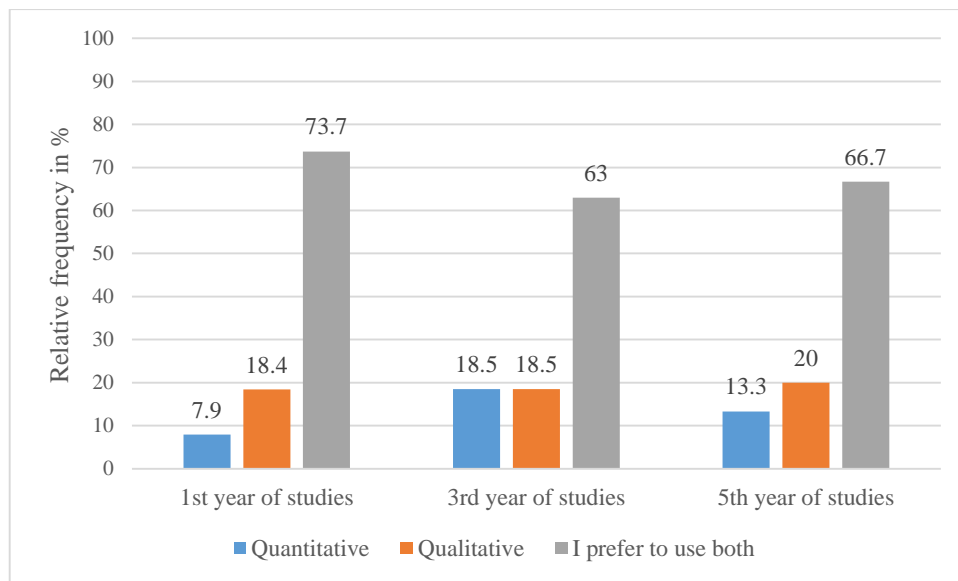
The limits of the current method were eliminated within the implemented preliminary research, which at least partially ensured the content validity of the tool. The tool's reliability was not calculated, the internal degree of consistency of questions was tested for two questions, which are not presented in this paper.

The ethical level of the research survey is ensured by strict anonymity when filling in the questionnaires. This fact is also helped by the fact that the questionnaires were administered in electronic form, so there was no personal administration, i.e. return, nor was it returned via email. Of course, there was voluntariness in filling it in.

### 4. Findings

The presented results only represent a partial part of a broader research survey, whereby the results have not yet been publicly presented anywhere (Skutil, 2020). They focus mainly on the question reflecting the current discussion on what assessment types and forms should be used in the current school in Czech education. The intention was to point out the views of preservice teachers who are part of these discussions and who should be prepared to respond to the different situations arising from the demands of students, parents, school, and society as a whole.

Concerning the discussion on whether to use more quantitative or qualitative forms of assessment in the current school, students were asked what forms of assessment they would like to use in their practice (Graph 1).

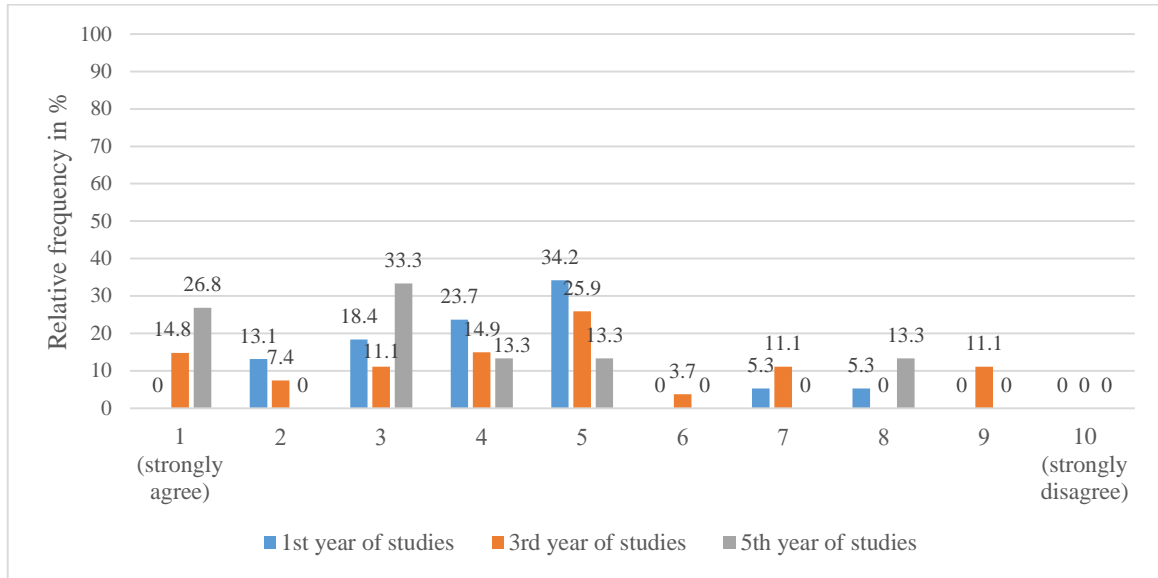


Graph 1: Preferences of assessment forms of assessment in practice

The results shown in Graph 1 are as expected. In all grades, respondents strongly prefer to use a combination of quantitative and qualitative assessment instead of only leaning towards one option. The slight predominance of the qualitative form over the quantitative one corresponds to the trends in current education; however, the differences are only marginal. Preservice teachers perceive the combination of quantitative and qualitative forms as the intersection of the classic approach, which is a traditional and newer trend in Czech education, which emphasizes the individual approach to students more.

To define the above statements, the respondents were asked questions about specific types of assessment. Concerning the balanced use of these forms in pedagogical practice, a summative assessment was chosen for the quantitative form of assessment, and a formative assessment was chosen for the qualitative form of assessment.

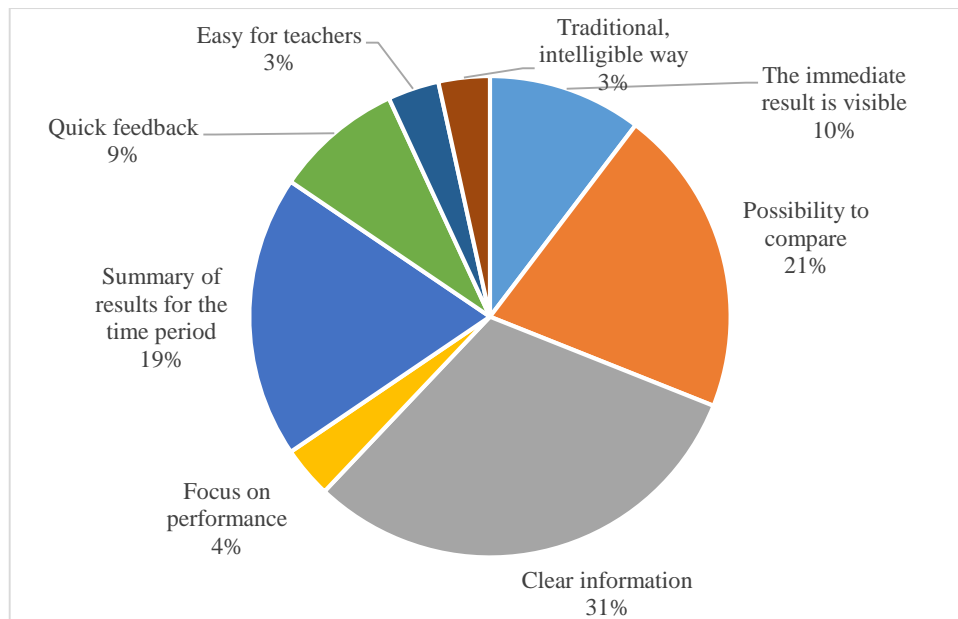
As part of the quantitative form of assessment, respondents were asked whether they would like to use summative assessment in their practice (Graph 2).



Graph 2: Interest in using summative assessment in practice

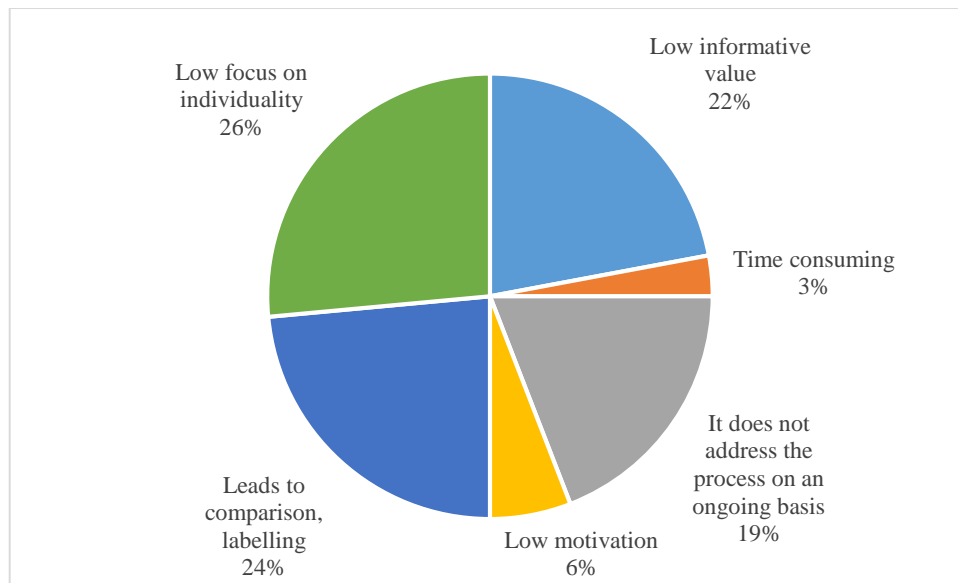
For us, the interest in using summative assessment in practice corresponds to the current divisive situation in Czech education. Although in principle, respondents are open across its years of use, the unambiguity of the answers is not dominant, as in the case of the answers concerning formative assessment (Graph 5). Nevertheless, it can be stated that the vast majority of respondents count on using summative assessment, although there is a group of respondents who imagine that they will not use summative elements in their pedagogical practice. The most obvious differences between grades are in the unequivocal acceptance of the summative assessment in the case of 5<sup>th</sup>-grade students and, on the other hand, the absolute zero acceptance in the perspective of 1<sup>st</sup>-grade students. The overall adjustment occurs only with the approaching middle of the scale, where, on the contrary, the percentages of 1<sup>st</sup> and 3<sup>rd</sup>-year students predominate. From our point of view, it may be a certain degree of idealism on the part of lower grades of primary school teaching, or greater pressure for individualization in education, which is evident following the change in legislation concerning educating pupils with special needs and gifted pupils, where the use of summative assessment is more complicated.

To understand the previous question better, respondents were asked to justify their choice. As in previous cases, there was a pooling of responses across the years. The positives of summative assessment are shown in Graph 3, the negatives in Graph 4.



Graph 3: Summative assessment positives

The respondents (31% of responses) consider the clarity of the communicated information to be the biggest positive of the summative assessment. This result is not surprising, as Czech education is traditionally based on a summative expression of performance, and therefore the vast majority of participants understand the expression of the result in the form of a mark. Within the competitive approach to education, emphasis is given on the comparison of the possible results between pupils, between classes, or between schools, where the summative assessment offers a clear statement. The third most common characteristic is the possibility to use the overview of results for a certain period. These are not only the report certificate results, but also the ongoing results of examinations and tests that pupils pass during the school year. At the limit of 10% of responses are two related results, which are immediate feedback and immediate result. The emphasis on quick feedback is acceptable from a didactic viewpoint and, in the context of the fact that marks are a generally accepted result; this factor also becomes more important.

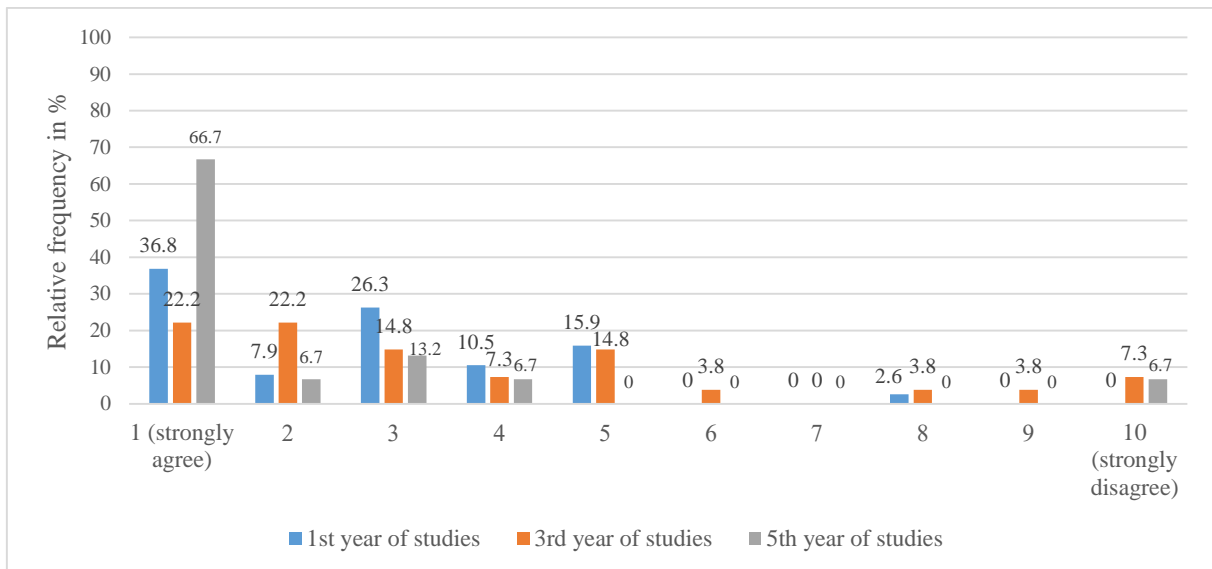


Graph 4: Summative assessment negatives

The biggest disadvantage of summative assessment is the respondents' low focus on individuality. This is also related to the low telling value. Although summative assessment is related to some clear criterion, the factor of preservice teachers' individuality does not appear in it, or only appears in general terms, for example in the form of assessment adjustments based on recommendations from school counselling facilities. However, usually, this type of collective assessment is common for the whole class. Another area that respondents see as a disadvantage is the so-called boxing of pupils based on their marks, which is understood in the context of the emphasis on equal opportunities in education as discriminatory. Last but not least, the complaint is that summative assessment cannot provide ongoing feedback so that pupils know exactly what and how they can improve in school education.

Formative assessment was chosen as a representative of the qualitative form of assessment, as in recent years it has been most often mentioned as a way of providing feedback, which should be preferred in schools. Respondents were asked whether they would like to use formative assessment in their pedagogical practice (Graph 5).

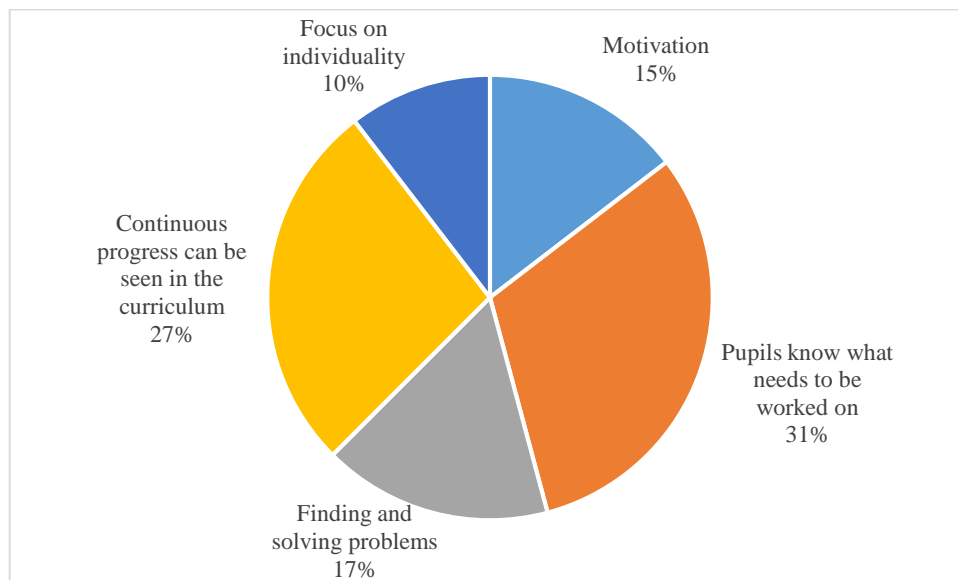




Graph 5: Interest in using formative assessment in practice

Formative assessment is accepted as the preferred type of assessment by all respondents. A more significant difference is shown in the case of a clear preference when 5<sup>th</sup>-year students expressed their interest in using formative assessment almost twice as much as 1<sup>st</sup>-year students and almost three times as much as 3<sup>rd</sup>-year students. We believe that this difference is in the way of greater practical experience with teaching in schools and greater awareness of the importance of formative assessment for the development of learning in primary school pupils. However, the fact that the vast majority of respondents expressed their interest in the first half of the scale can be perceived as positive, which means that the use of formative assessment in practice takes a positive attitude. On the other side of the spectrum, very few responses have been identified that are associated with formative assessment negatives, as further sub-divided in Graph 7.

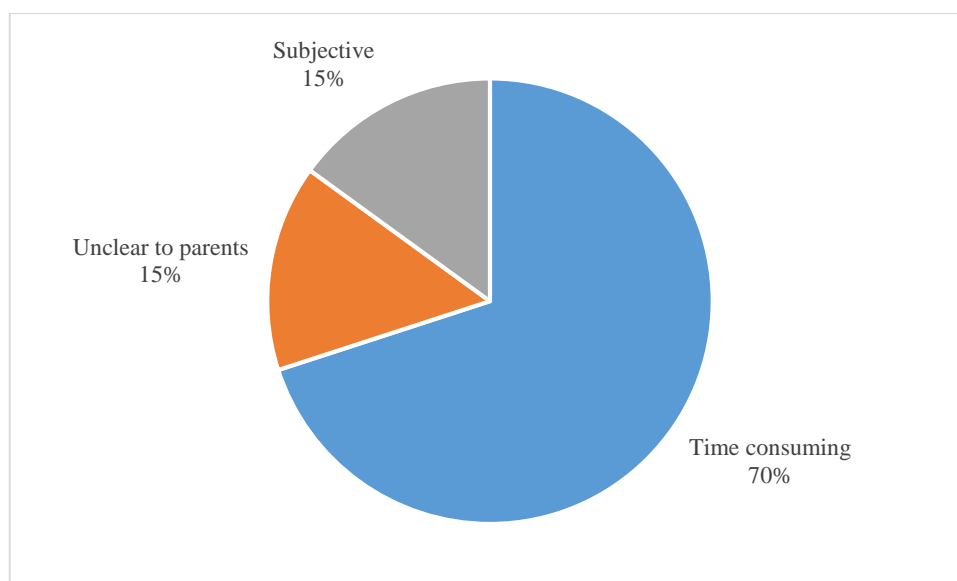
To understand the previous question better, respondents were asked to justify their choice. As in previous cases, there was a pooling of responses across the years. The formative assessment positives are shown in Graph 6, the negatives in Graph 7.



Graph 6: Formative assessment positives

Formative assessment is generally seen as a good way of showing pupils what they can improve and what path to take. This was also shown in the respondents' statements, where the largest number of answers corresponds to this factor. Secondly, the most common positive of respondents was that it is possible to identify the ongoing progress in the curriculum, and students and parents see what has improved. 17% of respondents perceive formative assessment as a diagnostic tool to help find and solve learning problems. This category is understood more from the teacher's viewpoint, while the most mentioned characteristic is understood more from

the pupils' viewpoint. It is the understanding of what pupils can (and cannot) that can be a motivating factor for the pupils themselves from the viewpoint of preservice teachers.



Graph 7: Formative assessment negatives

Formative assessment is generally accepted as a positive factor in school assessment. This may explain that the respondents only mentioned three negatives in connection with this type of assessment. The most significant negative is 70% of the answers that formative assessment is time-consuming. It is not only a matter of time within its direct application in the classroom, but also within its preparation. The remaining two factors were placed at the same percentage of responses. The first of them is non-objectivity, where teachers assess performance individually, i.e. for each student separately and differently. The second factor is the ambiguity of verbal information for parents, who are traditionally used to expressing performance in the form of a mark and cannot work with this type of information, i.e. they are not identified with the fact that performance will not be awarded a mark. For example, many parents who receive a verbal assessment often accompany their questions with the question "And what kind of mark is that?"

## 5. Discussion and conclusion

The research shows that preservice teachers in the Primary School Teacher Training field have experience with a wide range of forms and types of school assessment within their primary education. As expected, most respondents cannot imagine that the entire first stage would use only qualitative forms of assessment, without grading. The ideal combination is, according to the answers, grading supplemented by verbal assessment. In this approach no difference can be observed even between individual years, the cross-sectional approach is the same. Reasons given by respondents are in line with the conclusions of Laufková & Novotná (2014), which mention that verbal assessment does not stress pupils, but on the contrary motivates them to continue working. In terms of using summative assessment, the authors' conclusions are in agreement with the research results, as they present it as a result that is understandable and unambiguous for students. This survey's respondents also look at this type of assessment similarly and mention this reason as one of the factors for which they want to implement summative assessment in their practice. The combination of summative and formative assessment is also supported by Finamor et al. (2016), who concluded that the combination of summative and formative assessment helps to improve study performance. The essence of this connection is to maintain a standard assessment, with students being better able to identify their shortcomings and then be able to deal with them better. Glazer (2014) came to the same conclusions, saying that a combination of these two forms of assessment is necessary for teachers to provide formative assessment for learning and summative assessment to ensure that formative assessment is done properly. In their conclusions, this combined approach is also confirmed by Broadband, Panadero & Boud (2017), who state that a combination of summative assessment allows students to develop skills over time, but also the opportunity to use the feedback provided to improve performance. In their conclusions, they argue that feedback, designed correctly, must not only relate to current performance but should also focus on improving future performance. We, therefore, believe that, based on the above, the announced approach of preservice teachers seems appropriate.

In connection with the above findings, it is not surprising that the respondents attach the greatest importance to grading and verbal/formative assessment. This is a cross-section between the quantitative and qualitative assessment forms, which in previous questions have been identified by future teachers as the way they would prefer most in their future practice. Similar conclusions are reached by Pastore & Pantassuglia (2016), although Italian teachers have placed more emphasis on using quantitative forms of assessment in their findings, compared to Czech's preservice teachers, who view the use of quantitative and qualitative assessment in a balanced way.

From the viewpoint of the quantitative form of assessment, there is a clear preference for marking, which is closely followed by the use of emoticons and pictures, which are de facto expressive expressions of marks, but teachers perceive them as more friendly, especially for first and second-grade children. Quantitative assessment is given the importance of providing quick and understandable feedback on successful or unsuccessful performance. On the contrary, they are blamed for low individualization and low telling value, which hides behind the mark, i.e. symbol. Concerning the still frequent use of summative assessment, the research points out that the Czech school system, including parents, is still historically anchored in the system that has been in place here in recent decades. It is still an obstacle that society does not perceive the qualitative forms of assessment as equivalent, that it does not understand them, and therefore requires the school to be simple, i.e. clear expression of performance. As it turns out, this is not a purely Czech specificity; this problem can also be identified in other post-Soviet countries. According to Harro-Loit & Neeme (2017) in the example of Estonian education in a retrospective narrative study, in the "Soviet-era" none of the stories, in any case, contained any indications of a formative type of assessment procedures and positive support for individual results.

However, in a separate question on formative assessment, the answers of respondents are unambiguous, as most respondents are inclined to use it. There is a clear difference between the answers of preservice teachers in their final year and those in the earlier years when preservice teachers in their 5<sup>th</sup> year are more interested in working with formative assessment. Therefore, this research shows the interest of preservice teachers in incorporating formative assessment into pedagogical practice. Respondents most often mentioned as an advantage, that it is a way to find a problem and simultaneously a way to solve it, how to motivate students to continue working or how to support students' involvement in creating the educational process. These conclusions correspond to the findings of Laufková (2017), who states that students in this type of assessment particularly appreciate that their performance is assessed and that they also gain guidance regarding their further work. Gijbels & Dochy (2006), for example, talk about using the advantages of formative assessment, especially the motivational function, as stated in these research results, who mention the importance of understanding the aims of education and the curriculum itself for deeper interest in the study. The authors state that the way preservice teachers perceive and understand their learning context and the way they approach their learning is a major factor influencing learning outcomes. Overall, pre-service teachers expressed interest in implementing formative assessment in teaching, with an average of over 60% of respondents expressing the will to carry out the formative assessment on the scale with the highest possible value. However, this does not correspond much with the findings of Yan & Cheng (2015), who state that, according to primary school teachers, formative assessment is not used very often in their classes. However, the results may be different not only due to different methodologies, but also due to different attitudes of preservice teachers and teachers, or also due to different socio-cultural environments where the research was carried out.

From an overall point of view, there were no fundamental differences in preservice teachers' views across the grades - preservice teachers in the 1<sup>st</sup>, 3<sup>rd</sup> and 5<sup>th</sup> years. Although in principle, there were some differences in some answers, although this statement is not statistically verified, we believe that the respondents take approximately the same views on the use of types and forms of assessment in their future pedagogical practice. This conclusion is also supported by the findings of Pastore & Pantassuglia (2016), which in their research concluded that for preservice teachers, the data is almost uniform across their studies. As in this research, the respondents in Italy were mainly women studying teaching. According to the authors, it turned out that no significant differences were found between the students' answers.

Based on the findings presented in the empirical part of the work and subsequently confronted in the discussion, we believe that the research goals have been met. First of all, it turns out that preservice teachers perceive school assessment as a very important part of the educational process. They do not only see it as feedback assessing educational performance but expect that assessment will also represent the educational component. This is reflected in their views when they choose the most appropriate option for a combination of quantitative and qualitative assessment, which can cover both aspects. We consider it a positive finding that respondents are aware of both the strengths of different types and forms of assessment as well as their weaknesses. This supports the consideration that respondents take school assessment very seriously and try to think about which way is the most suitable for their future pupils. In this context, the inclination towards qualitative forms of assessment, which respondents characterize as demanding and less objective, but for the first-grade pupils as generally more beneficial, more respectful of their possibilities and needs, still slightly prevails. On the other hand, there is a relatively significant emphasis on the element of the tradition of

quantitative assessment, which is focused on measuring current performance. It is interesting that preservice teachers not only see this as an obstacle with their parents but also with themselves when they often mention the question of Czech school tradition in their answers.

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