

NEW METHODS OF TESTING AND EVALUATION

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Abstract

In this study I introduce, that in addition to traditional testing methods such as oral tests, achievement tests, the assessment of various written works (graphic design, projects, protocols of measurements, etc.), at present other methods of testing and evaluation are applied as well, in particular:

In this paper I introduce the differentiating and selective function of educational evaluation, which is oriented towards the differentiation of students in terms of their abilities, interests, or opportunities to advance to higher-level schools and to gain higher qualifications. I pointed out that it is often the subject of criticism because our schools usually only deepen the social inequalities among students, are selective about them and the choice of school is often determined by the result of school evaluation.

By analyzing the functions of educational evaluation we aimed to arrive at defining the dimensions of educational evaluation that offer insight into the process, resources, methods of evaluation from different perspectives – the dimensions. In this paper, I define three dimensions of educational evaluation: the personality dimension, where the levels of relationships between the object and the subject of educational evaluation are examined, the didactic dimension, the aim of which is to optimize the process of teaching and learning through the function of feedback, and the social dimension, the point of which is to enrich evaluation with the achievements of modern science, technology and social relations.

Keywords:

Portfolio,
Educational Evaluation,
Teacher's Personality,
methods of testing,
Choice of Methods

1 Introduction

In addition to traditional testing methods such as oral tests, achievement tests, the assessment of various written works (graphic design, projects, protocols of measurements, etc.), at present other methods of testing and evaluation are applied as well, in particular:

One of the current trends in student evaluation is the introduction of the so-called portfolio in which the teacher can store the student's works systematically and for a long time (mid-term and final achievement tests, protocols of measurements, drawings, projects, reports, essays, the teacher's records of the observed student, the results of interviews with students, self-assessment sheets of students, messages and notes of parents, etc.). The teacher thus has the possibility to follow the direction, the nature and degree of changes in the student's learning. The portfolio should also enable students themselves, their parents and other interested participants to get the fullest possible insight into how the student learns and thinks, how he or she creates technical or other artefacts, how he or she behaves with other people, etc., that is the various components of the student's personality, interests and talents. The portfolio allows the student to succeed with different learning styles. The portfolio is evaluated in an interview when the student answers the questions of the examination committee relating mainly to the explanation of portfolio items, defending their accuracy, etc.

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2 Type of Testing

The type of testing where students are allowed to use any literature and aids (in English: open-book exam) is also widespread. Such testing is focused mainly on higher cognitive processes such as analytical or critical, creative thinking, the ability to solve problems, the ability to acquire and use information, etc.

At present, authentic learning and the authentic evaluation of students is a very current trend. The teacher organizes the teaching process in a way so that it could be comparable to the real world and life as much as possible and students could apply the subject matter of instruction meaningfully, for example creating something that brings joy to themselves, their parents, friends or other loved ones, and the community. With authentic evaluation the artificial school task is not assessed (e.g. the exercises of an achievement test), only the student's performance, which is meaningful even outside teaching, out of the school. For example, it is not enough if the student describes the general phenomena of the electromagnetic field, but he could be able to design an operating front door bell. With authentic evaluation it is not sufficient that students merely reproduce the curriculum, but on the contrary, they must search for information, interpret them, analyze, produce, create, explore and solve problems related to the subject.

The students could also be involved as partners in the evaluation process. For example, they can correct and assess educational tests themselves according to predetermined criteria which can be formed with their and the teacher's involvement. Such a procedure has an educational impact as well, forming various character traits of students, such as honesty, fairness, persistence. It is also appropriate from time to time to carry out a discussion with students focused on testing, evaluation and marking. One of the current trends is also students' self-assessment and their assessment of other students, called peer evaluation. Both of these evaluations are taken into account in the final evaluation. For example, a student will first evaluate his response alone (essay, oral report, etc.) then it is assessed by his classmates and eventually by the teacher who compares and considers the student's self-evaluation, his/her own and the evaluation of classmates. Students thus learn to evaluate themselves, to value other people, objects, processes and the phenomena of the surrounding world and to receive and reflect on the evaluation of their person from others.

The formative evaluation of students is advised to use in a much greater extent. The aim of formative evaluation is feedback, acquiring information on how students learn, detecting and diagnosing weaknesses, mistakes, difficulties and their causes in the process of learning in order to eliminate them and make students' learning activities more efficient. For the teacher, feedback helps to choose the optimal teaching practices. Formative assessment did not use to be associated with the marking of students. Formative assessment is often identified with students' continuous testing and evaluation, which is a mistake because in continuous evaluation the subject matter of one or more lessons is assessed, the causes of deficiencies are not detected and the student is not usually informed of these deficiencies, nor on how to eliminate them and make the learning process more efficient.

Verbal evaluation of students is also widely used complementing the marking process or even replacing it. It is very difficult to assess students' attitudes, interests, their value system, talents, skills and core competences with a mark. The biggest disadvantage of verbal evaluation is that words can be ambiguous. Verbal evaluation is more laborious than the evaluation with a number, as the teacher must invent a verbal assessment for each student, plus pay attention to avoiding its repetition. Therefore, the tendency is to combine number-based evaluation with verbal evaluation. Verbal evaluation, the so-called student profile should include in particular:

- the student's interests, special skills, talents,
- the quality of the achieved results,
- moral and personal characteristics, diligence and conscientiousness,
- activity and independence,
- the understanding of spiritual values,
- the level of the student's key competences (how he can study independently and rationally, what his relationship is to learning, the ability to solve appropriate problem tasks, the level of critical and creative thinking, communication skills, personal and interpersonal competences, e.g. the willingness to help others, respect, courtesy),
- the level of knowledge and skills of the student,
- behaviour, respect for educational and social requirements,
- aesthetic expressions and aesthetic sense,

- the protection of material values.

In vocational training there is a tendency for testing and focusing evaluation on acquiring the relevant professional and key competences, and achieving the appropriate standards. Evaluation is often external. Not only teachers evaluate students, but vice versa, students also assess the quality of teachers' work through anonymous questionnaires. The humanization of students' evaluation is based mainly on trending towards the progress in their development, detecting and evaluating changes in their attitude, skills and knowledge, compared to a previous state, and the students themselves at the time. It is thus about the individualization of the student's evaluation. Comparing the student's performance with the standard is subordinate here and is implemented through tests to verify the achievement of the required educational standards. The aim of the humanistic-oriented evaluation of students is to develop their self-assessment skills.

3 Authentic teaching and evaluation

Another trend in teaching and evaluation is authentic teaching and the students' authentic evaluation. Not only in the past but even today quite often happens that students after finishing school are not ready for real life and do not know how they should apply the acquired knowledge in practice. To the elimination of these shortages a new trend in learning could contribute – authenticity. Applying this trend the teacher prepares and organizes the learning process in such a way that the student does not only understand but also contributes to creating the work (or even creates it himself) that is needed in real life.

Authenticity in education contributes to a deeper understanding of the curriculum and its point in real life, making the lesson more interesting and varied. I. Turek (2008, p. 246) states that in authentic evaluation it is not artificial school tasks, e.g. exercises in achievement tests, that are assessed, but students performance, which is meaningful even outside teaching, outside the school. Authentic teaching and evaluation is very close to practical teaching since students learn to apply theoretical knowledge in practice.

4 Conclusion

In this paper is devoted to the informative function of educational evaluation which lies in informing the student and parents (but also others) about the results the student achieves and how these meet the teacher's expectations. The fourth subchapter presents the function of greater efficiency in educational evaluation. Here I critically noted that the absence of clearly defined indicators for measuring the quality of education on external and internal levels also means the inability to give an objective evaluation of schools which regarding their specific conditions are achieving good results. In the fifth subchapter I introduced the differentiating and selective function of educational evaluation, which is oriented towards the differentiation of students in terms of their abilities, interests, or opportunities to advance to higher-level schools and to gain higher qualifications. I pointed out that it is often the subject of criticism because our schools usually only deepen the social inequalities among students, are selective about them and the choice of school is often determined by the result of school evaluation.

By analyzing the functions of educational evaluation we aimed to arrive at defining the dimensions of educational evaluation that offer insight into the process, resources, methods of evaluation from different perspectives – the dimensions. In this context, I defined three dimensions of educational evaluation: the personality dimension, where the levels of relationships between the object and the subject of educational evaluation are examined, the didactic dimension, the aim of which is to optimize the process of teaching and learning through the function of feedback, and the social dimension, the point of which is to enrich evaluation with the achievements of modern science, technology and social relations.

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References

BENDÍKOVÁ, E. (2014). Lifestyle, physical and sports education and health benefits of physical activity. *In European researcher : international multidisciplinary journal*. Sochi : Academic publishing house Researcher, 2014. Vol. 69, no. 2-2, pp. 343-348. ISSN 2219-8229.

HORVÁTHOVÁ, K. (2010). *Kontrola a hodnotenie v školskom manažmente*. 1. vyd. Bratislava: Wolters Kluwer, 2010. 106 s. ISBN 978-80-8078-329-7.

HORVÁTHOVÁ, K., MANNIOVÁ, J. (2008). *Úvod do školského manažmentu*. Ivánka pri Dunaji : AXIMA. 179 s. ISBN 978-80-969178-6-0.

HORVÁTHOVÁ, K.- SZŐKÖL, I. (2013). *Kontrola a hodnotenie žiackych výkonov v národnostných školách na Slovensku*. Monographiae Comaromienses 9., Komárno: Univerzita J. Selyeho 2013, 120. p., ISBN 978-80-8122-083-8.

HRMO, R. – TUREK, I. (2003). *Kľúčové kompetencie I*. Bratislava: STU Bratislava, 2003. ISBN 80-227-1881-5.

PORUBSKÁ, G. (2000). *Aktuálne problémy slovného hodnotenia na 2. stupni ZŠ*. In: Slovné hodnotenie na druhom stupni základných škôl: Zborník príspevkov z vedeckej konferencie Nitra : UKF, 2000. s. 101-108 ISBN 80-8050-320-6.

SZARKA, K.- BRESTENSKÁ, B. – JUHÁSZ, Gy. (2015). *Analýza aspektov hodnotenia autentických výstupov a komplexného monitorovania žiackych prác v chémii*. In: *Didaktika chemie a její kontexty: 24. Mezinárodní konference o výuce chemie*. Brno: Masarykova univerzita, 2015, CD-ROM, p. 200-208. ISBN 978-80-210-7954-0.

TUREK, I. (2008). *Didaktika*. Bratislava : Iura Edition. 595 s. ISBN 978-80-8078-198-9.

VASS, V. (2015): *Creative School: Renewing Leadership for Creativity*. In. Tadeusz Marek, Waldemar Karwowski, Marek Frankowicz, Jussi Kantola, Pavel Zgaga (eds.): *Human Factors of a Global Society: A System of Systems Perspective*. Education in Modern Society. CRC Press, Taylor and Francis Group. Florida, US. 969-974.