

## **Monitoring of the Study Plan, based on the Graduation Profile, as a mechanism to contribute to quality improvement.**

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### **Abstract.**

Introduction: University development and the increase in supply in Higher Education generates the need to incorporate systems to ensure the quality of institutions, careers and educational programs and increases interest in strengthening quality control mechanisms of training processes.

Methodology: A mechanism was designed that, through surveys and focus groups, collects information from teachers, students and graduates to monitor compliance with the Graduation Profile of the Dentistry career at the Diego Portales University.

Results: The results support that the mechanism allows obtaining concrete information about the training process that includes: perception of the level of development of the skills achieved by the students after taking key subjects, correspondence between learning results of the Study Plan and those declared in subject programs, coherence between learning results with methodologies, learning and evaluation processes.

Conclusions: This mechanism contributes to showing whether the competencies declared in the Graduation Profile are developed gradually and systematically during the training process. It contributes to the diagnosis of gaps and deficiencies that can be corrected in a timely manner. The nature of the questionnaire allows it to be used by other careers.

**Keywords:** Study program, Professional profile, Quality of education, Education.

## **1 Introduction**

Between 1950 and 2000, Latin America increased from 75 to 3.000 Higher Education institutions and from less than 300.000 students to nearly 20 million (Espinoza et al., 2006; Falabella et al., 2018).

Chile currently has an enrollment of 1.204.414 students, the highest number ever recorded (Covarrubias, 2021; Cruz et al., 2021). Factors that affect the development of university systems have been described: introduction of market logic, the need to respond to the requirements of globalization and guarantee the training provided (Billing, 2004; Espinoza & González, 2012; OECD & The World Bank, 2009). In

view of this background, it is necessary to incorporate and strengthen systems to monitor processes that ensure the quality of educational institutions and programs.

The objective of this research is to publicize the monitoring mechanism of the School of Dentistry of the Diego Portales University (UDP).

## 2 Theoretical Framework

In Chile, the Higher Education Law 21.091 establishes mandatory accreditation for the Dentistry career, recognizing that one of the principles that Higher Education must have is “Quality”.

A Study Plan designed and implemented rigorously makes it possible to achieve the proposed Graduation Profile. However, it is essential to incorporate verification milestones during and at the end of the training trajectory, to evaluate mentioned process (Huamán Huayta et al. 2020; Ministry of Education of Chile, 2022).

In the literature, two types of monitoring are mainly described: a) those carried out after a curricular innovation, to evaluate its impact and, b) those carried out to review compliance with the achievement of learning outcomes (R.A.). of the Graduation Profile, at the end or during the training process, allowing interventions before the graduation of a cohort (Figueroa San Martí et al., 2016; García, 2010; Münzenmayer et al., 2022).

## 3 Methods

This research is a descriptive study of the monitoring mechanism carried out in the UDP Dentistry career. Its purpose is to verify how the subjects of the Study Plan contribute to the construction of the Graduation Profile during the training process. A survey-type instrument with a Likert scale was designed, it was validated through the review of experts in education and with its application to a pilot group of students and teachers. The instrument consists of 5 items, which inquire about: (1) level of competence, (2) whether the R.A. described in the subject program are consistent with what is declared in the Study Plan, (3) if the R.A. is developed in the subject declared; if they are evaluated and if they have defined evaluation criteria (4) what learning methodologies, activities and evaluation instruments they use for each R.A., (5) if the methodologies and evaluations carried out are coherent. Each item has a space for comments.

The mechanism begins with the selection of the Graduation Profile competence that will be monitored. The taxation matrix is analyzed to determine subjects and R.A. that allow the gradual construction of the selected competence. These are called “Key Subjects”. With this information, the instrument is completed for each subject and is applied to all academics in these subjects and to students who recently took them. It ends with focus groups consisting of an average of eight students, with the aim of delving deeper into the results.

## 4 Results

The last competency monitored was: “prevent and treat endodontopathies and their consequences in adult patients up to a level of medium complexity.” For the variable level of competence that students must acquire regarding the competence under study, 17% of 2nd and 3rd year teachers considered that they should prepare them at the novice level, while 100% of the 4th and 5th year teachers and 6th year consider that it must be at an advanced or competent apprentice level. The opinion of the student body is quite similar: 11% consider that in the 2nd and 3rd year they should be prepared at the novice level, and 100% consider that in the 4th, 5th and 6th year they should be prepared at the advanced or competent apprentice level. It was determined that there is coherence of the R.A. with the Study Plan (91.5%). The subjects used various learning methodologies, the most used were the participatory classes, about 76% of the R.A. are evaluated, the evaluation criteria are declared and are considered relevant by the respondents. The most used evaluation instruments are written tests and rubrics. The results of all monitoring mechanisms are similar.

## 5 Discussion

The monitoring mechanism is carried out to review compliance with the achievement of the competencies of the Graduate Profile of a degree during the training process, which allows adjustments to be made before the graduation of a cohort. It collects information from students, graduates and teachers, at different levels of the training process, while other proposals only consult graduates and employers about compliance with the Graduate Profile. (Amado, 2019; Huayta, 2020; Sepúlveda Riveros, M. 2020; Ortega Muñoz, F, 2022).

It corroborates the harmonization between the different constituents of the learning process (content, R.A., learning and evaluation methodologies), which coincides with mechanisms proposed by other authors. (Vallejo et al., 2020).

It verifies whether teachers and students recognize the level of development of the competence in which they are, according to the location of the subject in the curricular framework. Having clarity about this guides students towards learning (Covarrubias-Apablaza, 2019) and allows teachers to design their activities linking the student's level to the R.A. to be achieved (Guzmán, 2011). This has also been contemplated in other monitoring proposals (Interuniversitario De Desarrollo, 2017; Icarte & Hugo, 2016).

## 6 Conclusions

This mechanism, applied in the dentistry career, shows that the competencies declared in the Graduation Profile are developed gradually and systematically during the training process. Contributes to the diagnosis of gaps and shortcomings. The nature of the mechanism allows it to be used by other careers.

## 7 Limitations and Future Research

It does not consider results of evaluations obtained by the student. It is the researchers' interest to delve deeper into this aspect in future research.

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