Wide angle

Assessment in Higher Education:
A Measure of Learning or a Selection Process?

In higher education, grades have a major impact on a student's pathway: they open and close doors in the academic and professional world, and have repercussions on self-esteem, well-being and student aspirations.

Getting good grades, but more importantly, getting better grades than one's peers, is a necessary condition for standing out in a selection processes. In this competitive context, assessment, especially when it takes the form of a high-stakes summative exam, is often perceived as a stressful, no-holds-barred ordeal. Reduced to the dimension of grading, assessment is "most often seen as detrimental to learning and motivation" (Yerly & Berger, 2022, p. 7).

In this issue of Wide Angle, ORES explores some questions related to normative assessment in higher education:

- Where does normative assessment in education come from, and how can we explain its longevity?
- What impact does normative assessment have on students and their success?

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1 What is Normative Assessment?

For centuries, Western school systems have used grading to categorize and compare students. In the 20th century, with the massification of education, schools were given a new role: to determine the social destiny of individuals, sorting them according to their "merit," "aptitudes" or "efforts" (Romainville, 2021, p. 90).

Normative assessment is the mechanism through which categorization takes place: those who perform best are selected for access to the most prestigious or restricted disciplines or programs, while the "weakest" are ejected from the system or relegated to less valued pathways. In other words, the function of normative assessment is to rank students for selection purposes.

> Normative assessment: "A mode of assessment in which a subject's performance is compared (...) to that of others in a reference group on the basis of the same instrument" (Legendre 2005, cited in (CSE, 2018, p. 8)).

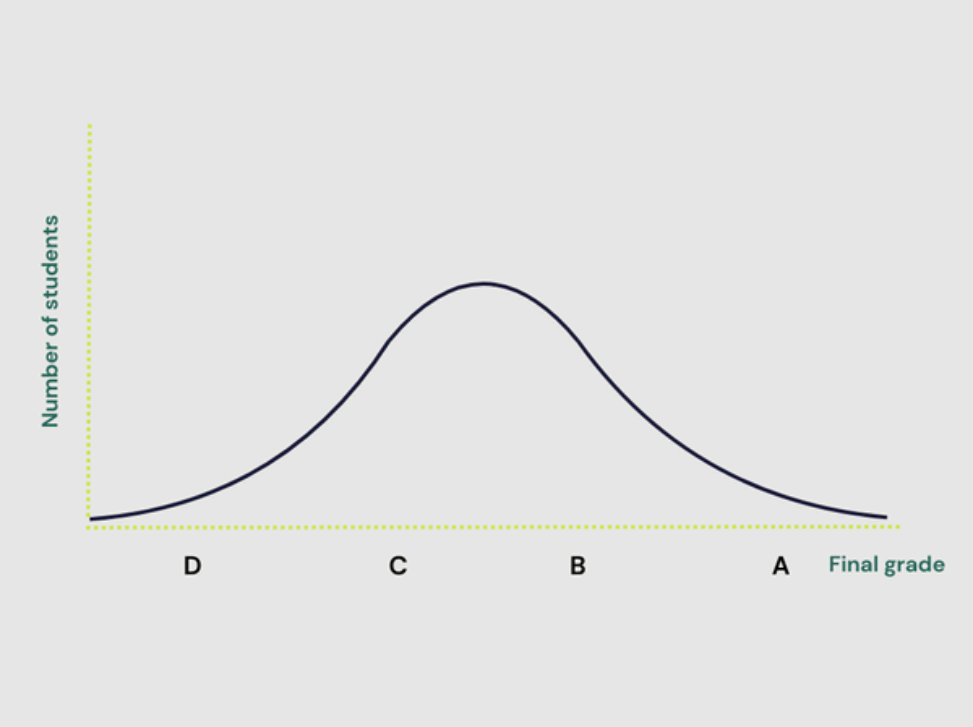
Breaking with this normative approach, specialists in educational sciences have for decades been advocating the adoption of **assessment practices centred on learning**. In this vision, which lies at the heart of the competency-based approach, **assessment is a qualitative, criterion-referenced evaluation designed to support students throughout the learning process** (Côté, 2017). It measures the achievement of learning targets, rather than comparing students to one another

Despite the scientific consensus in favour of learning-centred assessment, normative assessment practices remain very present in higher education.
Why is this so?
On what beliefs is the longevity of the normative approach based?

The Normal Curve

The normal curve or Gauss curve (bell-shaped) is the graphical representation of a binomial probability distribution of random results. For example, if you throw a handful of coins on the ground, such distribution predicts that the proportion of “tails” results is much more likely to be between 40% and 60% rather than 90% or 10%.

At the turn of the 20th century, human sciences adopted this law to model human behavior, giving rise to psychometrics. This new science, which invented standardized tests and the notion of IQ, assumes that, in the population, intellectual abilities are distributed along a normal curve. Thus, in the field of education, the psychometric model is at the origin of normative assessment, seen as a more “objective” and “scientific” way of measuring student performance (Bowen & Cooper, 2022; Brookhart & al., 2016).



Concretely, when applied to the field of educational assessment, this conception imposes a certain distribution of grades, which should reflect the supposedly “natural” distribution of students' abilities. In a normative logic, “a good method of assessment should result in several average grades and few very good and very bad grades” (Huver & Springer, 2011). Technically, this means that the success of some depends on the failure of others.

An Invisible Reference Point

In the 1970s, psychologist Benjamin Bloom criticized normative assessment by posing the following question: How can learning outcomes reflect the laws of probability, when learning and teaching conditions differ for each individual?

In the decades that followed, educational sciences distanced themselves from the normative approach, first adopting a behaviourist perspective inherited from Bloom (teaching paradigm) and evolving toward the socio-constructivist stance that is now dominant (learning paradigm).

Despite this, the normal curve remains the "silent partner" of the grading system, whether in letters or numbers (Brookhart et al., 2016). While criterion-referenced assessment is officially valued, normative practices (such as comparing individual results to the group average or "normalizing" grades) persist, from primary school to university. **In higher education, selection mechanisms for prestigious internships and scholarships play a key role in consolidating this normative approach.**

According to the Conseil supérieur de l'éducation, the logic for academic selection that prevails in higher education has cascading effects across the entire school system, contributing to the "overvaluation of grades and ranking" from elementary school onwards (CSE, 2018, p. 69).

The College Performance Score (R score)

The R score is the main criterion that determines access to certain university programs or institutions.

Prior to the 1980s, the college average was used by universities to rank and select students for admission. Subsequently, a more elaborate calculation formula including the mean and standard deviation (the Z-score) was used until 1995, when universities adopted the R score. This new calculation method was designed to correct the biases introduced with the Z-score, by taking into account the relative strength of the group:

> *"The R score combines, for each course taken by a student, three pieces of information: an indicator of that student's position based on the grade obtained in their group (the college Z-score), an indicator of the strength of that group and an indicator of the dispersion of that group" (BCI, 2025, p. 7).*

The College Performance Score (continued)
According to the Bureau de coopération universitaire, which is responsible for this calculation method, the R score is a "fair and equitable measurement tool" that gives "the best students from all colleges an equal opportunity to access the most restricted university programs" (BCI, 2025, p. 20).

However, the Conseil supérieur de l'éducation notes that the R score feeds a sometimes unhealthy competition, in addition to systematically penalizing students who are experiencing "a slow or difficult start" (CSE, 2018, p. 47). A research team has further shown that the R score continues to reflect a bias based on group strength, and "legitimizes and even accentuates social inequalities in access to restricted university education programs" (Moulin et al., 2022).

2 What are the Repercussions on Learning and Student Success?

Collaboration VS. Competition

The predominance of the ranking logic in assessment exacerbates competition and discourages collaboration among students. Indeed, in a normative logic where everyone positions themselves in relation to others, each successful student makes success a little harder to achieve for the others. This climate of competition is particularly exacerbated in certain prestigious study programs, for example law or STEM fields (Canning et al., 2020; Nyström et al., 2019).

> In an education system based on selection, *"seeking to be better than others becomes an adapted response to the structural constraints of the academic environment"* (Świątkowski & Dompnier, 2017, p. 107).

The results of this "obstacle course" are seemingly merit-based. In reality, this system favours students from privileged backgrounds, who are better prepared for CEGEP or university. Conversely, it disadvantages people from underrepresented groups (particularly first-generation students), who are more likely to experience a sense of imposterism in higher education, lack the implicit knowledge and don't have support from those around them to know how to perform well in assessments (Bowen & Cooper, 2022, p. 190; Campbell, 2024; Canning et al., 2020).

Anxiety and the Race for Grades

The culture of competition amplifies grade-related stress and anxiety, particularly among individuals from historically underrepresented groups in higher education or certain fields (e.g., women in engineering) (Posselt & Lipson, 2016).

To counter the negative effects of high levels of competition on students' mental health, several medicine programs in Canada and elsewhere have actually replaced their grading system with a "pass-fail" designation (CSE, 2018, p. 51; Nyström et al., 2019).

Are Stressful Assessments Necessary?

A common idea is that stressful assessments are part of learning, since they are a preparation for the stressful realities of working life. However, the typical constraints of high-stakes exams (e.g., a time-limited examination in a closed room with no access to one's notes) do not correspond to the reality of the professional, academic or social environments that students will enter after their training. In this sense, they are not authentic assessments.

According to members of the comité de travail sur les « cours défis » au collégial, an examination such as the Ministerial Examination of College French or épreuve uniforme de français (EUF), which consists in producing a 900-word essay in 4.5 hours, "may not offer an accurate picture of a student's abilities" because of the "intense stress" it generates (MES, 2024, p. 73). The Fédération étudiante collégiale du Québec describes the EUF as a "totally artificial, anxiety-provoking and outdated" assessment context (FECQ, 2022, p. 21).

Grades and Motivation

Assessment and grading generate highly differentiated emotional states in students (Stiggins, 2008, p. 240). For those who "perform" well, the assessment system can act as a driver for success: it generates confidence, fuels the desire to perform, to put in effort, and so on. With that being said, good results can also accentuate the pressure to perform. At the college level, people who obtained good results in their first semester are more likely to experience "grade-related anxiety later on" (Benlakehal, 2023, p. 53).

Conversely, for those with poorer results, assessment maintains the **vicious circle of failure and dropping out**, acting as a "self-fulfilling prophecy." Indeed, research shows that as early as primary school age, "many children begin to see their level of academic ability as a stable and definitive component, no matter how hard they try" (Prokofieva et al., 2017).

A number of studies have examined the link between the type of feedback provided through assessment and motivation, showing that grades themselves tend to be a source of extrinsic motivation, which is less conducive to learning and success (Gorichanaz, 2024, p. 2021; Koenka et al., 2021). Motivation through grades is "atrophied motivation" (Elbow, 1997), which does not lead students to engage deeply in their learning or to develop their metacognitive skills.

Learning Strategies in a Normative Context

The terms of assessment shape students' learning strategies, and they also "condition" teaching practices (Barbeau et al., 2021; Morrissette & Legendre, 2014, p. 236).

Many teachers use grading as a lever to induce certain learning strategies, believing, for instance, that "assigning grades is the best way to get students to study" (Bélanger & Tremblay, 2012, p. 76). The importance attached to grades and the predominance of the grading logic in assessment reinforce a "utilitarian relationship to knowledge" among students (CSE, 2018, p. 54):

- Strategies for getting good grades lead students to **neglect what cannot be evaluated in numbers**. For example: choosing not to engage in learning activities or assessments that are not graded (that don't "count") or whose weighting is low (Segueda, 2023).

- At the same time, the prominent place of grades in a system fuelled by numbers means that **teaching tends to become preparation for examinations**, as exemplified by the Ministerial Examination of College French (MES, 2024, p. 73).

- The race for grades encourages **cheating and plagiarism**. Moreover, in the wake of the emergence of generative artificial intelligence tools in higher education, the risk that the integrity of assessments may be impeded represents the main fear expressed by higher education stakeholders (CSE & CEST, 2024, p. 31).

- High-stakes summative examinations encourage **cramming**; i.e., superficial and intensive preparation on the eve of an exam, commonly known as “brain dump preparation” (CSE, 2018, p. 72; French et al., 2024).

- The disproportionate importance of grades in the assessment system **discourages risk-taking** among students. For example, not taking a course that interests us or would be useful for our pathway, but which is perceived as “more difficult,” to avoid lowering one's GPA (Blum & Kohn, 2020, p. 13).

For Further Reflection

- Review the report published by the Conseil supérieur de l'éducation (2018) Évaluer pour que ça compte vraiment, a still topical review of learning assessment practices at all levels of the education system.

- Learn more about the results of a study by the Observatoire sur la santé mentale étudiante en enseignement supérieur (OSMÉES) on suicide deaths among students, highlighting “the performance culture” and “certain assessment practices that contribute to issues of anxiety, competition and exclusion.”

- Read the statement by the Fédération étudiante collégiale du Québec (FECQ) (2021) on university admissions practices.

- Watch the AQPC webinar hosted by Caroline Cormier and Bruno Voisard entitled “La dénotation à des fins d'équité.”

- Join a community of practice where you can discover alternative rating practices (NAPs) and exchange with “teachers who have implemented NAP systems in their courses” (CdP-PAN).

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