

## Formare alla valutazione: un'indagine sulle concezioni dei docenti in-service per orientare la formazione universitaria

### Developing assessment expertise: a study of current teachers' conceptions of assessment to inform university-level teacher education

Deborah Gragnaniello

PhD Student, Department of Political and Communication Sciences, University of Salerno, dgragnaniello@unisa.it

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#### ABSTRACT

This contribution offers a descriptive analysis of secondary school teachers' conceptions of assessment (Thompson, 1992; Ciani, Rosa, 2022; Scierri, 2023). The analysis demonstrates a pronounced inclination towards summative assessment, underscoring the imperative for interventions to address this limitation (Scriven, 1967; Barbier, 1977; Falcinelli, 1999). The evidence presented in this study supports the proposal of a university training course on assessment. The course aims to address misconceptions and promote assessment for/as learning (Earl, 2003; Sambell, McDowell, Montgomery, 2012). This initiative is part of a broader faculty development programme, with the objective of developing university lecturers as reflective practitioners (Schön, 1987).

Il contributo presenta un'analisi descrittiva sulle concezioni valutative di docenti *in-service* nelle scuole secondarie di primo e secondo grado (Thompson, 1992; Ciani, Rosa, 2022; Scierri, 2023). L'analisi evidenzia una forte preferenza per la valutazione sommativa, segnalando l'urgenza di interventi per superare questo limite (Scriven, 1967; Barbier, 1977; Falcinelli, 1999). Sulla base delle evidenze, si propone un percorso formativo universitario sulla valutazione per decostruire mis-concezioni e promuovere lo sviluppo di competenze valutative in linea con i paradigmi dell'*assessment for/as learning* (Earl, 2003; Sambell, McDowell, Montgomery, 2012). Questa iniziativa si colloca nell'ambito del *faculty development* in cui il docente universitario è inteso *reflective practitioner* (Schön, 1987).

**Keywords:** assessment for/as learning, descriptive data analysis, teachers, conceptions of assessment, faculty development

**Parole chiave:** assessment for/as learning, analisi descrittiva, docenti, concezioni valutative, faculty development

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**Corresponding Author:**  
Deborah Gragnaniello, [dgragnaniello@unisa.it](mailto:dgragnaniello@unisa.it)

## Introduction

The present study is situated within the pedagogical-didactic debate concerning the assessment of learning, considered no longer as a mere tool for final measurement, but as an intrinsic and dialectical component of instructional design and teachers' professional development process. The literature (Brown, 2006; Vanini, 2012; Ciani, Rosa, 2022; Tammaro, Gragnaniello, 2024) converges in emphasizing how teachers' assessment conceptions exert a decisive influence on teaching practices and pedagogical decisions made in the classroom.

This research aims to investigate the assessment conceptions of in-service teachers working in secondary schools, analyzing the functions predominantly attributed to evaluation (diagnostic, formative, summative) and the judgment criteria employed. In line with the literature (Thompson, 1992; Scierri, 2023) it is hypothesized to detect a plurality of conceptions inherent in the timing, purposes and objects of assessment.

In parallel, the study aims to identify teachers' training needs in the area of assessment in order to design and implement targeted and effective training interventions capable of promoting improved assessment practices and, consequently, raising the quality of teaching and learning.

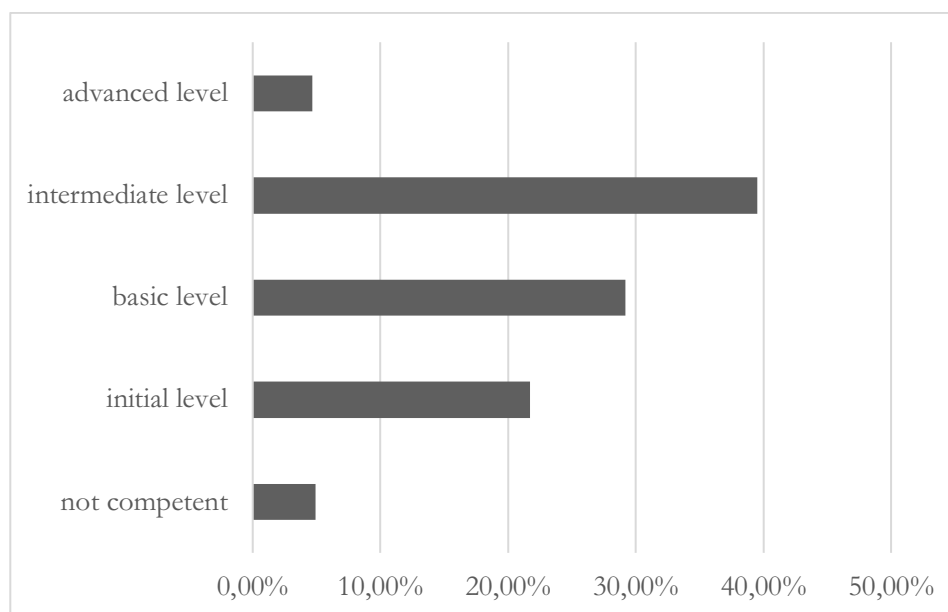
The sample surveyed consists of teachers in service at secondary schools of first and second degree, recruited through the university qualifying pathways (30 and 60 CFU) and the Active Formative Traineeships for Teaching Support activated at the University of Salerno in the academic years 2023-2024 and 2024-2025. Participation in the survey is on a voluntary and anonymous basis.

The survey is conducted using a structured questionnaire adapted from the validated Teachers' Conceptions of Assessment Inventory (TCoA-IIIA) (Brown, 2006; Brown, Gebril, Michaelides, 2019). The choice of this instrument is justified because of its proven psychometric validity and reliability in detecting multiple dimensions of teachers' assessment conceptions. The questionnaire is divided into two sections: a registry section (4 multiple-choice items) and a section on conceptions (27 items on a four-step verbal Likert scale: 1 = not at all agree; 2 = slightly agree; 3 = somewhat agree; 4 = very much agree). The self-completion administration is preceded by a statement on the objectives, methods and privacy guarantees (Legislative Decree No. 101/2018).

## 1. Descriptive analysis of secondary school teachers' assessment conceptions

The paper sets out a descriptive analysis, conducted with the SPSS software, of 387 online questionnaires (Google Forms). The sample is predominantly female (86.54%) compared to male (12.11%) and unspecified (1.35%) (item 1). Most of the subjects were between the ages of 40 and 49 (49.61%), followed by those between 30 and 39 (24.03%), those between 50 and 59 (15.76%), and finally those between 20 and 29 (10.08%). A negligible proportion (0.52%) of the sample is over 60 years of age (item 2). About substitution experience, most respondents reported either annual (33.4%) or multi-year (38.6%) substitutions, with smaller percentages reporting daily (3.3%), weekly (4.6%) or monthly (10.6%) substitutions. A mere 9.5% of the sample reported having a permanent contract (item 3).

A modest percentage of teachers (4.91%) declare that they do not possess specific competences in the field of assessment, while 21.71% are at an initial level. A greater proportion of participants self-evaluated themselves at a basic (29.20%) and intermediate (39.53%) level, while only 4.65% perceived themselves to possess advanced competences (item 4) (Graph. 1).



Graph. 1: item 4 – How do you assess your assessment competences?

The analysis explores the assessment conceptions in relation to different dimensions of assessment: timing (*ex-ante*, *in itinere*, *ex post*), functions (diagnostic, formative, summative) and objects (product, process, system) (Scriven, 1967; Barbier, 1977; Falcinelli, 1999) (Tab. 1).

The frequencies corresponding to the positive and negative response levels of the Likert scale were aggregated to highlight the overall agreement and disagreement trends.

With reference to the *ex-ante* assessment with diagnostic function, item 15 shows that a conspicuous majority of the sample (70.29%) recognizes its primary role in the identification of learners' training needs and in the orientation of instructional design ( $M=2.83$ ). However, the standard deviation (SD) of 0.86 indicates a moderate dispersion of responses, with a significant portion (29.69%) expressing a discordant opinion. A similar observation can be made when analyzing item 19, which revealed a heterogeneity of views on the ability of assessment to adapt teaching according to individual differences ( $M=3.05$ ). While most respondents (78.04%) attest to this function, the SD of 0.84 indicates variability in beliefs, with 21.97% expressing disagreement (Hattie, 2016; Ciani, Rosa, 2022).

Items 14 ( $M=3.07$ ) and 16 ( $M=2.88$ ) revealed a marked convergence of opinions concerning in-progress assessment with a formative function. A significant proportion of the teaching faculty (82.43% and 72.61%, respectively) concur on its efficacy in providing continuous feedback to students and enhancing their learning experiences (Trincherò, 2023). The relatively small standard deviations (0.75 and 0.81, respectively) indicate a homogeneous response, although a non-negligible minority (17.57% and 27.39%) expressed a different perspective. The results for item 17 ( $M=3.00$ ) indicate that a substantial majority of teachers (78.29%) recognize the ability of assessment to integrate with teaching practice, suggesting a widespread awareness of its potential to improve teaching, with a SD (0.80) denoting moderate variability.

Item 9 demonstrates that a significant proportion of the teaching staff (43.93%) adhere to an assessment conception less oriented to its formative and diagnostic potential, thereby confirming the persistence of a more traditional view focused on *ex post* assessment with summative function ( $M=2.33$ ) (Corsini, 2023). The high SD (0.95) indicates a significant dispersion of opinions. Similarly, item 8 reveals that 32.56% of the teachers primarily associate assessment with a classificatory function ( $M=2.07$ ), with a SD (0.95) underlining a marked heterogeneity of views. Item 10 corroborates the widespread perception (74.42%) of the crucial importance of assessment in determining the achievement of learning objectives ( $M=2.95$ ), with a relatively low SD (0.78) suggesting a good degree of agreement (Ciani, Rosa, 2022).

The analysis concerning the objects of assessment revealed the following trends. About product assessment, in item 11, a significant majority of teachers recognize its usefulness in detecting learning achieved

during teaching ( $M=2.85$ ) and, in item 12, in ascertaining the acquisition of knowledge, skills and competences ( $M=2.86$ ), with moderate standard deviations (respectively, 0.77 and 0.72) indicating a good level of agreement. This orientation is partially corroborated by item 13, which shows that for 57.11%, the assessment measures higher order cognitive skills ( $M=2.57$ ), although the SD (0.81) suggests greater variability in opinions. About process assessment, analysis of item 25 reveals significant resistance to the idea of using assessment as an informational tool for teaching practices ( $M=1.93$ ), with the SD (0.87) indicating moderate dispersion in responses. However, in item 28, 72.87% (calculated as the sum of the negative percentages) expressed disagreement with the statement that assessment has a negligible impact on teaching ( $M=1.96$ ), indicating comparable variability in opinions ( $SD=0.86$ ). About systemic assessment, item 5 demonstrates that for 62.01%, assessment of student achievement provides information on the effective functioning of educational institutions ( $M=2.65$ ), with a SD (0.78) suggesting moderate heterogeneity. However, in item 6, a slim majority (50.91%) of respondents believe that such assessment is an accurate indicator of the quality of a school ( $M=2.49$ ), with a similar dispersion ( $SD=0.81$ ). A similar pattern is evident in item 7, where the opinions on the effectiveness of student achievement assessment as a tool for evaluating a school are divided ( $M=2.47$ ), as indicated by a SD of 0.81, reflecting the associated uncertainty (Tab. 1).

Item No.	Question	Not at all agree (%)	Slightly agree (%)	Somewhat agree (%)	Very much agree (%)	M	SD
15	Provides students with information about their learning needs	8.27	21.45	48.84	21.45	2.83	0.86
19	Allows teaching to be adapted to individual differences	5.43	16.54	45.48	32.56	3.05	0.84
14	Provides feedback to students on their performance	3.36	14.21	54.01	28.42	3.07	0.75
16	Helps students improve their learning	6.20	21.19	51.16	21.45	2.88	0.81
17	It is integrated with teaching practice	4.91	16.80	51.68	26.61	3.00	0.80
9	Consists of assigning a grade/level to the student's work	22.48	33.59	32.30	11.63	2.33	0.95
8	Ranking students	33.59	33.85	24.55	8.01	2.07	0.95
10	Determines whether the students achieved the learning objectives	3.88	21.71	50.39	24.03	2.95	0.78
11	It allows the observation of how much the students have learnt	4.65	24.55	51.94	18.86	2.85	0.77
12	It reveals what the students have learnt	3.88	22.48	57.62	16.02	2.86	0.72
13	Allows the measurement of higher cognitive skills	10.08	32.82	46.77	10.34	2.57	0.81
25	Interferes with teaching	38.50	33.59	24.81	3.10	1.93	0.87
28	Has minimal impact on teaching	35.14	37.73	23.51	3.62	1.96	0.86
5	The assessment of student performance provides information on the functioning of schools	8.27	29.72	51.16	10.85	2.65	0.78
6	Assessment of student performance is an accurate indicator of the quality of a school	11.11	37.98	42.12	8.79	2.49	0.81
7	Assessment of student performance is a good way to evaluate a school	11.63	38.76	40.83	8.79	2.47	0.81

Tab. 1: *Analysis of in-service teachers' assessment conceptions*

## 2. A training course for the implementation of assessment for/as learning among in-service teachers in secondary schools

In response to the findings of the analysis, the training pathway implemented focused on overcoming the prevalence of the summative conception, enhancing the practical integration of diagnostic and formative assessment, promoting assessment as a tool for professional self-assessment and disseminating the principles and strategies of AfL and AaL. The training course was directed towards teachers engaged in initial training who had previously participated in the assessment needs analysis. This strategic choice is based on the pedagogical principle that initial training has a primary role in the internalization of conceptual models and innovative practices (Schön, 1987). The primary objective was twofold: to make future teachers aware of the inherent limitations of a predominantly summative evaluative approach; to promote an in-depth understanding of the formative potential of assessment. This is in line with constructivist theories of learning, which emphasize the active role of the student in the construction of knowledge and the function of feedback as support for this process.

The specific objectives of the training course implemented were as follows:

- to deconstruct any misconceptions about assessment, highlighting its dynamic nature and its intrinsic correlation with teaching;
- to develop operational skills in the design and use of assessment for/as learning strategies, such as the development of transparent assessment criteria, the provision of effective and timely feedback, the promotion of self-assessment and peer review (Trinchero, 2023);
- to foster critical reflection on the role of assessment in supporting educational differentiation and inclusion of students with special educational needs (Pastore, Pentassuglia, 2015).

The training course that was implemented included several activities. Firstly, teaching modules were devoted to deconstructing misconceptions about assessment, highlighting its processual nature and its intrinsic connection with teaching. Subsequently, practical strategies of assessment for/as learning were introduced and discussed, such as:

- the elaboration and sharing of transparent and co-constructed assessment criteria with students, with a view to making learning expectations explicit;
- the introduction of effective questioning techniques designed to stimulate reflection and provide immediate feedback;
- the presentation of examples of targeted and timely formative feedback, focused on identifying strengths and areas for improvement, with a view to guiding students towards progress.

The implementation of self-assessment and peer review practices was also explored (Liu, Carless, 2006), with the objective of fostering metacognitive awareness and responsibility among students in their own learning process. Concrete examples and case studies were analyzed to illustrate the practical application of the principles of assessment for/as learning in various disciplinary contexts (Black *et alii*, 2003; Earl, 2003; Sambell, McDowell, Montgomery, 2012; Hattie, 2016).

The objective was twofold: to cultivate practical competencies in the design and implementation of formative assessment strategies, and to encourage critical reflection on the role of assessment in promoting educational differentiation and inclusion.

## 3. Conclusions

The training proposal is based on a theoretical framework that enhances faculty development of university teachers, promoting trainers competent in assessment for/as learning. It also recognizes the crucial role of the university teacher as a reflective practitioner (Schön, 1987) and the importance of cultivating a culture of assessment understood as a continuous process integrated with teaching, aimed at student growth and



autonomy (Black, Wiliam, 1998). A longitudinal study of the effectiveness of the implemented initial training course is planned, using a mixed methods design with quantitative (pre/post questionnaires) and qualitative (focus groups, interviews) data. The relevance of investing in continuing teacher training is also emphasized. The latter, to be implemented, aims to support the practical application of assessment for/as learning by promoting effective training strategies, teacher collaboration, metacognitive reflection on assessment (Flavell, 1977), and adaptation of practices to individual and inclusive needs through a flexible and contextualized structure. Positive spillovers are expected at the level of initial training, equipping teachers with innovative skills, and continuing education, improving the practices of those in-service. However, the research has limitations: the non-direct causal inference between training and outcomes, the limited generalizability of the sample, and the social desirability bias due to self-perception. To mitigate the latter, future research intends to supplement the surveys with multiple sources of data, such as direct observation of teaching practices.

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