Progressive assessment of the development of competencies in higher education students

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Abstract. Education based on the development of competencies is proposed as a solution to the demands of globalization and the society of knowledge. Training is ought to meet the requirements that discipline, society, and the labor market demand. With the implementation of these models, universities were challenged by the need for change, not only in their knowledge, but also in their beliefs and practices, abetted by demands and initiatives that do not always align with the development of knowledge. The present study explores knowledges and practices related to the creation of intermediate profiles and their evaluation processes in higher education students.

A literature review and comparative benchmarking are carried out among 5 Chilean universities selected due to possessing official documents which are freely accessible on their websites. The results show a limited theoretical and empirical development of the subject. The experiences reported by the universities show points of convergence in terms of evaluation methods, depth, number of evaluative milestones, instructional design and didactic aspects. The results are discussed, and practical guidelines are provided for defining intermediate competencies and their evaluation in higher education.

Keywords: Competencies, intermediate profiles, evaluation, higher education.

1   Introduction

In the 1980s, the changes experienced in the field of information technology, as well as the articulation of national economies to the processes of integration and globalization, permeated higher education institutions responsible for producing, disseminating and transferring knowledge regarding the training of professional, scientific and technical human resources (Irigoyen et al., 2011). This implied a rethinking of curricular orientations, the academic offer, the curricular architecture of the careers, the improvement aimed at academics, the ways in which institutions are linked to the demands of society, the productive sectors, services and employment. Education based on the

development of competencies is proposed as a solution to new needs, where training must respond to the requirements that the discipline, society and the labor space prescribe (Estrada, 2018).

2   Theoretical framework

Advancing from a model focused on the fulfillment of objectives to an educational program based on the development of competencies has not been an easy task, since it is a process that implies a profound change in the formative work of teachers, who must modify their teaching strategies and evaluation methodologies, relegating the lecture or essentially expository class, favoring activities focused on active learning and on the student's work (Moreno, 2010). An education based on the development of competencies promotes the development of transversal or generic skills that allow the professional in training to face various challenges that arise in the environment, solve problems in certain contexts and respond to the needs of today's world (Paredes & Iniciarte, 2013; Huerta, 2018).

One of the challenges posed by this scenario is to be able to generate learning itineraries that make it possible to achieve the graduation profile of the careers, which includes the development of milestones that respond to intermediate training processes, which have been called intermediate profiles. These profiles indicate which are the enabling competencies that would allow a student to reach the graduate profile in a given discipline and are used as a reference for the construction of the progressive evaluation of competencies (Yáñez and Palma, 2022).

Although there is a consensus that the development of skills should be evaluated continuously and gradually, there are no methodological proposals to determine which are the enabling or intermediate competencies that constitute an intermediate profile, nor is it clear how to evaluate them.

3   Method

The purpose of this study was to answer the above questions based on a review of empirical theoretical literature of recent years and a comparative benchmarking among 5 Chilean universities selected for having official documents freely available on their web pages. The analysis of the documents was descriptive, identifying and recording relevant information on the following topics: evaluation of progression, number of milestones, instructional design, didactic design and level of depth. Once the universities had been analyzed individually, they were compared by means of a matrix that sought similarities and differences between them.

4   Results and Discussions

The results show scarce literature and little clarity in the definition of the terms associated with the subject, the most useful are those provided by the institutions in charge of public policies on the subject and international organizations that watch over the quality of the training process in higher education. In turn, the comparison of Chilean universities shows that:

a) Most institutions use the same methodology for the definition of graduate profiles and for the construction of intermediate profiles.

b) The divisions by learning cycles mark the moments of the evaluative milestones.

c) The evaluative milestones occur more frequently in the fourth semester and at the end of the training activities contemplated in the curricular architecture.

d) Pedagogy courses are the ones that have the most defined methodologies for the construction of intermediate profiles, since they respond directly to the monitoring of the progress of the graduate profile demanded by the National Accreditation Commission (CNA).

e) Regarding the design of the evaluation milestone, there are two options, depending on whether it is within or outside the curriculum. The first option contemplates activities inserted in the curricular architecture, either in a subject, module or internship; the second option establishes specific extracurricular activities and/or evaluations that seek that students demonstrate that they have achieved the expected development of the competencies in the intermediate profile.

These findings allow us to identify that in some scenarios inadequate evaluative strategies are being used to follow up on the achievement of the intermediate profiles, since they do not show effectiveness in terms of estimating the level of achievement of the intermediate profiles. This leads to a debate on the relevance of the evaluative milestones, to rethink whether they should be different according to the disciplines, in order to respond to the particular characteristics of each training area, and whether it is more appropriate to place them intra- and extra-curricularly, understanding the former as a subject that is incorporated into the curriculum; and the latter as crosscutting milestones of formal evaluation.

5   Conclusions

It is concluded that the evaluation of the progression of intermediate profiles in higher education students is scarcely developed, both in its foundations and in its implementation proposals, and that the Chilean Universities that are facing this challenge already have certain learning that should be taken into account as input for the generation of more effective guidelines that allow fulfilling the objective of favoring learning trajectories that allow higher education students to reach their graduation profiles.

6   Limitations and Future Research

The present study is an approximation to the design of intermediate profiles and evaluative milestones in higher education. Its main limitation is the number of universities included in the sample, together with a data collection strategy that is insufficient because it addresses the subject partially and omits other sources of information that could provide a more complete vision. Future research should use primary sources of information and incorporate the vision of different educational actors. At the same time, progress should be made towards the generation of evidence to support the practices indicated as successful, in order to generate learning that can be replicated in other higher education institutions.

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