THE INFLUENCE OF FORMATIVE ASSESSMENT OF STUDENTS’ ACADEMIC ACHIEVEMENTS ON INCREASING THEIR MOTIVATION TO STUDY AT UNIVERSITY

A INFLUÊNCIA DA AVALIAÇÃO FORMATIVA DAS REALIZAÇÕES ACADÊMICAS DOS ALUNOS PARA AUMENTAR SUA MOTIVAÇÃO PARA ESTUDAR NA UNIVERSIDADE

LA INFLUENCIA DE LA EVALUACIÓN FORMATIVA DE LOS LOGROS ACADÉMICOS DE LOS ESTUDIANTES PARA AUMENTAR SU MOTIVACIÓN PARA ESTUDIAR EN LA UNIVERSIDAD

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ABSTRACT: The purpose of the research is to study possible causal links between the introduction of high-level formative assessment and the motivation of students to learn a foreign language. The influence of the formative assessment of low and high levels on the motivation of students to study a foreign language is experimentally traced; effective ways of using formative assessment to increase the level of educational achievements of students are proposed. The materials and conclusions of the study can be used in the practice of teaching a foreign language at university.


RESUMO: O objetivo da pesquisa é estudar possíveis ligações causais entre a introdução da avaliação formativa de alto nível e a motivação dos alunos para aprender uma língua estrangeira. A influência da avaliação formativa em baixos e altos níveis de motivação dos alunos para estudar uma língua estrangeira é traçada experimentalmente; são propostas formas eficazes de usar a avaliação formativa para aumentar o nível de desempenho educacional dos alunos. Os materiais e conclusões do estudo podem ser usados na prática do ensino de uma língua estrangeira na universidade.

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RESUMEN: El propósito de la investigación es estudiar los posibles vínculos causales entre la introducción de la evaluación formativa de alto nivel y la motivación de los estudiantes para aprender una lengua extranjera. La influencia de la evaluación formativa de niveles bajo y alto sobre la motivación de los estudiantes para estudiar una lengua extranjera se rastrea experimentalmente; Se proponen formas efectivas de utilizar la evaluación formativa para aumentar el nivel de logros educativos de los estudiantes. Los materiales y las conclusiones del estudio se pueden utilizar en la práctica de la enseñanza de una lengua extranjera en la universidad.


Introduction

Assessment is considered one of the most effective means of influencing the improvement of a student’s academic achievements, their interest in learning, diligence and responsibility. This is especially true of formative assessment, which is now recognized as an effective tool for influencing student motivation and, therefore, is a promising area of research. Despite the close attention of scholars (WINTER et al., 2020; SOKOLOVSKAYA et al., 2020) to this problem, it remains a complex issue for discussion. The study of the positive impact, as well as the explicit and hidden challenges of assessment, is important for understanding the problems that arise in the implementation of formative assessment in the educational process and will contribute to their solution.

In psychology, motivation is defined as a process that “initiates, controls or maintains behavior to meet physiological or psychological needs” (ECCLES; WIGFIELD, 2002, p. 110). As a complex and multidimensional phenomenon, motivation contains a variety of components, such as interest, confidence, self-esteem, effort, and efficiency, etc. M.M. Mason (2012) attributes decisiveness to start a business, persistence (the decision not to stop and keep doing it) and focus on completing the business to the most significant signs, although some scholars (MURAYAMA et al.: 2016) consider only persistence and focus to be important characteristics of motivation. Motivation is internal if the activity is carried out not under compulsion, but voluntarily, as bringing satisfaction from performance and for which external reward is not promised. If the case is carried out to avoid undesirable consequences or certain compensation is provided for it, then such motivation is external (RYAN; DECI, 2000).
A student’s academic achievements can be explained by several motives. For example, as studies show, students study a foreign language to be able to work abroad in the future and assimilate with a foreign language environment and culture (VINICHENKO et al., 2020; ARKHIPOV et al., 2019). If students consider learning a language important and this aligns with their personal goals, they see language learning as worth the effort. This dichotomy of motivation has been defined as orientation in accordance with the academic, career, or sociocultural context of learning (PARVESH; 2015). Thus, learning motivation is seen as a form of energy that governs a student’s ability to learn, adapt and change in response to internal and external stimuli (HIDI; HARACKIEWICZ, 2000).

The need to be successful turns out to be another powerful motive that influences a student’s learning motives. The motivation for achievement is interpreted by scholars (REISS, 2004) as a person’s desire to achieve certain goals and feel the joy of completion. Students with a low level of achievement motivation usually slow down or stop learning a subject (for example, a foreign language) when they encounter any serious obstacles; however, they attribute their failures to a lack of ability (KUZNETSOVA et al., 2020; GALIZINA et al., 2020). Such students do not realize that the result depends not only on ability but also on effort and perseverance (LINNENBRINK; PINTRICH, 2002). At the same time, people who are highly motivated to achieve, according to (PINTRICH, 2003), consider their own abilities, determination and hard work to be factors that influence results and predetermine success. Moreover, students with a high level of achievement motivation do not give up easily when they fail academically.

The academic values of the instructor and the purpose of teaching certainly influence the assessment of student achievement. Among them, scholars (MIELE; SCHOLER, 2018) distinguish performance goals and mastery goals. The instructor, for whom exemplary performance is the main goal, values individual abilities and rewards impeccable performance. If the teacher’s goal is the mastery of the student, then they focus on assessing the development of students, mastering new skills, and improving them.

According to the conclusions of scholars (ALONSO-TAPIA; PARDO, 2006) regarding the influence of the summative assessment and tests on student motivation, the assessment covers any activity with the help of which systematic certificates of learning are obtained, which are the basis for determining the results of this learning. Assessment has long moved from testing knowledge of the material to continuous assessment of efforts and contributions made by students in the learning process (DEGA, 2019).
Assessment, in the process of which information is accumulated about the knowledge of students to adapt learning for its improvement, is defined as formative. This is a process during which the teacher systematically monitors the progress of students in learning and helps them overcome difficulties and eliminate deficiencies that affect the motivation of students in the learning process (BOUD; SOLER, 2016).

B. Crossouard (2011) characterized the formative assessment of high and low levels. Accordingly, low-level formative assessment is more standardized and formal, where the main decision-maker is the teacher. Feedback is usually provided after rating. The interaction between teacher and students is very limited, and a student’s self-esteem is not considered. Motivation is external. Students attribute their success or failure to external factors.

High-level formative assessment can be spontaneous, informal, student-centered and using a variety of assessment tools. Feedback is often instantaneous. Assignments can be selected not only by the teacher but also by students, adjustments are flexible, and the interaction between the teacher and students is diverse. Much attention is paid to student self-assessment, which is part of the teacher’s assessment. Internal motivation is typical.

The purpose of the research is to study possible causal links between the introduction of high-level formative assessment and the motivation of students to learn a foreign language.

The objectives of the study: to analyze the modern views of scholars on the definition of the main terms of the research; to experimentally trace the influence of the formative assessment of low and high levels on the motivation of students to learn a foreign language; to propose effective ways of attracting formative assessment to improve the level of educational achievements of students.

The hypothesis of the study: high-level formative assessment can influence the motivation of students and, at the same time, the level of their academic achievements.

According to the results of the study, it can be concluded that the purpose set in the study was achieved.

Methods

To solve the objectives, the following research methods were applied: experiment, observation, modeling, questioning, interviewing, testing, and mathematical statistics. Eighty second-year students of the specialty “Social Studies” studying the discipline “English for Professional Communication” were involved in the study process. The experimental and control groups were selected randomly and included 40 students each. High-level formative
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Assessment was implemented in the experimental group, and students in the control group studied using low-level formative assessment.

The survey offered to students consisted of two parts. It was explained to the survey participants that it was aimed at measuring their motivation to learn English and the results of the survey would not affect their assessment of the academic discipline. The students were assured that no one other than the researchers would have access to their answers and that their names would not be used in the analysis of the research results. Participants received instructions on how to fill out the response form.

The first part of the survey contained demographic data on curriculum, year of study, gender, age, length of study of English as a second foreign language and duration of ESP, as well as self-assessment of students regarding their level of English proficiency in accordance with the Common European Framework of Reference for Languages (CEFR) (COUNCIL OF EUROPE, 2003). To check the level of motivation for student achievement, the online test Achievement Motivation Scale (n.d) was used.

The second part of the survey contained 19 questions about motivating students to learn English for special use, which were adapted and modified from the motivation test (The Attitude/Motivation Test Battery) by R.C. Gardner (2004). In the second part of the survey, a five-point Likert scale was used, with fluctuations from level 1 (“strongly disagree”) to level 5 (“strongly agree”). The test was used twice: at the beginning and the end of the study. After repeated testing, the results of two motivational tests were compared, analyzed, and generalized conclusions regarding the level of students’ motivation to learn a foreign language.

The experimental learning was developed in the form of a sandwich model. The formative stage was carried out between the control testing of reading comprehension (online tests of checking the reading comprehension of the international Cambridge exam, PET), which occurred before and after the application of the experimental method. The formative stage of the experimental research provided for the regular interaction of students with the teacher. At each lesson in the experimental group, 30 minutes were provided for reading using high-level formative assessment at various stages of interaction in a sandwich model in the following way.

The first stage – students received a reading comprehension test and assignments to it with open and closed questions. During the checking and grading of the test, the teacher gave comments and explanations of errors in writing in each work, without offering the correct answer, encouraging students to analyze the errors individually and self-evaluate.

The second stage – in the classroom, the teacher in a discussion format tried to reveal the problematic issues that were identified during the verification of the reading comprehension
tests. The teacher provided feedback and explanations, invited students to explain their reasoning when choosing an answer and introduced them to various techniques that help to choose the correct answer. During the discussion, the teacher tried not to give a ready-made correct answer but stimulate the students to search independently. To this end, the teacher divided the students into groups and gave each group a blank answer sheet. Each group of students had to independently discuss and agree on a common version of the correct answers. After that, the answer sheets of different groups were compared. When evaluating students, their self-preparation, active participation in the discussion and self-assessment were considered.

The third stage was another test to check reading comprehension. The teacher used the same scoring procedure for the completed test with written comments on the identified errors but did not conduct a group discussion of the identified errors, encouraging students to self-correct errors, search for correct answers and self-evaluate.

The described three stages of the sandwich model were repeated five times during the semester in the experimental group. In the control group, students also performed reading comprehension tests, but only some elements (for example, delayed feedback) of the low-level formative assessment procedure were observed during the training. Student self-evaluation was not considered when assigning assessment points.

After the final verification test (PET), same for the experimental and control groups, the students were asked for the second time to answer the questions of the survey (The Attitude/Motivation Test Battery) to determine the level of motivation to compare the levels of student motivation to learn a foreign language before and after experimental learning.

Results

The self-assessment survey was developed in accordance with the CEFR. Students who independently assessed their knowledge of English at the A1 or A2 level made up most of the respondents – 68.8%. There were 31.2% of those who independently assessed their English language skills at B1 or B2. Those who were fluent in the language, that is, students who independently assessed their foreign language skills as C1/C2, were not identified. The results are shown in Table 1.
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Table 1 - Student Self-Assessment of English Proficiency

<table>
<thead>
<tr>
<th>Level</th>
<th>Number of students</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>9</td>
<td>11.3%</td>
</tr>
<tr>
<td>A2</td>
<td>46</td>
<td>57.5%</td>
</tr>
<tr>
<td>B1</td>
<td>21</td>
<td>26.2%</td>
</tr>
<tr>
<td>B2</td>
<td>4</td>
<td>5%</td>
</tr>
<tr>
<td>C1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>C2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Devised by the authors

Comparison of the results of preliminary and final reading comprehension (PET) tests was carried out to confirm that the obtained data of the experimental and control groups were statistically significant. Table 2 shows that a high-level formative assessment procedure can be a significant indicator of motivation. The students in the experimental group showed that they were more motivated to get better marks in the study of a foreign language compared to the control group.

Table 2 - Results of preliminary and final reading comprehension tests

<table>
<thead>
<tr>
<th></th>
<th>Control group</th>
<th>Experimental group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grade</td>
<td>N</td>
</tr>
<tr>
<td>Preliminary test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>B</td>
<td>4</td>
<td>10%</td>
</tr>
<tr>
<td>C</td>
<td>22</td>
<td>55%</td>
</tr>
<tr>
<td>D</td>
<td>7</td>
<td>17.5%</td>
</tr>
<tr>
<td>E</td>
<td>7</td>
<td>17.5%</td>
</tr>
<tr>
<td>FX</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Final test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>B</td>
<td>3</td>
<td>7.5%</td>
</tr>
<tr>
<td>C</td>
<td>22</td>
<td>55%</td>
</tr>
<tr>
<td>D</td>
<td>8</td>
<td>20%</td>
</tr>
<tr>
<td>E</td>
<td>7</td>
<td>17.5%</td>
</tr>
<tr>
<td>FX</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Devised by the authors

The statistical software package (SPSS 16.0) was used to compare the motivation of students in the experimental and control groups with the data from The Attitude/Motivation
Test Battery. Table 3 shows the results of the descriptive statistics. The average scores indicate a greater motivation of students in the experimental group compared to the control group.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>40</td>
<td>3.67</td>
<td>1.86</td>
<td>.26</td>
</tr>
<tr>
<td>Experimental</td>
<td>40</td>
<td>4.84</td>
<td>2.07</td>
<td>.29</td>
</tr>
</tbody>
</table>

Source: Devised by the authors

To determine the statistical significance of the difference in results, Student’s t-test was used. The results indicate that there was a statistically significant difference between the experimental group (M = 4.84, SD = 2.07) and the control group (M = 3.67, SD = 1.86), t = 2.942, p <0.001; thus, formative assessment of a high level can be a significant factor influencing the motivation of learning a foreign language. The results of testing the students of the experimental group indicate a higher motivation for learning English as a foreign language in comparison with students of the control group.

Discussion

According to the results of the motivational test, which was carried out at the beginning of the experiment, the students turned out to be mostly indifferent to the study of a foreign language. Most of them showed a low level of motivation. According to the results obtained, 38% of students believed that knowledge of English would not be necessary for them in their future profession. Although they understood that in modern society, a person must be fluent in at least one foreign language, 57% of those surveyed were skeptical about the possibility of using a foreign language. The test results showed that the basic needs of students in learning a foreign language were not met and their internal motivation was rather low. Most students (81%) reported that they had never used English as a means of communication outside the classroom and did not understand the benefits of learning a foreign language in their chosen specialty. Only the threat of failing the exam in the discipline “English for Professional Communication” motivated 83% of students to constantly study a foreign language during the course. This allows us to conclude that students were mainly guided by the external motivation to learn a foreign language of special use.
At the same time, the analysis of the results of self-assessment of the level of knowledge of students in a foreign language showed that 68% of second-year students had not mastered the B1 level of proficiency in English. Some students had such a low level of knowledge of the language that they experienced extreme difficulties even in reading and understanding. It is difficult for instructors to motivate these students and properly assess them, as incorrect grades can destroy even a weak desire of students to learn English. An inadequate assessment of the efforts of such students causes them to experience academic failure.

Similar problems were observed with students who demonstrated a higher level of language proficiency. The instructor must be very careful when assessing such students, as there is a high probability that students will find it difficult to maintain their level of language proficiency, and it will gradually decline. If the instructor applies high-level formative assessment and assesses the student’s current progress in language acquisition, this can lead to misunderstandings in grading. Some students may compare their knowledge with the level of knowledge of other students in the group, without considering their initial level of knowledge. By misinterpreting the teacher’s assessment, they may disagree with it.

The study confirmed the assumption that the basic principles of formative high-level assessment should be explained to students at the beginning of the course “English for Professional Communication” and later clarified if necessary. Students need to be explained that the formative assessment of a high level does not consider their level of knowledge of the English language in comparison with other students, but, above all, their achievements and progress in mastering the language. Such a performance assessment based on the principles of high-level formative assessment makes it possible to persistently work for students who have not received the necessary knowledge from the school curriculum of a foreign language (the level of language proficiency corresponds to level A1 or A2) and encourages students who are advanced users (level of language proficiency B1 and B2), improve their level of foreign language proficiency.

Here we agree with scholars (GIJBELS; DOCHY, 2006), who express critical opinions about standardized knowledge testing. Critics of standardized testing of knowledge point to the failure of testing to demonstrate the gradual development of students (JIMAA, 2011) and other negative aspects of the use of tests.

The analysis of the results of the motivational test The Attitude/Motivation Test Battery, which was carried out twice during the experimental training, also indicates the advisability of using high-level formative assessment. In the answers of students, it was noted that this assessment contributed to the forming of a creative atmosphere in the classroom. This increased
their motivation to learn a foreign language and, accordingly, affected the improvement of their
level of proficiency in a foreign language. We agree with the opinion of A. Littlejohn (2008)
that “intrinsic motivation is preserved only when it is promoted by the appropriate climate in
the classroom”. The environment in which a student’s least achievements are assessed catalyzes
curiosity and a desire to overcome the challenges that arise in the process of learning a foreign
language.

S. Bevitt (2015) believes that high-level formative assessment motivates students if
teachers increase a student’s internal interest, encourage a positive classroom atmosphere,
explain the purpose of the assessment and engage students in self-assessment. Teachers,
creating a positive and supportive classroom environment, should explain the role of assessment
in learning, foster student engagement in learning and emphasize the weight of ongoing
progress rather than the weight of the assessment. Feedback becomes more important if the
information obtained during the assessment is used by the teacher for replanning or
representation of the material, as well as if the student wants to improve or improve their
knowledge, skills and abilities.

Conclusion

According to the results of the study, it can be argued that students who passed the high-
level formative assessment procedure were more motivated than students who did not undergo
experimental training. There is a significant difference in the motivation of students in the
experimental and control groups, and there is a positive relationship between the high-level
formative assessment procedure and the motivation of students to study a foreign language in
a professional direction.

The analysis of the results of the study allows us to conclude that the introduction of
high-level formative assessment in foreign language classes plays a decisive role in improving
the motivation for student achievement, which significantly affects the level of educational
achievement. The student’s desire for success and the level of motivation for their achievements
are closely related to the efforts that they are willing to make to achieve their goal in learning a
foreign language. The student’s learning helplessness can be overcome with the help of high-
level formative assessment, namely, teacher support, constant feedback (if possible), positive
assessment of student efforts. The teacher, giving students problematic assignments that
correspond to their level of proficiency in a foreign language, provides an opportunity for
students to focus on improving their skills and abilities and perceive the achievement of their
goals as the progress of their own learning, develop their self-esteem, and expect success in further learning.

Thus, the hypothesis of the study that high-level formative assessment can affect the motivation of students and, at the same time, the level of their educational achievements was confirmed.

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