A guide to remotely assess learning

Erica Delorenzi[1] [0000-0002-1106-0899] , Gisela Schwartzman[2] [0000-0002-5178-7398] , [1]Laura Eder[3] [0000-0002-3941-6834], Susana Meza[4] [0009-0003-3921-8373], Michelle Berk[5] [0000-0002-0177-0715]

[12345] Instituto Universitario Hospital Italiano de Buenos Aires, Buenos Aires, Argentina

Abstract. Assessment in the university context is a challenge that was intensified with the emergency remote teaching and learning during Covid-19 pandemic. As a result of this process most of the proposals today combine on-site and virtual instances. Challenges regarding resource selection, assessment instruments, expected results and teaching interventions still remain. This paper analyzes remote learning assessment strategies designed by teachers of a University Institute in health sciences, in the context of training on this topic between 2020 and 2022. A Guide for designing remote learning assessments was built, revised and adjusted in successive iterations through its use in new teacher training programs. In this paper, we present the analysis of more than 50 remote learning assessment strategies designed using the Guide in the context of a teacher training activity. It highlights the need to analyze teaching practices and how they can promote learning, especially in the new context of post-pandemic hybridity.

Palabras clave: Higher Education; Learning Assessment; Health; Virtual Education.

1   Introduction and Theoretical Framework

Learning assessment in higher education is an issue of concern to a large number of teachers and a challenge that was intensified by the need to rethink teaching and assessing (García-Peñalvo, 2020) during the Covid-19 pandemic. Although returning to on-site teaching meant recovering certain practices, the coexistence of hybrid teaching models that combine on-site and virtual, synchronous and asynchronous instances presents new challenges. Teachers make multiple decisions when assessing learning in these different educational scenarios, exploring aspects such as: resources and tool selection, assessment instruments, expected learning outcomes, teaching interventions, time management, among others. Which of these practices emerged in times of remotization? Which were already installed practices? How can we accompany teachers in this decision making process in today's educational context?

We understand learning assessment as part of a didactic process (Camilloni et al., 1998), inseparable from teaching and learning. It implies that students become aware of their learning process and that teachers interpret it in order to guide their teaching strategies. Therefore, in order to develop online assessment proposals, we must

recognize the multidimensional relationship between assessment and learning (Elena Barberá, 2006) and the particularities of teaching practices in this modality.

With the purpose of contributing to the understanding of university learning assessment with technologies, this study analyzes the decisions made by teachers regarding online learning assessment when undergoing pedagogical training.

2   **Methods**

Through a descriptive-interpretative study (Ramos Zincke, 2005), remote learning assessment strategies developed by teachers of a university institute in health sciences in the context of teacher training on this topic between 2020 and 2022 were characterized. For the analisis, a documentary matrix was built and categories constructed to identify the prevalence of features in the assessment activities presented. As a result, a Guide for designing remote learning assessments was elaborated. It provides comprehensive understanding of the aspects that need to be considered when planning learning assessment strategies (Schwartzman et al., 2021). The Guide was revised and adjusted in successive iterations through its use in new teacher training programs. In this paper, we present the analysis of more than 50 assessment activities designed by teachers in the context of their training.

3   **Results**

We found that teachers mostly choose to carry out learning assessments (Barbera, 2016) to accredit knowledge and pass (or fail) their subjects. Some alternative strategies include feedback that promote the construction of knowledge during the process. The majority of these assessments are carried out through written or oral activities in which students are asked mainly to analyze cases, solve exercises or questionnaires. We observed a predominance of assessment strategies that especially value the analysis and conceptual foundation done by students. Although some academic productions were expected, most of the strategies aimed at producing or analyzing professional practices related to healthcare. We infer with this that there is a teaching effort to preserve situated learning linked to professional practice in online education. In addition, they prioritize asynchronous instances developed through online collaborative documents; followed by synchronous activities through video conferencing tools. Although most learning assessments are individual, it is interesting to note that small group activities focused on asynchronous collaborative productions are also designed.

Previous works (Schwartzman et al, 2021) point out that research and literature problematizes the use (and abuse) of power in test-taking or prescribes how to give feedback but these articles do not analyze teacher intervention during the assessment process. In this study, the analysis of the assessment strategies designed allowed us to build categories to identify ways in which teachers intervene. These interventions are

mainly planned at the "extremes" (Carlino, 2013) at the beginning (giving instructions and framing the work) and at the end (giving feedback). It is interesting to note that they also plan interventions during the assessment process (clarify doubts or guiding the resolution of a task). They are inclined to communicate such interventions via forum or videoconference meetings, either individually to each student, to small groups (when the activity was developed this way) and even to the whole class to give global feedback on frequent errors and collective achievements.

4   Discussion and Conclusions

The Guide described here was the result of a research work started in 2020 when the pandemic forced remote teaching. At that time, teachers did not choose a virtual modality but instead had to forcibly adapt their on-site teaching practices to this new educational context. With the first presentations of the Guide, we wondered what lessons and experiences would the "post pandemic" leave us and what practices would remain with us when returning to on-site teaching.

With this new study we confirm that the dimensions described in the Guide have been stabilized and that it is a valuable instrument to guide decision making. Also, with the return of on-site education, there are teachers who once again choose virtual teaching as their exclusive or combined modality of teaching.

5   Limitations and Future Research

The expanded access to Artificial Intelligence (AI) tools over the last year, driven by generative algorithm applications such as chat GPT, once again challenges education in general and learning assessment in particular. As with all technological developments, it generates expectations and concerns in the educational community. These tools can be included by teachers and students in authentic assessment activities that recognize the current ways in which society produces and circulates knowledge. Both teacher training and the practices carried out by teachers may consider the inclusion of AI tools as long as the assessment strategies designed, such as the ones described in this study, promote situated assessments that adjust to the teaching process, are far from automatised and simple reading controls but focus instead on the construction of meaningful learning. We therefore consider it appropriate to include AI tools in the aforementioned Guide and continue teacher training programs that promote a responsible and critical use of technologies and strengthen soundly based teaching practices.

References

Amin, Z. y Eng KH. (2003). Basics in medical education World Scientific, Singapore, ISBN 981-238-209-7, 38

Barberá, E. (2016). Aportaciones de la tecnología la e-Evaluación. RED. Revista de Educación a Distancia, 5(6), 1-13. Recuperado de https://epk.is/11WZq

Camilloni, A., Celman, S., Litwin, E., & Palou de Maté, M. D. C. (1998). La evaluación de los aprendizajes en el debate didáctico contemporáneo. Buenos Aires: Paidós.

Carlino, P. (2013). Alfabetización académica diez años después. Revista mexicana de investigación educativa, 18(57), 355-381.

García-Peñalvo, F. J. (2020). Evaluación online: la tormenta perfecta. Ensinar a distancia. Recuperado de https://repositorio.grial.eu/bitstream/grial/2007/1/Tormenta.pdf

Ramos Zincke, C. (2005). Cómo investigan los sociólogos chilenos en los albores del siglo XXI: Paradigmas y herramientas del oficio. Persona y Sociedad, 19(3), 85-119.

Schwartzman, G., Roni, C., Berk, M., Delorenzi, E., Sánchez, M., & Eder, M. L. (2021). Evaluación Remota de Aprendizajes en la Universidad: decisiones docentes para encarar un nuevo desafío. RIED. Revista Iberoamericana de Educación a Distancia, 24(2), 67-85.