Using formative assessment to foster confidence and motivation to learn

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Abstract

Educational standards in the broadest sense include the goals of education, their content, the conditions for the implementation of the programs and the system of evaluating the achievements of students. In such a case, evaluation can have a formative function. The evaluation should refer to all aspects of the development of the student's personality. In this case, the evaluation may have a formatting function. This means a frequent and interactive evaluation of student's achievements, understanding learning needs and adapting teaching methods, according to the student's needs and abilities. The most realistic assessment is when the student and teacher participate in the opinion of the assessment, publicly and transparently. From here is starting the need to realistically evaluate and see the level of achievement by the student himself. The evaluation process should not be reduced to valuing the quantity of knowledge or ignorance, but should take into account the student's prior to follow-up, measurement and interest, his relationship to tasks. This builds the moral character of the student. It is precisely because of this fact that students should be introduced and trained in time and properly for their own assessment and evaluation, as well as for mutual evaluation. The involvement of students in the evaluation and self-evaluation process develops student democracy in the school, improves the general climate of the teacher-student relationship and the most important thing is to develop the positive values of the student and teacher's personality.

Keywords: formative assessment, student, techniques, school, learning

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1. Introduction

Almost every problem in pedagogical practice is as complex and important as the problem of assessing students' achievements and progress. Assessing students' work and achievements is a very responsible job, so we should approach this issue with great care, because the ultimate goal in teaching is to objectively and transparently assess the work of students. The evaluation should refer to all aspects of the development of the student's personality. In this case, the evaluation may have a formatting function. This means a frequent and interactive evaluation of students' achievements, understanding learning needs and adapting teaching methods, according to the student's needs and abilities. The most realistic assessment is when the student and teacher participate in the opinion of the assessment, publicly and transparently (self-assessment and self-assessment of their own work). Hence the need to realistically evaluate and see the level of achievement by the student himself.

Grades in teaching as a topic are certainly most popular for teachers, students and parents, school, ministry, education inspection and the public in general. This stems from the fact that evaluation is an evaluation of achievements for every single person in life who tends to be as good and successful as possible every day. This shows that everyone needs to be evaluated or self-evaluated to know how much he is worth and is successful in relation to himself and other individuals. Assessing a student's achievements, skills, attitudes and abilities should not only be understood as a way to assess, but should be seen as a continuous process that is directly related to all aspects of the student's development. If we want objective monitoring and evaluation of the student's achievements in educational work, we need to plan it, systematically record, evaluate and inform it. This implies assessing the process and effects of the goals and tasks set out in educational work and its constant promotion.

If the student is allowed to be part of the process of evaluating his own work, he develops a sense of self-government, self-control, responsibility for his own learning and self-criticalness, as a very important feature. When a student actively participates in the evaluation of his own work, he becomes more motivated to learn, his self-confidence increases and learning about him makes real sense. When a student participates in the evaluation process, he considers the degree of his success and becomes accustomed to and enables self-assessment and self-criticism of his own work. This establishes a culture of evaluation that will be in favour of the needs of student and teaching process. This selects and adapts the evaluation criteria and creates the possibility of greater fairness in assessing achievements. Moreover, learning is basically a self-directing process that requires choosing the appropriate method of learning in order to recognize individual, linguistic and cultural differences between students. In today's practice, assessment as still limited only in the framework of one way communication between the teacher and the student. It is still insufficiently treated as a cooperative process that is socially conditional and which considers the student an active partner in the teaching process and thus in the evaluation process.

The research consists of four parts logically related: theoretical approach to the problem, research methodology, analysis and interpretation of results and conclusion. In the section entitled as a theoretical approach to the problem, we look at several substantive issues regarding reform changes to monitor and evaluate students' achievements. The second part refers to the methodological approach to the problem, which aims to examine the views and opinions of teachers and students in primary education on the application of formative evaluation in teaching. The third part contains data from the analysis of the results obtained from the survey of respondents, their views and opinions on the application of formal evaluation. Eventually, an overview of the literature used and contributions to the production of this research was given.

What is the evaluation? Teaching and learning of the 21st century is noted that evaluation is more than giving grades. This is: monitoring the work of the student; exchange of learning information; evaluation of

learning and learning; giving direction for further work; and recording, documenting the development of the student's achievements.

Good evaluation should help the teacher learn by recognizing that it is not accurately understood in order to undertake activities to overcome it. Good evaluation, however, allows the student to learn better by giving accurate feedback and correcting understanding by setting clear goals. The term evaluation is to indicate all those activities taken over by teachers, as well as their students in their self-evaluation, which provide information that will be used feedback to modify teaching and learning activities. "Anything a student does can be used in evaluation" (Black and Wiliam 1998).

Such an assessment is aimed at:

➢ providing information to students and their parents about students' progress in knowledge mastery, developing abilities and forming attitudes.

➢ supporting teachers to modify teaching and educational programmes.

➢ providing information on other competent structures that make decisions on educational policy, which applies to students.

From such assessment guidelines, it can be concluded that evaluation is an integral part of the teaching process. There is a close connection between teaching, learning and evaluation. There is a clear link between the objectives and content of teaching and evaluation (what is taught and what is evaluated). The results of the evaluation depend on how the teaching takes place and what other objectives we strive for.

Formative evaluation - Any screening and evaluation that aims to help the student learn and develop and which actively involves the student is a formal evaluation. The class should be an open learning environment where alternating information exchange occurs through co-operation and dialogue. The concept of formal evaluation in literature was treated thirty years ago, before the critical reviews of Black and William appeared, which attracted attention to seeing the positive effects of learning and seeking innovation in practice. In some studies in literature, formatting evaluation is a process for giving guidance on changes and improvements based on feedback on a student's achievements. In the programme, which concerns an international evaluation of students' achievements from the PISA project (2007), formative evaluation is also seen as a set of instruments that measure and monitor students' progress in teaching. Pofan says that formal evaluation is always a planned process that never happens by accident (Ropham W., 2008). Hence, one closest definition of the term formative evaluation can be rounded up: it is a process in which teachers use various instruments and strategies to determine the student's knowledge, to look at the shortcomings in understanding, to monitor its personal development, in order to plan future activities to improve teaching. The assessment that allows students to show their views and opinions, and allows teachers to best assess and record that cognitive process is formative evaluation. Learning evaluation is any assessment whose priority in its concept and practice is to serve the goal of promoting student learning. This differs from the assessment, conceived, primarily to serve their goals. Evaluation activity only improves teaching if it provides feedback to be used by teachers and their students says such evaluation becomes formative when indicators are actually used to adapt teaching to meet learning needs (Black R., 2002).

2. Research objectives

The aim of this research is to examine student's views and opinions on how much and how the formative assessment of their achievements in teaching is applied in order to foster self-confidence and motivation to master teaching content. Departing from the above purpose of the research, the following tasks will be:

➢ To examine student's views and opinions on what methods of formal evaluation teachers use;

> ➢ To examine students' views and opinions on the application of different approaches to monitoring and evaluating the knowledge and understanding of students by teachers;

> ➢ To examine students' views on how much and how teachers involve students in the process of evaluating achievements in teaching;

> ➢ To examine students' views and opinions on the quality of feedback;

> ➢ To examine whether the formative evaluation methods used by teachers affect the degree of motivation and self-confidence of students.

2.1 Survey Hypotheses

General hypothesis according to the purpose of the study:

> ➢ It is assumed that formal evaluation from the point of view of inclusion and motivation of students in evaluation is successfully applied in teaching and positively affects the attitudes of the teacher and students.

Auxiliary hypotheses according to the purpose of the study:

> ➢ We assume that the teacher uses various forms of formative evaluation in teaching by electro group to motivate and improve students' achievements.

> ➢ We assume that the teacher uses quality feedback, which is in the function of improving students' achievements.

> ➢ We assume that the teacher continuously applies formal evaluation techniques, which are in the function of involving students in evaluation and their motivation.

> ➢ We assume that using various forms of formal evaluation will raise the degree of motivation and self-confidence in students.

> ➢ The process of continuously assessing students' achievements will be known in advance for both the teacher and the student, which will mean objectivity and validity in assessing the level of achievement of the student, which will be a conscious process of work in teaching and evaluation of the teacher's work towards the student and self-evaluation and self-examination by the student.

2.2 Sample Description

The research was directly applied in subject classes in the Electro group of subjects, at the Gjorge Naumov Secondary Municipal School in Bitola, Macedonia. The sample of respondents is students who are 3 grade or aged 16–18 chosen by random choice. The total number of respondents (students) is 40.

2.3 Description of data collection instruments

The questionnaire, which was electronic and anonymous, was used to collect data from students. The questionnaire consists of lickert's scale of views with precisely established statements and closed-type issues. Scaling is done for each attitude offered answers (5 - fully agree, 4 - agree, 3 - do not know, 2 - partly agree, 1 - disagree at all). The selection of students for surveying is random and is realized in a separate class, where students were placed in a classroom with computers for this purpose so that each student could respond to the survey directly in a software program.

3.   Result and discussion

The main goal of the data obtained by this research is to apply it in proving or rejecting the hypothetical framework. Quantitative and qualitative data analysis may result from the evidentiary procedure for verifying individual and specific hypotheses. The survey questionnaire applies the descriptive method in the form of description, definition, analysis, and generalization. As noted above, the questionnaire is composed of a Lickert's scale of views with precisely established statements and closed-type questions. In order to examine students' opinion on the application of formative evaluation in teaching by electrical group of subjects, we traded on the assumption that the teacher continuously applies formative evaluation techniques, which are in the function of involving students in evaluation and their motivation, and we assume that using various forms of formal evaluation will raise the degree of motivation and self-confidence in students. We can look at the key questions and response rates from students in the survey involving year III students.
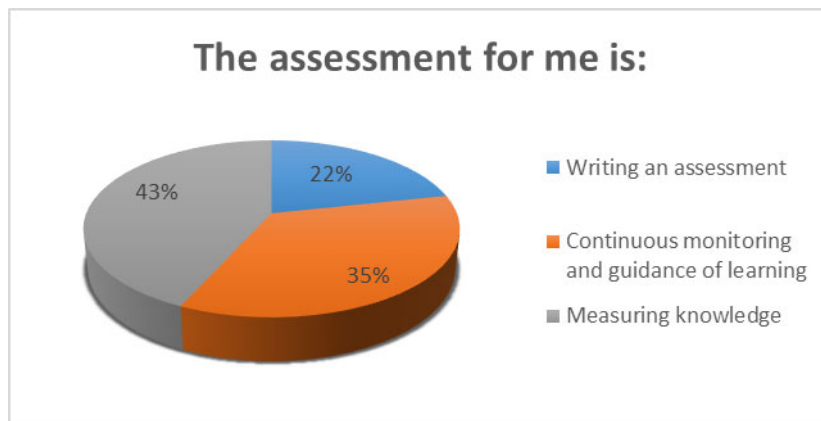

Figure 1. Question number 1

On the first question students 43.2% responded by constantly monitoring and directing learning, For the majority of students surveyed, evaluation is constant monitoring and guidance of learning, confirming that students are aware of the importance of continuous/formative evaluation. With regard to the second issue, which is of the type of Lickert's scale of views with precisely established statements, Students should have rated certain statements by 5 – fully agree, 4 - agree, 3 - do not know, 2 – partially agree and 1- do not agree at all.
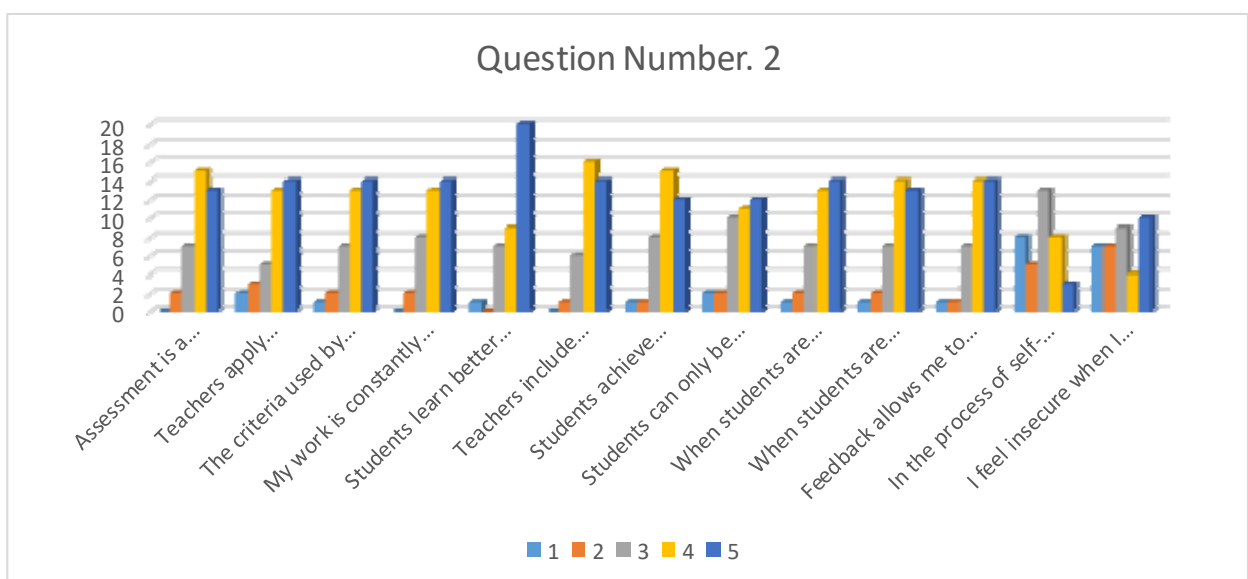

Figure 2. Question number 2

Table 1

Results from question 2

Statements	Marks for statements				
Rate the statements:	1	2	3	4	5
Assessment is a motivating tool for learning and achieving better success only if it is clearly reasoned	0	2	7	15	13
Teachers apply formative assessment (sharing goals, constant monitoring and recording of answers, giving feedback)	2	3	5	13	14
The criteria used by the teachers for evaluation are sufficiently clear and understandable to me.	1	2	7	13	14
My work is constantly assessed in class and helps me see where I am at.	0	2	8	13	14
Students learn better when they are tested more often and on shorter material (teaching sheet, quiz, essay, project assignment)	1	0	7	9	20
Teachers include students in the process of evaluating their achievements.	0	1	6	16	14
Students achieve higher results and exchange ideas if assessment is part of the process.	1	1	8	15	12
Students can only be assessed if they have a clear idea of the goals and criteria for their learning.	2	2	10	11	12
When students are involved in evaluating their achievements, they have more motivation to learn.	1	2	7	13	14
When students are involved in evaluating their achievements, they perceive their weaknesses.	1	2	7	14	13
Feedback allows me to see that my point of view and opinion is valued and respected.	1	1	7	14	14
In the process of self-evaluation of my own work, I am not realistic enough.	8	5	13	8	3
I feel insecure when I am involved in evaluating the work of a classmate	7	7	9	4	10

Most of the students surveyed were rated 5 and 4, this means that their grade is an instigating means of learning, teachers include them in evaluation, are familiar with the riterities of evaluation, and their involvement in the evaluation process encourages greater motivation and self-confidence.
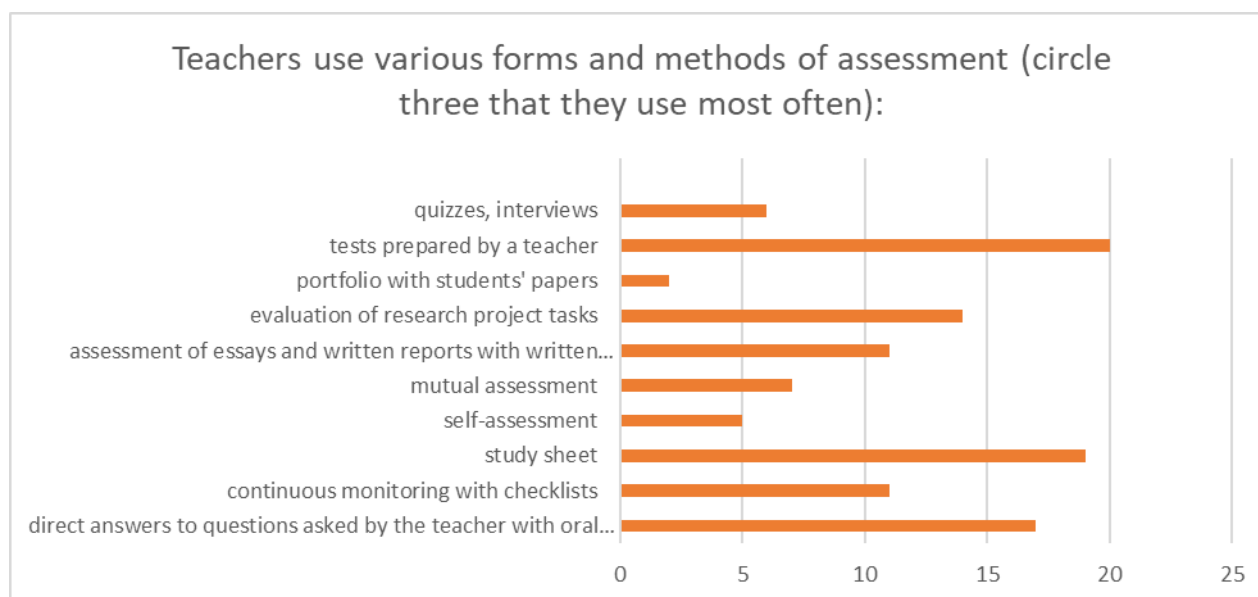

Figure 3. Question number 3

The results of our study suggest that teachers use various forms of formative evaluation in teaching electro technical subjects to improve students' achievements. By examining the rank correlation of the answers offered, we found that as the three most commonly used forms of formal evaluation by teachers occur:

➢ direct answers to questions asked by the teacher with oral information

➢ continuous monitoring with checklists

➤ curriculum

Given the frequency of other types of grades represented in a smaller percentage, the hypothesis is also confirmed that teachers use various forms of assessment of students' achievements.
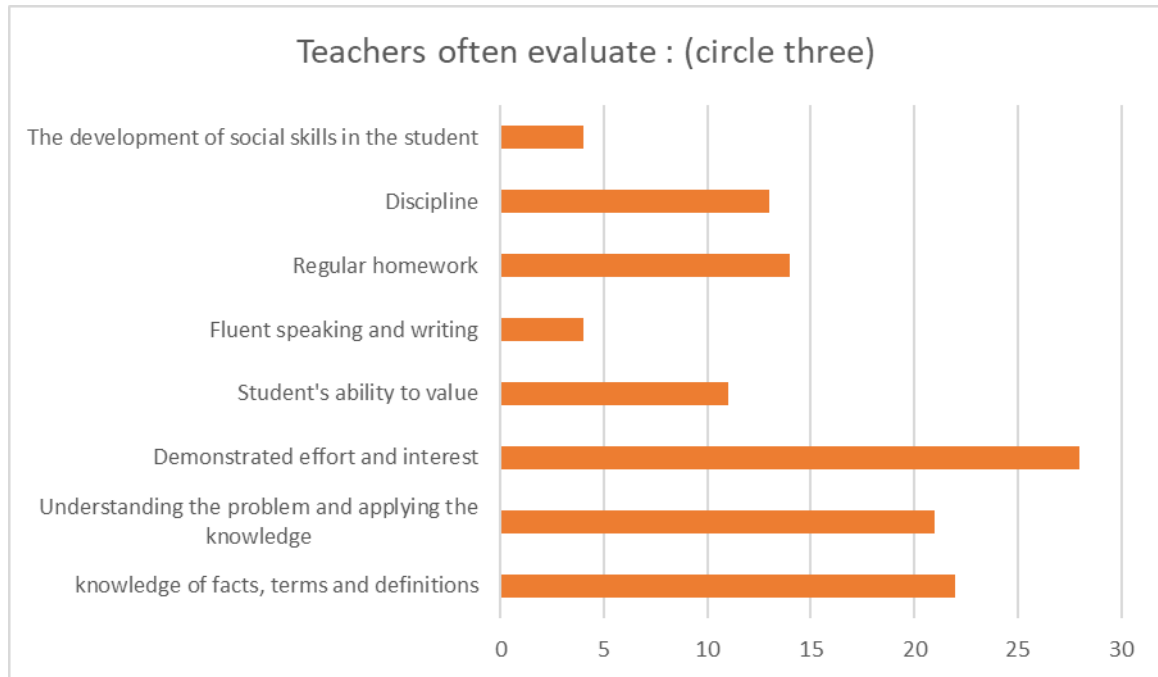

Figure 4. Question number 4

In relation to the fourth question of the survey by examining the rank correlation of the answers offered, we found that teachers usually assess the work and interest shown, knowledge, facts, concepts, definition as well as understanding the problem and application of occupation.

On the fifth question of the poll teacher ratings are most commonly with 62.2% responded by regularly monitoring and recording the student's achievements (formative evaluation), 21.6% with The Application of Final Tests, 16.2% chose by involving students in the evaluation process.
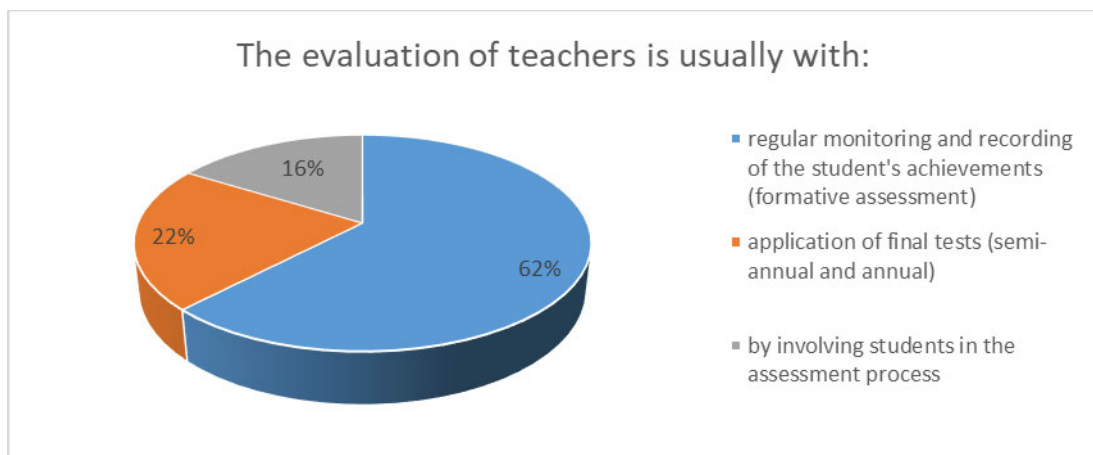

Figure 5. Question number 5

For the majority of students surveyed, evaluation is usually regular monitoring and recording of a student's achievements, confirming that students are aware of the importance of continuous/formative evaluation.
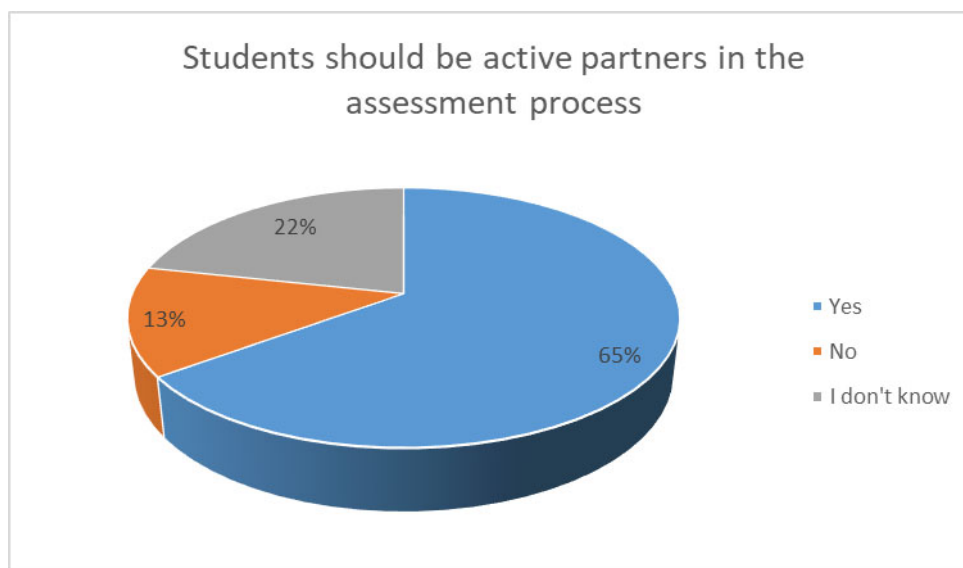
Figure 6. Question number 6

On the sixth question of the poll students should be active partners in the evaluation process: 64.9% of respondents responded with yes, 13.5% responded with NO, and 21.6% responded with I DON'T KNOW.

4. Conclusion

Based on the above, we can conclude that the assessment of the achievements, skills, attitudes and abilities of the student should not be understood only as a way of assessing but on the contrary, it should be understood as a continuous process that is directly related to all aspects of the student's development. systematically record, evaluate and inform it. This implies assessing the process and effects of the goals and tasks set out in the educational work and its constant promotion. The student as a subject in the teaching process has his own rights and duties in the school and as such should be involved in the planning, realization and evaluation of teaching through various forms of evaluation. If the student is allowed to be part of the process of evaluating his own work, he develops a sense of self-government, self-control, responsibility for his own learning and self-criticalness as a very important characteristic.

Formative evaluation as an assessment of the process, if properly implemented, allows the student to see his deficiencies, direct him and improve them, to highlight the positives of the person, all of which contributes to improving the success and quality of the student's knowledge. When a student actively participates in the evaluation of his own work, he becomes more motivated to learn, increases his self-esteem and learning about him makes real sense. Based on the results obtained from our research, we can confirm with sufficient argument that in teaching by electro group of subjects the formative evaluation is applied and this should be imperative for each teacher to continuously involve students in the evaluation.

All these guidelines refer primarily to the cognitive dimension of learning, but we should not neglect other aspects such as the affective dimension where feedback given as direction, praise, or assessment greatly strengthens egos when students are involved in the execution of the task. With the inclusion itself, students believe that they can improve through their own advocacy, ready to accept new challenges and learn from their own mistakes. Learning assessment should be used for feedback from teachers and students in order to help the student evaluate himself or his classmate, to modify teaching and learning activities where they are engaged and where the purpose of teaching is to meet learning needs. When assisting students in developing self-evaluation and co-operation in a group (mutual evaluation), teachers should clearly set goals that students should strive for and understand the criteria.

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