

Self- assessment in learning process at basic school

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Abstract: The concept of self-assessment, the role, function and place in the learning process are explained in this article. Used self-assessment methods are listed in the article. A study is done on the following subjects: how the 9th grade students' of Jelgava Secondary School No. 4 self-assessment skills have changed in 4 years. The results show that the self-assessment skills development has contributed the improvement of learning outcomes. The aim is to raise the importance of self-assessment in teaching at basic school as an essential component of high quality education.

Keywords: self- assessment, learning process at basic school.

Introduction

The goal of education is to promote the development of such a personality who can solve his/her life problems independently, effectively and proficiently, and who is capable to learn with a purpose to develop himself/herself and in his/her professional field. Acquiring sustainable and operative knowledge and skills is one of the most important objectives in acquisition of learning content. Students' learning achievement assessment is based on learning activities, while evaluation is related not only to learning outcomes, but also to a learning process.

Learners in the 21st century must take charge of their own learning in order to be able to sort through and make sense of the overwhelming amount of available information and use the information to fulfill personal and academic needs. Both the “what” and the “how” of learning have become so complex in today's global society that learners must make constant decisions throughout their own learning process. These decisions are based on self-assessment, the cornerstone of independence in learning (Self-assessment strategies, 2008).

Modern Education introduces a new concept of Assessment for Learning. This idea represents Assessment Reform Group (1999, 2002). The Group describes this concept as: students and teachers to use evidence-gathering and interpretation process to determine what the students have learned what they should learn, and how best to do it. Assessment for Learning improve learning process, exploring learning opportunities and displays the next steps which must be taken in order to facilitate the learning process, focusing on the learning and teaching process dynamics. According to W. Harlen's (2007a,b) direction „*Assessment for Learning*” aims to support learning, continuously develop pupils' ability to evaluate their own learning activities, it means to develop skills for self-assessment.

This means that the assessment should be viewed as a strategy that supports and stimulates learning (Pridāne, 2006, 88). Only the analysis and regulation of knowledge and skills acquired correspond to a modern and high-quality education, in which assessment is becoming rather the instrument of learning management and development than the instrument of control (Lanka, Lapiņa, 2006).

Assessment of students has been in existence since the school beginnings. However self-assessment is discussed as a pedagogy component more recently. Costa A. L., Kallik B. (2003) points out that the assessment destination is going to give learners the opportunity to self-assess. A significant opinion of contemporary pedagogy and psychology is as follows: in order to bring about a change of personality's self-respect it is important to learn to carry out self-assessment, it means to reflect on your learning. Introduction of experience and self-directed learning refers to the need for self-assessment and is directed so that students are becoming more aware of their own learning, and thus are able to manage it better (Brown, 1999).

Self- assessment in learning and teaching process is mainly connected with possibilities for self-realization in a significant way. The goal of student self-evaluation is to promote formation of shared responsibility for their learning outcomes.

Methodology

In the theoretical study explanation of the concepts “self-assessment” is given. Self-assessment functions and their place in learning process are discussed. The importance of self-development of the personality, motivation for learning, student ownership of their learning outcomes, and recommendations for self-assessment skills and techniques for use in basic school are emphasized in the paper.

A practical study has been carried out in Jelgava Secondary School No. 4. In a practical study it is found out how students' self-assessment skills have been changed in 4 years (from the 6th - 9th class). The study was used to carry out the final inspection work carried out by students' self-assessment of the subject "Home Economics and Technology." Students' self-assessment is compared to teacher's assessment.

The author's experience and educational outcomes of many years has shown that students have improved their self-assessment skills. In a practical study to follow up if introduction of regular self-assessment in learning contributes to the outcomes of learning process. Therefore is studied and compared mutually the dynamics of four years final tests. The data are summarized in two tables.

The results obtained support the author's point of view.

Results and discussion

There are concepts of *Self-Esteem*, *Self-Evaluation* and *Self-Assessment* used in pedagogy and psychology. Getting acquainted with these terms in scientific research context it is admittedly that they are commonly used as synonyms. Yet, there are significant differences among them.

The explanation of the concept of *Self-Evaluation* can be found in Explanatory Dictionary of Pedagogic Terms (Pedagoģijas terminu..., 2000, 124). It is a process, in which the person is evaluating him-/herself, the importance of his/her actions, deficiencies and further perspective in detail. *Self-Evaluation* is important in planning further individual actions.

The main functions of *Self-evaluation* are the following:

- the constructive (the facts gathering, storing information, self-controlling of one's work, comparison of it with the given criteria),
- the mustering Oneself (the assessment and conclusions about the still to be covered things, analysis of one's actions, attitudes and behaviours),
- the projecting (balance of probabilities, setting the goals, planning actions).

In the opinion of the author, the concept of self-assessment can be used as synonyms.

Definition of **self-assessment** in British and World English in Oxford dictionary is- assessment or evaluation of oneself or one's actions and attitudes, in particular, of one's performance at a job or learning task considered in relation to an objective standard. (Oxford Dictionaries..., 2013).

Self-assessment is the evaluation of the person's personality, opportunities and place in her/his life. It is a fundamental trait of a personality that establishes relationships with other people. Hahele R. (2006) believes that self-assessment is a condition of the self-directed lifelong education, and it is forming individually, providing means for self-improvement and extending of one's ideas. Students' self-assessment is an individual system of evaluative activity for self-improvement and extending one's ideas, in order to acquire the desired or expected results. The process of self-assessment results in the motion from the set objectives and tasks towards the learning outcomes and progress. By assessing the quality of his/her own learning the student improves his/her learning results.

According to Andersone R. (2011), self-assessment is a pedagogical tool for promotion of an adequate self-evaluation. This may come as evaluative activity and a necessary part of the learning process, as well as reflection, that promotes awareness of the objectives put forward by the student to identify the current situation and improve the learning process, make adjustments.

Fisher R. relates self-assessment to self-analysis. It can help students to acquire a better understanding of their own life and estimate themselves more objectively. Self-assessment is necessary not only for

helping the students to discover the aspects in which they succeed, but also for formulating and being aware of their weaknesses (Fišers, 2005).

According to the theoretical research, Hahele R. (2006) has established the primary definition of self-assessment: “Students’ self-assessment is students’ evaluation of their learning by reflection.”

It is indicated in the Instructions about National Education Standard of Basic Education and Curriculum of Basic Education (Noteikumi par valsts...,2013) the assessment of students’ learning outcomes form up in learning process consisting of three types of valuation:

- self- assessment,
- mutual evaluation,
- teacher’s assessment.

According to the Standard’s requirements, the evaluators may be the administration of school, parents, experts, state and local authorities (external evaluation), classmates, teachers (internal evaluation) and also the student him-/herself. The question is - How can students assesses their own learning outcomes?

There is an interesting experience in Switzerland in this matter (Untersetzungshilfen zum Lehrplan Volksschule, 1996). The self-assessment skills are built up in every lesson by cooperation of the teacher and student in developing an appropriate framework.

It is important for students to learn how to assess not only final learning outcomes but also the process and effectiveness of their learning (Lanka, Lapiņa, 2006.) These findings are related to statements of teachers and psychologists which state that the assessment is one of the stimulators in the development of a personality. Acquiring the knowledge is a process, activity and conscious action, including the motivation, objectives, means and the results that help in fostering students’ self-assessment, in providing useful guidance of thoughts about learning (Fišers, 2005), in giving the opportunities to students to assess themselves (Prets, 2000) and is directed to students’ self- awareness of their own learning and ability to conduct it better (Brown, 1999).

Hahele R. (2006) draws the attention of teachers to the fact that still today students are not used to think and evaluate their work and the acquired knowledge as the result of it in the process of learning. Role of the teacher is to motivate students, guide them towards the best possible results, help them with setting the learning objectives, realize them and assess the acquired outcomes (Maslo, 2006.), analyse their mistakes and failures, compare their learning outcomes. This experience can appear being useful later on in evaluating and assessing the others.

Students have to be prepared for an objective self-assessment; they have to obtain the above mentioned experience. Self-assessment skills have to be built up during every lesson. This facilitates students’ independency, positive attitude towards learning and motivates them to work (Aherman, 1992).

So, a significant part in developing self -assessment skills belongs to the cooperation of the teacher and student. Teaching and learning that is directed towards cooperation require the choice of such methods that emphasize shared knowledge and decision-making. The teacher has to elaborate the assessment strategies that give students the opportunity to:

- reflect on their own achievements (it can be done getting involved in different activities that help to set objectives, plan, control, assess one’ s activity and learning outcomes and finally arouses also self-confidence),
- coordinate a long term planning of teacher’s and students’ plans.

An assessment activity can help learning if it provides information to be used as feedback by teachers and their pupils in assessing themselves and each other, to modify the teaching and learning activities in which they are engaged. Such assessment becomes formative assessment when the evidence is actually used to adapt the teaching to meet learning needs (Black, Harrison, 2002).

However, experience has shown that the teachers and students are not always ready for organizing the learning process this way. It requires highly developed skills of reflection for both students and

teachers. Reflection skills can be built up by devoting one's time to both - the consideration of one's progress and to answering questions: What have I learned today? Where do I need help? etc. One of the most fundamental questions in providing, improving and developing students' learning outcomes is the students' own responsibility for his/her own learning process. We can encourage students to set objectives for developing their own personality and plan the ways on how to reach them. When we help the students to form the awareness of their thinking and learning process, we help the students to consider the effectiveness of the strategies they use in acquiring the set objectives and goals.

Self-assessment has to be included and used for schoolwork as a regular systematic activity, teaching students to assess their thoughts and behaviour already since young age (Jansone, 1998, Fišers, 2005). If self-assessment has not been organized already since the first grade, the student who is used to the assessment given by the teacher's or others, does not even seek for self-assessment (Амонашвили, 1990).

Day-to-day assessment is an essential aspect of effective teaching. It involves the teacher or practitioner focusing on how learning is progressing during the lesson, determining where improvements can be made and identifying the next steps. During the lesson, we need to be listening to, observing and engaging with the children we are assessing. We can use the strategies of questioning, observing and talking with children. We can develop methods for quickly checking on children's understanding and we can also develop more sustained assessment activities that give us a particular insight into how well the children are applying what they have learned (Day-to-day assessment..., 2004).

Just as a student learner is acquiring the learning content-from the simple to the complex, also self-assessing should be performed in a specific order- from the simple to the complex. Firstly occurrence and fact-finding takes place: for example, the teacher and students discuss the course of the lesson and reflect about the lesson at the end of it; teacher compiles the information about how students have understood the subject matter of the lesson, how did they like the learning methods used in the lesson.

The next stage- explanation of the acquired facts and assessment of results- comparison with the existing standards, requirements, benchmark- the evaluation criteria prepared by the teacher or the teacher together with his/her students in advance. This contrasts with the system when the student receiving the teacher's assessment in marks, for example, for an item made in a certain handicraft technique, often does not get to know anything about the process of the work performed and the objectives achieved.

Criteria of self-assessment are like landmarks or reference points in the process of learning (student knows the criteria already in advance and takes them into account in the process of producing his work, estimates, how much time and effort it would take in order to produce the given item or work). Thus the assessment does not depend on the relations between the teacher and the student anymore. Finally assessment of the results, predicting development and exchange, as well as planning testing of his/her own work (Gailīte, 2000,8), for example, what does the student needs to learn better in order to pass the test. The student who has learned self-assessment skills and is aware of him-/herself can reach the maximum result, because he knows what is possible and impossible for him to achieve (Pridāne, 2006), he/she is able to separate the knowledge, partial knowledge and ignorance, identify his/her skills and inability, as well as to see the perspective for his/her further development in his ignorance or in ability rather than helplessness and impotence (Jansone, 1998, 113).

Moreover, the teacher should create the situation of success to students with low self-esteem and to those who face difficulties in assessing themselves objectively. Groduma- Vīriņa D. (2009.) highlights that self-assessment is introduced in lessons for giving the students an opportunity of viewing the subjective (self-created esteem) and objective (teacher's created according to the evaluation criteria) assessment.

Critical attitude in thinking is the quality that provides the opportunity to weigh up precisely one's results, find the strengths and weaknesses in it (Nikiforovs, 2007). There are both- the positive and negative aspects of critical attitude. If the student will think only critically, these thoughts will penetrate into one's consciousness and the student won't try to achieve higher level. However,

positive critical attitude, in its turn, is necessary, because it will stimulate students to achieve better results (Špona, Čehlova, 2004).

Self- assessment is three-directional: looking backwards at work that has been done to see how successful it was (summative assessment), looking at the present to determine the next steps (formative assessment), and looking at the future to decide what has been learned that will make the learning process more effective in the future (predictive assessment)(Self-assessment strategies, 2008). Self- assessment has got a significant role throughout all the process of acquiring the learning content, not only at the end of it. Student can get involved into self-assessment in different periods of lesson, in various contexts (Krastiņa, Pipere, 2004, 127).

Planning self-assessment during his/her class the teacher should evaluate its place in the learning process. It can be as follows:

- predictive self-assessment- before the beginning of work, lesson in order to get an idea of student`s knowledge before the introducing the new material,
- gradual self-assessment - during the work, at different stages, during the process of learning in order to collect information about the process of acquiring the new theme, material,
- definitive self-assessment- as a result of work at the end of acquiring learning content after learning the theme (Pliners, Buhvalovs, 2002, 77).

Self- assessment can be done both- orally and in written. It can be used:

- in everyday work – at the lesson, at the end of the lesson, for example, for collecting the information about the students' understanding of the new matter or during the preparation for tests;
- in tests – in order to get the information about students' assessment of their knowledge and skills in performing certain tasks;
- in formulating the concept of "I" to oneself, for example, while thinking about the career possibilities in relation to the knowledge, skills and interests acquired during crafts, technology and visual art lessons;
- in social events- in various events, contests and activities at school.

It is important that the opinion of students is heard out before the teacher's opinion has been offered. The information that would be reflected in individual achievement cards or student portfolios would be summarized after reconciling the opinions or after the test results. Self-evaluation skills should be built up by offering freedom of choice, respecting students' individual learning styles, carrying out individualized, variety (Krastiņa, Pipere, 2004).

Among the plenitude of the methods of self-assessment that can be used at every stage of education, the following methods should be mentioned: discussion, reflection, diaries, weekly assessment, assessment control sheets, questionnaires, surveys among and interviews with students, SWOT analysis, portfolios.

All these methods motivate students to analyse their work, define what they have learned, formulate what problems still exist, provide students with the opportunity to determine his/her progress. It is very important to help the students in formulating clear criteria for evaluating their work. It is advisable that they were clear to students already before the beginning of learning. For example, before acquiring the new theme in discussion about timesharing, the methods of acquiring the learning content and assessment, the teacher defines the requirements of standard for acquiring the learning content and agrees on the form of the test together with students.

In order to gain information about the fact if students have acquired compliant Instructions about National Education Standard (Noteikumi par valsts..., 2013) knowledge and skills in the subject "Home Economics and Technology", students write a final test at the end of each school year. Knowledge and skills required in each of the topics are formulated through the levels (high, optimal, sufficient) in the A. Pridane author's programme. Pupils are regularly introduced to these requirements, thus making students to assess which of the levels is to corresponding his or her knowledge and skills.

In the learning process, especially in preparation for these tests, a variety of self-assessment methods are used. More often a question and answer session on a specific topic is practiced. Frequently, the author has prepared self-assessment criteria for the knowledge and skill test content according to which students can evaluate themselves. There are also cases when the class teacher develops criteria together with the students.

In the 9th grade students write a basic education final course test in the subject "Home Economics and Technology". It is therefore very important as far as possible prepare for it. This can be done when preparing the process of being written test exam paper and then made self-assessment that allows the students to self-assess who has the knowledge and skills acquired.

The aim of the study was to determine whether and how students' self-assessment skills have changed in four years period (from 6th - 9th grade). The study compared and evaluated students' self-assessment and a teacher's assessment of the subject "Home Economics and Technology" on the final tests. The data summarized in the table No.1.

Table 1

Comparison of self-assessment by the teacher on the final examination

Grade Academic year	6. Grade 2009. /2010.			7. Grade 2010. /2011.			8. Grade 2011. /2012.			9. Grade 2012. /2013.		
	h	l	e	h	l	e	h	l	e	h	l	e
The number of students %	51,4	28,6	20	54,5	9,1	36,4	16,6	36,7	46,7	20,6	38	41,4

h-higher, l-lower, e-equal

The results show that the growth of dynamics of the marks that are equal (e) is obvious and statistically significant. The number of students (%), the assessment of which is equal with the teacher's mark or assessment in the 6th-7th grade is disparate (differs substantially) from the number of students (%) in the 8th, 9th grade. The number of students (%) who assess their results above the teacher's mark in the Register, decreases substantially in the 6th, 7th grade in comparison with the 8th, 9th grade. However the number of the students (%) who assess their results below the teacher's mark in the 8th, 9th grade increases. Supposedly, students become much more critical with themselves.

In the study, it was examined if the results of the end-of-year tests also improve. In the table No. 2 the marks in the end of year tests that are expressed by HSC are evident. Data show positive trend-statistically significant differences between the marks in the 6th, 7th and 8th, 9th grades. The average marks in the 6th, 7th grade are for one mark lower than in the 8th, 9th grades.

Table 2

Comparison of the final test HSC from 6th till 9th Grade

2009. /10- 6. Grade	2010. /11- 7. Grade	2011. /12-8. Grade	2012. /13.- 9. Grade
HSC- 0,59	HSC- 0.56	HSC- 0,7	HSC- 0.71

Conclusions

Self-assessment is an essential component of modern teaching. It is necessary to promote student ownership of their learning outcomes, be aware of their own learning and be able to manage it better.

Self-importance has also been emphasized in the new concept of high quality education *Assessment for Learning*.

As a result of self-assessment it is also possible to improve students' learning outcomes by assessing their quality of learning objectively and setting goals for improvement at the same time, The research results indicate that the average final exam score (HSC) 6., 7th grade is about one mark lower than in the 8th and 9th grade.

Students' self-assessment skills should be obtained gradually: from the simple fact-, phenomena result- finding to more complex-assessment, explanation of the facts and results, and comparison of them with the existing standards, the requirements of the benchmark. Adequate self-assessment

enables to control the acquirement of knowledge or skills in the field, promotes purposeful planning of students' own learning in order to obtain the best possible result.

Self-assessment is essential in learning all the content in the learning process. This should be included and used in learning as a regular systematic operation with a variety of methods.

The research results demonstrate that the systematic use of self-learning, self-assessment skills improve, because the dynamic growth of identical scores is clear and statistically significant. Number of students' (%) whose assessment is equal to the teacher ratings at the 6th, 7th grades differs significantly from the number of students' (%) at 8th, 9th grades.

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