



The Relevance in the Value of Grading in the Educational Process

Ioannis Ch. Konstantinou

Primary School Teacher (PhD), University of Patras, GREECE

Received: 6 January 2022 ▪ Revised: 20 August 2022 ▪ Accepted: 31 August 2022

Abstract

The purpose of this article is to review the literature on the issue of grading as a method and technique of expressing students' performance in terms of school reality. Initially, a growing concern about the role of assessment of student's performance in the learning and, generally, in the educational process, is highlighted. Subsequently, the role of student's performance is approached regarding the methodological issue of measurement and its efficiency in educational and social reality in general. Great importance is given to the pedagogical content of the assessment of students' performance in association with the educational process and operation of the school. Then, the main issue is discussed referring to the means of expressing, describing, and presenting the outcome of student assessment with a specific reference to quantitative means and specifically to grading. In the last part of this paper, empirical research findings are used to point out the disadvantages of this specific technique. In particular, a reference is made to the errors observed in its use, which pose an important issue of validity, reliability, and objectivity and therefore of its dispute, as well as to the impact on the learning process and the student him/herself. The article concludes with the final notes on the subject.

Keywords: evaluation methodology, performance grading, student assessment.

1. Introduction

Assessment of student's performance emerges as a theoretical, practical, pedagogical, scientific, political, personal, and ethical phenomenon. Consequently, the organization and function of assessment have an impact on an individual and social level. As a result, negative or positive ramifications are brought on the individual himself/herself, as well as on the immediate and broader social environment. That refers, especially, to the student, who confronts the requirement for performance – and a particular kind of performance – since the very first day of school. Hence, based on school organization and operation, students are expected not only to learn but also to prove what they have learned (Konstantinou & Konstantinou, 2017).

From a pedagogical perspective, the most crucial question that arises is: What is the pedagogical content and function of student assessment? In other words; what is the purpose of assessing student performance from the perspective of pedagogy, and which methodological phases are included in its pedagogical implementation?

The second major question that arises concerns assessment techniques, i.e., written and oral examinations, observation, tests, students' portfolios, rubrics, etc. That is, which techniques ensure methodologically the validity, reliability, and objectivity of this process?

The third and most controversial question, which lies at the epicenter of this paper, refers to the means and methods of assessment, that conclude the techniques for expressing, describing, and presenting assessment outcomes, known as numerical or letter grades, descriptive assessment, etc. In other words; which of these means and methods are considered more comprehensive from a methodological and pedagogical standpoint, and why are they not implemented in Greek schools?

2. The issue of assessment of student's performance

When it comes to assessing students' performance, experts and teachers come across a methodological issue. The issue of an individual's performance has been one of the most widely known and oldest issues of concern to anyone involved in the processes of education and evaluation, as well as to society as a whole. This issue is associated not only with the educational institutions and, more particularly, the school but also with all aspects of social life. To begin with, the social definition of performance is ambiguous and controversial, a fact that has given rise to different views on its content and implementation in school and, more broadly, in society. Certainly, an individual's performance, both as an activity or coordinated effort and as the outcome of such an activity or effort with specific criteria, constitutes a social phenomenon that depends on the intention of individuals to stand out, to gain recognition and, ultimately, to establish their position within their immediate or wider social environment. Hence, an individual's quest for performance contributes, undoubtedly and decisively, to the achievement of both their personal goals, i.e., professional, research, scientific, family, etc., and their social goals, that is, economic, political, cultural, and so on (Alachiotis & Karatzia-Stavlioti, 2021; Konstantinou & Konstantinou, 2017).

In addition to the conceptual approach above, and in order to achieve a more comprehensive definition of the term, the concept of "performance" is perceived, as the students' progress relating to their learning objectives and the fulfillment of their potential. In other words, "performance" is related to the quantity and quality of students' knowledge, abilities, and skills within a specific field of study or a specific subject at a given period of time (see also Athanasiou, 2000: 43; Rekalidou, 2011: 32).

Therefore, from this point onwards, concerns begin to arise about the terminological definition of "performance", both as a concept and as a process. Regarding the student, we would argue that his/her performance is linked to his/her distinctive individual characteristics (biological, cognitive, psychomotor, etc.), his/her family status (parents' educational and socio-economic level, family relationships and expectations, motives, etc.), his/her social environment (peers, cultural and economic level of the area where they live), as well as to the characteristics of school reality (teacher-student relationships, the pedagogical climate within the classroom, teaching, and pedagogical means, etc.) (Konstantinou & Konstantinou, 2017).

3. The pedagogical function of assessment in the educational process

Within the school framework, each student is assessed according to his/her performance in specific subject areas, with great emphasis on Mathematics and Language/Literature. On the contrary, common practice has shown that pedagogical and teaching orientations are almost systematically ignored, and particularly, students' performance in vital areas such as social activities and communication (i.e., collaboration, responsibility, organization,

initiative, creativity, consistency, etc.), environmental awareness, as well as individual and collective emotional experiences, such as play, joy, enjoyment, and enthusiasm (Alachiotis & Karatzia-Stavlioti, 2021; Dimou, 1989; Hentig, 1976). Thus, there is an inconsistency between official statements about school mission in terms of learning and socialization (theoretical dimension) and the practices that school adopts and implements (practical dimension). This is the reason, many scientists, based on their analysis and research, have been led to refer to the school as being “performance-based”. The school, *ad hoc*, due to the emphasis it gives on its selective function, sets the very own pedagogical nature of its mission at risk, diverging from the domain of education and learning to a different domain of competition for acquiring grades and privileges. For the majority of the students, this is interpreted and perceived as a ceaseless effort to prove themselves “better” than their peers (Karatzia-Stavlioti & Lampropoulos, 2006; Lichtenstein-Rother, Heckhausen & Hentig, 1976).

However, the pedagogical function of assessment does not aim at the hierarchical judgment and grading of students, but rather to the evaluation of the teaching process and achievement of its predetermined goals, as well as to the identification of potential learning difficulties, having as the ultimate goal to promptly undertake appropriate pedagogical measures towards this direction. From a pedagogical point of view, this phase constitutes the ultimate and most decisive goal of assessing students’ performance and the learning process. In this notion, the assessment of school performance serves two purposes: on the one hand, to monitor established learning objectives and analyze the learning process; on the other hand, to analyze students’ abilities and skills. This analysis, which serves both teachers and students at the same time, contains information about students’ potential deficiencies in specific subject areas and their ability to follow through the instructions of a subject, a unit, or a lesson, as well as about the effectiveness of the inadequacy of specific changes in teaching practices. The pedagogical function of assessment, perceived in this notion, rests on the assumption that assessing and announcing the results of students’ performance can motivate them towards stepping up their learning efforts and generally play a positive role in the development of their personalities (Konstantinou & Konstantinou, 2017: 174).

4. Means of expressing, describing, and presenting the assessment outcomes

One of the most controversial issues regarding students’ assessment refers to the way, the means, immediate, and the ultimate goals that are applied for expressing, describing, and presenting the results of such processes. Given the fact that many different and opposing views exist on this issue, assessment outcomes are expressed in various ways, such as the limited numerical scale or minimum range-scale (0-5), the short-range scale (0-10), the medium-range scale (0-20) and the large-range or percentage scale (0-100). Other ways of expressing results include letter grading (A-B-C-D), verbal grading (excellent, very good, good, relatively good, insufficient), descriptive grading whereby students’ performance is determined according to descriptive adjectives, or designations such as “pass or fail”, “promoted or not promoted”, and so on (Konstantinou & Konstantinou, 2017: 265).

Short-range (0-10) and, to a lesser extent, medium range (0-20) numerical scales, as well as verbal grading (excellent, very good, etc.), are among the most commonly used assessment techniques in the educational systems of many countries, including Greece. Countless arguments have been put forward in favor or against each of these techniques, in line with theoretical perceptions and/or findings of empirical research, highlighting the advantages and shortcomings of each one of them. For instance, we mention what is supported for the minimum-range numerical scales or letter grading, that is; the assessor has a limited ability to differentiate the performance of students, while in the large-range scales arise different issues or may even lead to confusion of differentiation. However, the issue discussed in this section refers to what is intended

(the objectives) with the quantitative characterizations of performance in relation to the learning and -in general- the pedagogical processes, as well as the practical form and use of such characterizations (Konstantinou & Konstantinou, 2017).

Thus, according to the pedagogical function of assessment, specific pedagogical concerns prevail focusing on the organization and objectives of pedagogical processes, such as:

- What is the purpose of assessment?

Following the argument developed in the previous section, the process of assessment is inextricably attached to the teaching and pedagogical goals of the school, which are oriented towards learning, students' education, and their personal characteristics, that is the ascertainment of achieving the teaching goals, as well as the identification of deficiencies, abilities, and so on. This means that the assessment outcome (e.g., grade) is not an end in itself, nor a means of ranking and classifying students according to categories (e.g., successful or unsuccessful, excellent or bad, etc.). Within the pedagogical framework, the role of characterizations that describe the performance is to verify and to inform students, teachers and parents, thus they ought to be the result of systematic and multidimensional processes that involve the observation and monitoring of students and their assessment by the teacher. This requires that written or oral reports of assessment results reflect students' performance accurately and comprehensively. This process should be carried out in a way that students are informed about their abilities, deficiencies, interests, and their overall school activities. This kind of expressing and describing assessment outcomes intends to motivate students towards engagement in the educational processes. Furthermore, based on the findings of the evaluation, the school is motivated, through its teachers, to adopt appropriate pedagogical and teaching measures and initiatives that will contribute to improving the learning process and the students themselves. On that account, the means of expressing and presenting students' performance serve three functions; feedback, selection, and motivation (Konstantinou, 2007; Konstantinou, 2020).

Concluding the framework developed related to the posed question, we argue that it would be an ideal format if the school reached the level to establish learning processes that stimulate students' interest and desire to be actively involved in acquiring their knowledge. Nevertheless, under the present socio-cultural conditions, such an aspiration seems far from tangible. In this notion, the processes that encourage students' performance through assessment are associated with negative and positive learning parameters. This means that one can neither praise and idealize learning processes nor repudiate them at large.

Consequently, based on the aforementioned rationale, certain questions arise, which will facilitate the following approach, such as:

- Which forms of performance are assessed at school and how are they formulated and presented?
- What techniques (tools) are implemented in assessment?

According to its officially declared goals (see curricula, relevant provisions), the school is focused on contributing to the development of all cognitive, mental, emotional, and social skills of students. This shows that the school is orientated towards other skills-abilities-inclinations too, which are linked not only to the so-called "primary" subjects (Language, Mathematics, and so on) but also to "secondary" subjects like Aesthetic Education, Religion, etc., as well as to other participatory student activities in school. Therefore, decisions on how to define, express, and present students' performance need to be applicable in practice while, the most important is to ensure that the process is informative and depicts with clarity and comprehensively, as far as possible, its diversity and differentiation (Alachiotis & Karatzia-Stavlioti, 2021; Konstantinou & Konstantinou, 2017).

This implies that assessment processes, that aim to provide pedagogical findings and conclusions, use constantly and if possible, all kinds of techniques or combinations of them. Subsequently, the use of a single technique in all circumstances should be avoided, while the same applies for oral or written examinations once every three, four, or six months only. In this way, a more valid, objective, reliable, and clearly a more complete picture emerges for the set of activities and abilities of each student.

4.1 Grading as a flawed technique for expressing and presenting students' performance

Numerous scientific studies have attempted to investigate the relationship between performance and assessment from a wider level of perspective. Such studies highlight the deficiencies and weaknesses of the practical implementation of assessment and suggest ways to improve it. We can identify those contested aspects that raise doubts and undermine the diagnostic potential of assessment and, consequently, lead to perceptions that set-in dispute the value of quantitative means of performance assessment, suggesting that they are unreliable indicators of the phenomenon they are supposed to represent. More specifically, these aspects are primarily related to the representation of the empirical world through numbers (grades), i.e., mental phenomena, events, situations, etc., to the subjectivity of the evaluator and the effect of social circumstances on his/her judgment, as well as to students' personality (Ingenkamp, 1989; Konstantinou, 2007; Schmack, 1981).

Regarding the measurement of psycho-emotional performance, there is a convergence of views among researchers. Undoubtedly, the problem that emerges when trying to represent the performance of psycho-emotional content in terms of quantitative, i.e., numerical data, is not disputed. Representing a part of the empirical world with the assistance of a set of numbers, i.e., the grading scale, is methodologically accepted only under certain conditions, rules, and specifications. This means that the expression of a specific type of students' performance, such as collaboration, using numbers that allows the establishment of specific relations, contradicts the classic theory of measurement, whereby objectivity, reliability, and validity serve as fundamental methodological prerequisites. The numbers on the grading scale give the impression, at least seemingly, of a well-defined succession (classification), which is often approached and applied in this notion. However, each grade expresses an overall, generalized, and usually, vague estimation, which has very little in common with the previous and next grades of the scale and, therefore, has no determinant content. To depict functionality and content on the grading scale, teachers usually apply external (subjective) criteria of comparison, such as class average, the existence or not of a specific skill or knowledge, or the individual student's average.

These -largely subjective- criteria lead to errors. For instance, upon a class or school change, an average student can suddenly belong to the group of best or worst students in terms of their grades. Additionally, the assessment of a student's performance is always carried out within a specific socio-temporal framework, which means that circumstances at a given time obviously influence the evaluator's judgment (e.g., institutional framework of operation or demands of the school, etc.), as well as that the assessment of performance usually entails the collection of data related to the student's personality (Dimou, 1989; Ingenkamp, 1988).

In detail, having the fundamental prerequisites that methodologically ensure the acceptance of assessment results and the contested aspects that derive from them as a point of reference, the following potential errors that occur during the process of student's assessment arise (Alachiotis & Karatzia-Stavlioti, 2021; Kapsalis & Chaniotakis, 2011; Kassotakis, 1989: 52-73; Konstantinou, 2007: 120-123; Liampas, 2006: 57-76; Ziegenspeck, 1979: 40-45):

- Errors with points of reference related to assessment techniques, criteria, and practices.
- Errors related to the classification and prioritization of subjects into primary and secondary.
- Errors associated with students' social backgrounds.
- Errors associated with students' gender.
- Errors derived from feelings of sympathy or dislike for specific students.
- Other potential errors that originate in teachers' personal views, related to their personality and special professional and pedagogical training.

Negative attitudes and views concerning the impact of assessing students' performance, should not be forgotten, and more specifically those that implicate the negative feelings experienced by students when their performance is assessed:

- Certain assessment techniques often cause students stress and dissatisfaction while addressing the teacher as a detached examiner (Papas, 1995: 76).
- The sense of reduced effectiveness, combined with the fear of failure and personal inadequacy that students may experience during evaluation lead to:
 - stress, which makes students react in specific ways such as: treating themselves as inadequate and unable to deal with the problematic situation, losing their self-confidence, taking their failure for granted, and associating it with the loss of others' appreciation.
 - The stress that that is related to low grades has negative consequences for students' psychosocial adaptation and development. Students are often characterized by their peers based on their low grades, a fact that has an impact on the social relations they develop with each other (Leontari & Gialamas, 1996: 20).
 - Research data highlight the fears concerning a large number of students, who show neurotic symptoms that influence both their well-being and ability to perform under the pressure of assessment (Kassotakis, 1989: 42-43).
 - Other studies have pointed out that besides students' stress before or during evaluation, signs of depression, stomach ache, and fear, appear often even since primary school (Militello & Militello, 2013: 141).
 - For some students, the classroom signifies a competitive environment oriented towards high grades, rather than an environment that encourages personal effort and participation towards acquiring knowledge. Their efforts are consumed and their thoughts are divided between two pursuits: on the one hand to assimilate new knowledge, while on the other hand worrying whether they will achieve the desired performance when it comes to assessment. In fact, they strive to prove themselves worthy of their peers and the expectations of their parents and teachers, by achieving high grades, thus being led to stress, worry, and, quite often, sadness. Such feelings and thoughts may cause them to feel ashamed and to abstain from class or groups of peers, in order to avoid derision and negative comments regarding their poor performance (Bledsoe & Baskin, 2014: 34).

Based on the above mentioned so far, it becomes evident that such requirements, perceptions, and practices mean that grades cannot be valid, reliable, and objective indicators of students' value. Above all, because the nature of an individual's performance is dynamic, complex, and qualitative, aspects that cannot be evaluated using the existing systems of measurement offered by social sciences. After all, assessment processes and their results are also doubtful due to the coexistence of various other factors such as subjectivity, utility, etc., which often prevail.

Although, upon considering, evaluation in the Greek education system is almost exclusively viewed as a process of examination, rather than a diagnostic process that is linked to learning objectives and the adoption of appropriate pedagogical measures, it is not hard to realize the extent to which grades serve learning and the creation of positive experiences for pupils' personality.

Furthermore, considering the traditional nature of the Greek system of assessment and its function, we can conclude that the use of assessment techniques and practices casts doubts on the value of grades assigned to students. As already pointed out, this system, which is the primary and often sole means of oral and written examination, involves open-ended questions concerning specific topics. Consequently, evaluation criteria are vague and difficult to define, which means that students' assessment rests on the subjective judgment of evaluators. Moreover, great importance is laid on students recounting what is written in textbooks or said during instruction, thus their ability to memorize is overemphasized. Finally, individual and fragmentary written or oral examinations are often implemented in order to make crucial decisions regarding students' development and future careers. This kind of fragmentary, unplanned or spontaneous evaluation gives rise to limiting views on each student's values that are based, as a rule, on the fragmentary result of a single test, which can take place once, for example, every three months (Angeli, 2013; Konstantinou & Konstantinou, 2017).

Besides the practical consequences of grades for students, such as promotion or not to the next education level, it becomes evident that assessments in the context of education are anything but exclusively diagnostic since they do not only fail to satisfy the teaching and pedagogical objectives and learning needs of students, but they also lead to pedagogically undesired directions, such as the classification of students.

Therefore, based on these practices and circumstances, their diagnostic value is far from acceptable from a methodological perspective. The importance of grades and their diagnostic function gain even greater significance and importance, though in a negative direction, considering the crucial decisions made based on grades, which determine the educational, professional and social future of students. Decisions that often depend on a single point or grade according to the evaluator's judgment.

5. Final remarks

Taking into consideration the practically and pedagogically questionable assessment processes examined and discussed so far, grades would better be considered as relative indicators of students' value, to such an extent far from justifying the trust and importance placed upon them by the school and its stakeholders, as well as by parents and students themselves. In fact, we would add that the grade itself offers little pedagogical information in terms of evaluating the learning process when one fails to take into account the institutional, teaching, and social context within which the evaluation takes place. Furthermore, this process can, among other things, have mild or severe adverse effects on the person under assessment.

In conclusion, quantitative indicators are debatable not only regarding to their validity, objectivity and reliability but also to their inadequacy to accurately capture and articulate the value and parameters of human activities, especially those related to mental and emotional functions. On top of these problematic aspects, the use of grades appears to be downgrading the pedagogical function of evaluation, since they obscure and distort its pedagogical content, which should not be oriented to standard and comparable procedures, but rather to individualized procedures aimed at identifying pupils' learning difficulties, capabilities and personal characteristics, with the ultimate goal of introducing corrective and other didactic and pedagogical

measures. Of course, the former approach inescapably seeks to encourage students' efforts towards performance.

Therefore, it is no coincidence in both the Pedagogical science, as well as the special field of Educational Evaluation, and the educational systems around the world have sought other methodological tools that have led either to the replacement of quantitative methods (i.e., grading), especially in primary education or in supplementing it with qualitative means, with prevalent one the “descriptive evaluation”.

Acknowledgements

This research did not receive any specific grant from funding agencies in the public commercial, or not-for-profit sectors.

The author declares no competing interests.

References

- Alahiotis, S., & Karatzia-Stavlioti, E. (2021). *Biopedagogy: Interdisciplinary, evaluation*. Athens: Pedio. (In Greek)
- Angeli, V. (2013). *Educational Evaluation: From theory to the classroom-Evaluation of the works in the textbooks of History of the 2nd and 3rd High School*. Ioannina: University of Ioannina Publications. (In Greek)
- Athanasίου, L. (2000). *Assessment of teaching procedure and student's performance at school*. Ioannina: self-publishing. (In Greek)
- Bartnitzky, H., & Cristiani, R. (1987). *Zeugnisschreiben in der Grundschule*. Heinsberg.
- Bledsoe, T. S., & Baskin, J. J. (2014). Recognizing student fear: The elephant in the classroom. *College Teaching*, 62(1), 32-41.
- Dimou, G. (1989). The logic behind performances and the deviations in school. *Scientific Review* (Pedagogical Department of Primary Education of the University of Ioannina), 2, 123-151. (In Greek)
- Hentig, v. H. (1976). Kritik am Leistungsprinzip der Schule. In *Schulleistung und Leistungsschule* (pp. 43-53). Bad Heilbrunn/OBB.
- Ingenkamp, K. (1988). *Lehrbuch der Pädagogischen Diagnostik*. Weinheim-Basel-Beltz.
- Ingenkamp, K. (1989). *Die Fragwürdigkeit der Zensurengebung*. Weinheim- Basel.
- Kapsalis, A., & Chaniotakis, N. (2011). *Educational evaluation*. Thessaloniki: Αφοι Κυριακιδis. (In Greek)
- Karatzia-Stavlioti, E., & Labropoulos, X. (2006). *Evaluation, effectiveness and quality in education. Educational planning*. Athens: Gutenberg. (In Greek)
- Kassotakis, M. (1989). *Assessment of student's performance*. Athens: Grigoris. (In Greek)
- Konstantinou, X. (2007). *Assessment of student's performance as the logic behind the pedagogical procedure and school practice*. Athens: Gutenberg. (In Greek)
- Konstantinou, Ch., & Konstantinou, I. (2017). *Evaluation in educational settings: Evaluation of the educational practice, the teacher and the student as theory and practice*. Athens: Gutenberg. (In Greek)

- Konstantinou, I. (2020). The contribution of descriptive assessment to the student's emancipation: Theoretical consideration. *International Journal of Humanities and Social Science*, H-22439, 10(8). <https://doi.org/10.30845/ijhss.v10n8p1>
- Leontari, A., & Gialamas, B. (1996). Exams anxiety, self-perception and school performance, *Psychology*, 2(3), 20-39. (In Greek)
- Liampas, T. (2006). Rating scale and typical examination of the student in Primary School (1830-today). *The Educational Forum*, vol. 79-80, p. 57-76. (in Greek)
- Lichtenstein-Rother, I., Heckhausen, H., & Hentig, v. H. (1976). *Schulleistung und Leistungsschule*. Bad Heilbrunn/OBB.
- Militello, M. & Militello, L. (2013). Fear and loathing in elementary school: Lessons from a third grader about better assessments, *The Educational Forum*, 77(2), 140-150. <http://dx.doi.org/10.1080/00131725.2012.761311>
- Pappas, A. (1995). *The anti-pedagogy of pedagogy*. Athens: Delfoi. (In Greek)
- Rekalidou, G. (2011). *The assessment of learning or the assessment for learning?* Athens: Pedio. (In Greek)
- Schmack, E. (1981). Allgemeine und besondere Beurteilungsprobleme. In W. Twellman (Ed.), *Handbuch Schule und Unterricht*, Bd. 1 (pp. 329-342). Düsseldorf.
- Ziegenspeck, I. (1979). Zensur und Zeugnis – Ein Mängelbericht. In Bolscho/Schwarzer (Ed.): *Beurteilen in der Schule* (pp. 36-53). München.

