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Academic integrity in online assessment: a proposal for guidelines

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In recent years - accomplice to the COVID-19 emergency - the utilization of digital environments, APPs, and tools for assessment in the university context and in online learning has grown significantly (Sannicandro, in press). The expression “online assessment of learning” relates “to the use of digital tools to assess or measuring learning outcomes, both face-to-face and in distance-learning environments” (Bartley, 2005, p. 6). In the different contexts of online learning, assessment “is created, written, delivered and marked with technology, usually a specialist assessment platform” (Gibson, n.d., p. 1). Digital resources enable the implementation of assessment testing that can be conducted both in the presence (e.g., at labs, classrooms etc.) and at a distance. Monitoring tools, such as e-proctoring systems (particularly for summative assessment), can be used in both cases.

The different technology solutions *alone*, however, cannot guarantee the creation of a “*safe*” assessment environment, capable of ensuring academic integrity and the quality of the assessment process. Among the main needs emphasized by instructors in the context of online assessments, we find both the need to avoid plagiarism by learners and the possibility of developing an authentic culture of academic integrity (Robinson et al., 2017; Tatum, 2022). Not coincidentally, reference to *academic integrity* in studies on online assessment is a constant (Garg et al., 2022; Surahman et al., 2022; Holden et al., 2022; Hartnett et al., 2023). Inevitably, these aspects impact the attitudes and opinions associated with online assessment from instructors and students (Bahar et al., 2018; St-Onge et al., 2022). Such attitudes and opinions can affect positively or negatively, even to the point of challenging the quality of online assessment and the correct performance of testing.

Online assessment requires a high level of digital skills for exam taking, and as a consequence students face a double challenge related to learning how online assessment works and preparing for the exam (Abubakar et al., 2022). Assessment can, indeed, generate anxiety and stress in students, and that can result in cases of cheating. The study by Sanchez-Cabrero and colleagues (2021) revealed, however, that stress seems to decrease rapidly once the exam begins, and once is over, “most students consider that there is little difference between on-site and online evaluation, and both prompt the same amount of stress, if not less for remote exams” (Sanchez-Cabrero et al., 2021, p. 11).

There is no consensus in the literature on whether cheating is more frequent in online or face-to-face assessments (Reedy et al., 2021). These issues are also common in traditional learning contexts but may sometimes be amplified in the online experience (Akimov, 2020).

Academic dishonesty can therefore result in “behaviors such as the use of unauthorized materials, facilitation (helping others to engage in cheating), falsification (misrepresentation of self), and plagiarism (claiming another’s work as one’s own)” (Holden et al., 2021, p. 2) and in some cases even contract cheating and ghost-writers (Hill et al., 2021). Holden and colleagues (2002) identified a number of reasons that may be causes of academic dishonesty, such as individual and psychological factors, institutional factors, or factors related to test delivery instruments.

The term *e-dishonesty* has been used to refer to behaviors that diverge from academic integrity in the online environment, bringing up novel considerations that may not have been taken into consideration in previous studies (Holden et al., 2021). In many cases, countering these phenomena with surveillance strategies alone (Verhoef et al., 2021) is not an effective option. In digital learning environments not narrowly connected to *Emergency Remote Teaching and Learning*, many of the described critical aspects can be overcome. In blended or distance learning degree programs, “through detailed guidelines,

adequate training, and test practice sessions to familiarize with how online assessment works, it is possible to have an impact [on the phenomena of academic dishonesty]" (Abubakar et al., 2022, p. 196), not only from the perspective of control.

The proposal of guidelines shared - including at the institutional level - with faculty, students, and other professionals, appears capable of significantly impacting the processes under examination (*academic integrity, cheating, e-dishonesty*). The focus of educational research is shifting, necessarily, "towards an approach that is preventative, educative and positive in promoting student success" (Center for Teaching and Learning, UC Berkeley).

Against this complex background, we conducted an analysis of some of the guidelines and frameworks proposed in the academic context and internationally (e.g., by the Teaching and Learning Center and Center for Academic Integrity) used to promote the dissemination of an authentic culture of academic integrity. The research involved the below phases (in this paper, we present the first phase of the study):

- *First Phase*, analysis and mapping of guidelines, frameworks, and digital resources developed in the university context to encourage academic integrity;
- *Second Phase*, development of an early proposal for *guidelines* - from the resources identified and analyzed in the previous phase - to be implemented in blended or distance learning degree programs.

The relationship between online assessment and academic integrity is predicted to become even more *crucial*, also due to the development and growth of Artificial Intelligence (AI) systems (Perkins, 2023) and online learning. To develop and implement guidelines and honor codes, universities must reduce the cheating culture, particularly, in online courses (Holden et al., 2021).

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