

The habits of the students in self-assessment of learning achievements

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ABSTRACT

The aim of the research is to determine the self-assessment habits of high school students and to determine whether the students differ in self-assessment habits with regard to sex and school success. The research was performed during the 2018/2019 school year on the sample of 61 third-grade high school students from one gymnasium in Osijek. A written exam and a questionnaire were conducted. In the exam, the expected and achieved scores were compared in order to objectively assess the student's self-assessment of school achievement. Subjective experience of the ability to accurately self-assess achievement as well as other habits of self-assessment were determined by the questionnaire. The research identified a discrepancy between achieved and expected success, as well as a discrepancy between the perceived and actual ability to accurately self-assess one's own success. Students overestimate their success and their own ability to self-assess knowledge. It was also found that there was an awareness of the importance of self-assessment, but students lack habits and experience in this skill.

Keywords: *self-assessment; self-reflection; feedback; assessment approach*

INTRODUCTION

The systematic and continuous use of the assessment approach for learning and as learning provides the student and teacher with feedback on learning/teaching. Based on the information gathered, further learning is planned and teaching practices are modified to help students improve their learning (Earl i Katz, 2006). In addition to the practice of providing feedback by teachers, the students themselves can and should give feedback through self-assessment (Andrade and Valtcheva, 2009). Many studies address the issue of self-assessment, the basic concept of self-regulated learning, which improves motivation, development of metacognitive skills, autonomy in learning, the affective domain of learning, and ultimately has a positive effect on school success (Brown and Harris, 2013; Cavilla, 2017; Duckworth and Seligman, 2005; Suchodoletz et al., 2009; Zimmerman and Moylan, 2009). Students differ in the level of achievement and practice of self-evaluation (Duckworth and Seligman, 2006; Kuhl and Hannover, 2012). Female students use significantly more strategies for self-regulated learning than male students and this is considered to be a reason for better achievement of female students (de Bilde et al., 2011; Kadiravan, 2012). Self-assessment of the learning process and outcome is a skill that is being developed and, depending on the student's willingness to self-assess, requires a certain level of help and support from the teacher. That is why it is important to know the habits and the degree of independence of the students in the implementation of this skill. Therefore, the aim of the research is to determine the self-assessment habits of high-school students and to determine whether the students differ in self-assessment habits with regard to gender and school success.

METHODS

The research was performed during the 2018/2019 school year. It included 61 high school students from three 3rd grade classes of one gymnasium from Osijek.

The research was conducted in two stages. In the first stage, a written exam was conducted, which was compiled for the purposes of this research. The exam consisted of 21 question. The first level of achievement (R1 - reproductive knowledge) was examined by 3 questions, while the remaining 18 questions examined the second level of achievement (R2 - understanding and application of knowledge, according to Crooks taxonomy, 1988). The number of maximal points that could be achieved in case of completely correct answer was indicated by each question. After solving each question, the students evaluated the accuracy of their answer and wrote down the expected points in the designated place. In this way, the achieved and expected number of points was analyzed and compared in order to objectively judge the students' ability to accurately self-assess their own success at the exam.

In the second stage a questionnaire was given to the students, which was compiled for the purposes of this research. The first part of the questionnaire assessed student's sex and the final grade in Biology from the previous school year. The second part of the questionnaire consisted of 25 statements related to examining self-assessment habits. Students were required to rate each statement on a scale of 1 to 5 (1 – never, 2 – rarely, 3 – occasionally, 4 - quite often, 5 – always) according to which they assessed the measure of the presence of each statement in their biology learning (scale was selected according to Burušić, 1999). The Cronbach's alpha coefficient of 0.72 was calculated for the conducted questionnaire, which is interpreted as a sufficiently reliable questionnaire. The questionnaire determined subjective experience of the ability to accurately self-assess the achievement as well as other habits of self-assessment.

The correlation between students' self-assessment habits and success was determined by Pearson's coefficient correlations at $\alpha = 0.05$. Statistical tests were performed in the statistical software package Statistics 12 (Quest Software Inc., Aliso Viejo, CA, USA).

RESULTS AND DISCUSSION

By comparing the average earned and expected number of points on the exam, it was evident that students achieved an average of 2.54 points, while on average they expected 11.56 points. The students, therefore, expected an average of 9.02 points more than they actually achieved.

The analysis of the questionnaire answers showed that most of the female students think that they can quite often accurately evaluate their success on the exam, while most of the male students think that they can do it only occasionally. The most objective are average grade female students (with the grade good-3). Majority of them find that they can rarely evaluate their success, though there are some who think they can do it quite often.

The discrepancy between the assessment of success on the exam and the subjective experience determined by the questionnaire should be viewed from the perspective of the existence of the illusion of knowledge and the illusion of the possibility of accurately assessing one's own success. The illusion of knowledge is confirmed by the questionnaire that showed that most students of both sexes rarely and occasionally question their own understanding. Even among the better-performing students (with the grades very good-4 and excellent-5), there are most who do this infrequently and occasionally, and among the high-achieving students there are more of those who never question their own understanding than those who always do. A possible reason, determined by the questionnaire, was the non-use of certain learning techniques to assess student's understanding.

According to Ross (2006), students' self-assessments are usually higher than teachers' grades. A possible reason for that is the fact that students interpret assessment criteria differently from teachers and include information not available to the teacher, such as information about effort. The questionnaire answers showed that there was a tendency to review previous results and compare with the present ones in order to determine progress. How well students do it depends on how successfully they collect specific feedback.

The answers from the questionnaire indicate awareness of self-assessment importance because it was revealed that students try to find the causes of poor grades, and consider mostly themselves, while teacher occasionally, responsible for their success. The problem of unfulfilled self-assessment potential can be found exactly in the insufficient involvement of students in the evaluation process. According to Mrkonjić and Vlahović (2008), teachers rarely give students the opportunity to value their work because they fear losing authority and power over their students.

Evaluation is learning. When students are able to receive and/or create specific feedback in the sense that they know what to do with it, they can modify, adapt and direct their own learning process. Often, teachers are only focused on evaluating achievement (as can be seen from the results of the paper which identified the connection between some survey questions and the success of the test), but it is crucial to base themselves on evaluating the learning process.

Specific feedback on both the learning process and the learning outcome give students a sense of control, which is crucial to achieve motivation and ultimately progress.

CONCLUSION

The study identified a discrepancy between achieved and expected success, as well as a discrepancy between the perceived and actual ability to accurately self-assess one's own success. Students overestimate their success and their own ability to self-assess knowledge. Students were found to be aware of the importance of self-assessment but lacked experience. They need help and support in receiving, recognizing, and creating specific feedback so that they can successfully self-reflect and direct their own learning process.

The proposed predicted scoring of the expected number of points in an exam can serve both students and teachers as a guide for a quick and easy assessment of the success of an exam solving and as a specific feedback for approaches „Assessment for learning“ and „Assessment as learning“. The questionnaire can serve as a daily teaching practice for the teacher to determine the student's level of independence in self-assessment, thus directing own teaching by applying „Assessment for learning“. The same questionnaire can also serve students in self-assessment of their own self-assessment skills and habits so that they can focus their learning by using the approach „Assessment as learning“.

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