

Modelling the Institutional Didactic Choreography of the Diagnosis Processes for Undergraduate Curricular Innovation

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Abstract. Ensuring the relevance of Higher Education (HE) in the context of the knowledge society requires transforming the way undergraduate curricula are constructed. Curricular innovation (CI) involves changes in the curricular structure, which must be continuously monitored through deliberation and participatory co-construction from an epistemic perspective. The purpose of this research is to demonstrate the modeling of an institutional didactic choreography of the diagnosis for CI in 8 undergraduate programs, which encompassed four stages: Anticipation, Internal Choreography, External Choreography, and Product. In each of the four stages, at least three monthly working sessions were held, involving the management teams, faculty, students, alumni, and external experts. During these sessions, collaborative analysis and sharing of strengths, opportunities, weaknesses, and threats of the current curriculum were conducted. This modeling allows for collective decision-making in the development of reliable and responsive curricular products, thereby reducing the challenges associated with curriculum redesign implementation. Similarly, working through a participatory process helps moderate resistance to change and foster a sense of belonging to the educational project, as there is a positive appreciation for expanding levels of participation in decision-making.

Keywords: Higher Education, Quality of Education, Educational Program Development

1 Introduction

For decades, there has been a questioning of what is understood by tertiary education, calling for an approach that emphasizes the integral development of students through formative processes that value open and reflective education (Ordine, 2016; Nussbaum, 1997; 2000; 2002; 2010; 2011; 2016). In addition to this, there are co-constructed initiatives through dialogue and collaborative work in various educational communities that demonstrate the need to transform education through a metamorphosis (UNESCO,

2022); that is, through an intergenerational project that allows for reflection on what is being done, what remains, and what needs to be reimagined. In this context, there is an invitation to transform curriculum development by focusing on the active and reflective participation of educational communities.

2 Theoretical Framework

Curriculum in Higher Education (HE) can be understood as a living structure with a versatile identity influenced by ideological positions, institutional projects, legal, social, and economic changes, as well as the values, traditions, and beliefs of those involved in its construction (Galton & Moon, 1986; Hopkins, 1985; Null, 2016). Therefore, it is considered that curricular innovation (CI) should safeguard continuous epistemic surveillance through deliberation and participatory socio-curricular co-construction based on evidence, if we aim to position the curriculum as an emancipatory tool for thought and praxis.

Thus, the curricular development in universities requires a transformation in how undergraduate curricula are diagnosed, constructed, or redesigned. In this context, curricular innovation (CI) is defined as an intentional, structured, and deliberative process that focuses on formative effectiveness through changes in the foundational structure (Escudero, 1987; Galton & Moon, 1986). In these cases, CI can modify one or several curricular components, aiming to reconceptualize, modernize, and optimize the Study Plans (SPs), covering political, organizational, methodological, disciplinary, transversal (Escudero, 1987; Hopkins, 1985), and inter/transdisciplinary perspectives.

The effectiveness of a diagnosis for CI lies in problematizing the knowledge being transmitted and how it represents and guides social and academic practices and principles (Galton & Moon, 1986; Null, 2011; 2016). This point involves not only analyzing and developing the curriculum from an instrumental and prescriptive perspective but also questioning its nature and the effects it has on the educational trajectories of students and all those involved in its development.

3 Method

The case of the first stage of the CI Model at Universidad Diego Portales (UDP) is taken: the diagnosis. This process is carried out through collaborative and interdisciplinary workshops with the curricular committees (CC) of the undergraduate programs, problematizing, based on evidence, the quality and relevance of the current Study Plan.

The purpose of this research is to demonstrate the modeling of the diagnosis for CI (institutional didactic choreography) that allowed for a socio-curricular co-construction from an active, participatory, and reflective perspective (Corte, 2018; Zabalza & Zabalza, 2022), in eight undergraduate programs that began their curriculum redesign processes between 2022-2023.

Diagnosis stages:

1. **Anticipation**: Contextualization of the process and support with didactic materials for working with the CC.
2. **Internal Choreography**: Collaborative analysis of the strengths and weaknesses of the Study Plan based on the systematization of evidence regarding Academic Indicators, curricular products (Graduation and Admission Profiles, Curriculum Structure, etc.), characteristics and formative emphases. This includes gathering the perception of students, faculty, and graduates through surveys and focus groups.
3. **External Choreography**: Collaborative analysis of the threats and opportunities of the Study Plan based on the systematization of evidence regarding the Study Plans and Formative Characteristics of programs offered by other HEIs in Chile and worldwide. This includes examining disciplinary development, regulatory frameworks, local and global professional contexts, and external factors that could impact the proposal. This analysis is conducted through surveys, focus groups, and document analysis.
4. **Product**: Synthesis and socialization of the strengths, opportunities, weaknesses, and threats (SWOT analysis) of the current Study Plan.

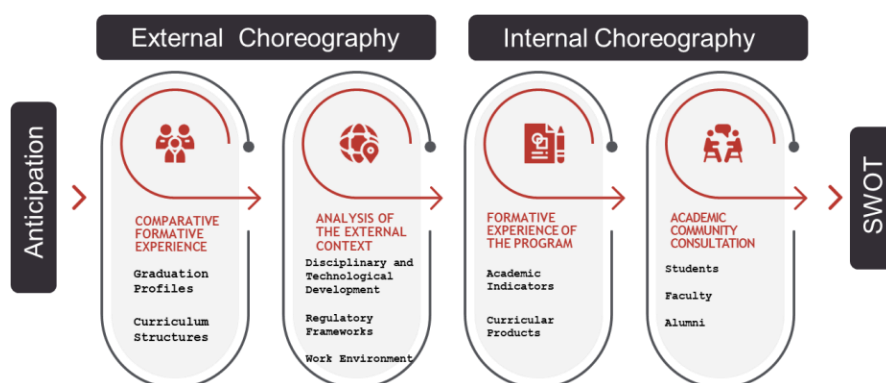


Fig. 1. Stages of the Institutional Didactic Choreography in the Diagnostic Processes for Undergraduate Curricular Innovation, Universidad Diego Portales, Chile.

From the Anticipation stage to the socialization of the SWOT analysis, at least 3 monthly working sessions are scheduled with the CC (Curriculum Committees) that include management teams, faculty, students, alumni, and external experts from each of the programs. Collaboratively, they analyzed and shared the strengths, opportunities, weaknesses, and threats (SWOT) of the current curriculum. Some of the guiding questions that prompted reflection on the data are:

1. **Comparative formative experience**: What are the standout formative characteristics of the educational proposals from other institutions? Are there notable differences in the graduate profiles, curriculum structures, or formative emphases?

2. Analysis of the external context: What changes have the professional fields in the discipline/profession undergone? What transformations do you foresee in the coming years?
3. Formative experience of the program: Are there significant gaps between students' prior learning and the first-year subjects that need to be considered in the curriculum innovation process? What macro and microcurricular adjustments should be considered in the new curriculum? Is it necessary to modify the intra- and inter-semester articulation?
4. Academic community consultation: What is the perception of the academic community regarding the curriculum products? The learning process? The management of the current curriculum?

4 Results

For data collection, 29 Edumetric Surveys were administered, which included 2 standardized scales CEQ and SPQ (Marchant et al., 2016) (with high reliability value, $\alpha > 0.9$, in all cases), and 10 Focus Groups with a total participation level of 1,909 individuals, averaging 272 per degree program ($SD=202$) across both instruments. Additionally, a documentary analysis of 166 comparative national and international formative experiences was conducted, with an average of 21 ($SD=11$).

After approximately 6 months of work with each degree program, the main findings showed that the Graduate Profiles were aligned with the UDP formative project, reflecting the key social, cultural, technological, and labor trends of the country. They focused on understanding local environments from a critical, reflective, and pluralistic perspective, and were highly valued by the academic community. There is a need to advance robust evaluation and monitoring systems for learning outcomes that transform local and global environments with a critical, intersectional, and collaborative approach. The Curriculum Structures have a relevant progression of learning, but it is necessary to ensure the development of cognitive skills throughout different stages of the program, progressing from lower-level skills (understanding) to higher-level skills (evaluating and creating). Some degree programs have dual degrees, but there is a lack of postgraduate continuity programs and intermediate certifications.

There are weaknesses in measuring the learning outcomes of incoming students and in implementing improvement actions related to identifying gaps. There is a lack of learning in a second language and a need to provide instruction in languages other than English. The faculty members in the degree programs are trained in university teaching and have disciplinary and formative research experience, which can support the design and implementation of evaluation instruments (such as rubrics) and, consequently, enhance effective feedback mechanisms for assessments.

The inclusion of creation as a dimension of knowledge generation by the National Accreditation Council of Chile (CNA, 2022) aligns with the role of creative education in the UDP Educational Model. The incorporation of interdisciplinarity in the curriculum is a challenge to be addressed by all undergraduate programs, given the demands

of social, academic, and professional contexts. International mobility and exchange experiences are limited and not widespread, so it is necessary to enhance other strategies such as "internationalization at home" through COIL (Collaborative Online International Learning). Finally, among other findings not included in this document, Law No. 21.369 (2022) regulates Sexual Harassment, Violence, and Gender Discrimination in Higher Education, providing an opportunity to establish an institutional framework for education with a gender perspective.

5 Discussion

The modeling of an institutional didactic choreography (IDC) for the diagnosis of IC, with a deliberative approach to the curriculum, allowed for the characterization of the strengths, opportunities, weaknesses, and threats of 8 undergraduate programs at UDP in a span of 6 months. This process involved the participation of nearly 2000 individuals and identified areas for improvement and spaces for reflection in the development of new curriculum proposals.

The IDC allows for the planning and coordination of the different elements involved in curriculum innovation, aiming to achieve a high-quality and relevant process. From the anticipation phase, which gives meaning to the alignment of the devices implemented in the curriculum development and seeks to give shape to the intended purpose by connecting it with the activities to be followed (Corte, 2018), to the end product (SWOT analysis), the IDC provides a response to the challenges that curriculum development processes must face. It fosters a socio-curricular co-construction approach when examining and analyzing the educational processes (Zabalza & Zabalza, 2022).

The main conclusions and recommendations derived from the diagnosis of the Curriculum allowed for informed and evidence-based decision-making. These decisions are related to strengthening the assessment and monitoring systems of learning outcomes of the Graduate Profiles, promoting the use of more effective assessment tools, such as rubrics, fostering teacher training in University Teaching and research, encouraging disciplinary and formative research, designing and implementing assessment and feedback instruments for learning, developing postgraduate continuity programs and intermediate certifications to provide opportunities for advanced and specialized training, promoting interdisciplinary learning and internationalization by fostering intra and inter-semester articulation and leveraging the strengths and synergies between different areas of knowledge, and establishing specific strategies and actions to promote gender equity and inclusive education.

6 Conclusions

The modeling of the Institutional Didactic Choreography (IDC) for the diagnosis of CI at Diego Portales University has proven to be an effective tool for informed and evidence-based decision-making. This deliberative approach to the Curriculum has enabled collective decision-making from various sources of information to develop

reliable, genuine, and community-sensitive curricular products, reducing the challenges of curriculum redesign implementation. By involving teachers, students, and other key stakeholders in a participatory manner, resistance to change has been mitigated, fostering a sense of ownership in the educational project. The positive valuation of expanding levels of participation in decision-making has strengthened the community and fostered greater commitment to the curriculum development process.

However, it is important to highlight that implementing an IDC with a deliberative approach to the Curriculum requires ongoing sensitization of the educational community. Promoting a reflective and critical culture that values participatory perspectives in the curriculum development processes is needed. Additionally, it is essential to establish institutionalized incentives that encourage participation in collaborative work instances.

In summary, the IDC has proven to be a valuable tool for driving curricular innovation at the Universidad Diego Portales. Its deliberative approach has allowed for informed decision-making based on real contexts and the needs of the educational community, promoting the quality and relevance of curricular products. However, it is recognized that it is important to continue strengthening community participation and reflection, as well as establishing mechanisms that incentivize collaboration in the curriculum development process.

7 Limitations and Future Research

In order to enhance knowledge generation regarding curriculum processes in higher education, it is crucial to promote data literacy within communities for curriculum development and academic research related to the process under consideration, considering the amount of evidence it produces.

Although this study briefly mentions comparisons with other educational institutions, there is a lack of evidence regarding other utilized CDIs that would allow for specific findings to be established.

Finally, the study primarily focuses on the diagnosis and recommendations for curriculum redesign, prompting us to emphasize the need to explore the subsequent stages of implementation and evaluation of the proposed changes.

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