

Measuring change in institutional diversity in higher education in Latin America

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Research Domains

Higher Education policy (HEP)

Abstract

This study examines the impact of higher education system expansion on institutional functioning in Latin America. It argues for a multi-functional approach to understanding the degree of institutional diversity, which is applied to the analysis of Brazilian higher education over the last decade. Using clustering methods applied to administrative data from all HEIs, we find that a decrease in systemic level of institutional diversification as enrollment concentration in large for-profit private institutions rises. Our results indicate that differentiated shifts between groups are concentrated in private HEIs, mainly large for-profit institutions, while integrated research institutions remain stable, albeit losing ground to for-profit conglomerates. Additionally, we contrast these patterns with those observed in both Chile and Peru, two other countries with significant privatisation in their higher education systems. Our study illuminates the evolving landscape of higher education in Latin America, reflecting on the transformation of roles and institutionalisation in the region.

Full paper

The expansion of higher education systems has been accompanied by increasing pressures to diversify their offer to meet the different needs and demands of students and other stakeholders. This process has motivated several studies aimed at classifying higher education institutions (HEIs) and delineating the “institutional topography” they form, in order to discern the operational dynamics beyond official or normative definitions (Trow, 2007; Muñoz & Blanco, 2013; Huisman et al. 2015). This holds particularly true in regions such as Latin America and the Caribbean, as well as East Asia and the Pacific, where there has been exponential growth in enrollments over the past 30 years, accompanied by a similarly rapid process of diversification in their institutional foundation (Labraña and Brunner, 2022).

The Latin American case presents special interest not only due to the considerable heterogeneity in the degree of universalization among higher education systems, but also because of the defining processes of its expansion: significant involvement of the private sector in provision and funding, commercialization of teaching and research, and the establishment of new public management in state institutions (Brunner et al., 2021).

In this study, we investigate the relationship between the expansion of higher education in Brazil and changes in the organisational functioning of HEIs. Although the Brazilian system has largely followed the

regional patterns of expansion and diversification mentioned above, not only does its regional importance allow us to better understand those patterns (in 2020, a third of the region's enrollments in tertiary education were concentrated in Brazil), but its trajectory poses challenges to research on institutional diversification. Additionally, we contrast these patterns with those observed in Chile (Villalobos et al., forthcoming), another country with significant privatisation in its higher education system.

This study contributes to the literature on the conceptualization and measurement of institutional diversity by seeking to answer two research questions. First, to what extent does organisational functioning differentiate types of institutions? Second, how have systemic changes over the past decade reconfigured the functional classification of institutions, if at all?

This study is based on nationwide administrative data from 2010 and 2019 rounds of the Brazilian Higher Education Census (HEC) and public tables on enrollment and academic production of postgraduate courses. We chose a set of 43 variables that represent five theoretical dimensions of organisational functioning: (1) Governance, (2) Educational profile, (3) Research involvement, (4) International orientation, and (5) Third mission. Once the variables were selected, we employed exploratory factorial analysis (EFA) to assess the consistency of each theorised dimension and reduce the data dimensionality.

The seven factors estimated by EFA were used in a series of latent profile analyses to identify latent groups of HEIs and assess if they changed over time, and if so, how. Using a combination of two criteria, the change in log-likelihood and the Bayesian Information Criterion (BIC) (Weller et al., 2020; Schmidt et al., 2021), we determined a nine-profile model to be the best-fitting across all data in both years of our analysis.

The results indicate nine clusters of HEIs identified between 2010 and 2019. By 2019, three-quarters of enrollments were concentrated in two clusters: large private institutions with high virtualization and medium-sized private colleges with low virtualization. Public and private universities characterised by low virtualization and a high percentage of highly qualified professors, constituted a separate cluster, comprising only 2% of HEIs but accounting for 16% of enrollments. Analysis of stability and change patterns indicates three dynamics over the past decade: (i) Expansion without diversification, with a smaller number of clusters found in 2019; (ii) Concentration of enrollments in few clusters, with 77.85% in two clusters; (iii) stability of public universities, which showed absolute and relative enrollment losses.

Alongside findings from other Latin American countries, such as Chile (Villalobos et al., forthcoming) and Peru (González et al., forthcoming), our study points to regional processes of system-level unbundling, whereby higher education systems polarise between multi-faculty research universities and less selective institutions focused on offering low-cost (in Brazil, highly virtualized) courses with quick returns in the labour market. However, while these poles form the axes around which systems begin to organise, they may be rather unrepresentative of the significant transformations in the higher education landscape, which primarily occur within the intermediate groups, both in Brazil and other contexts (Villalobos et al., forthcoming). Our study raises additional questions about whether the changes in this landscape, particularly in rapidly expanding systems in the Global South, represent a process that effectively promotes academic innovation and social impact or are merely institutional adaptations to regulatory changes.

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