

Performance indicators for research and cultural creation activities in polytechnic higher education institutions: a consensus building approach

Ana I. Melo¹, Ricardo Biscaia², Maria J. Rosa³, Hugo Figueiredo⁴, Isabel Machado⁵, Paula Rocha⁶

1 – School of Technology and Management & CIPES, University of Aveiro

2 – School of Technology and Management & CIPES, University of Aveiro

3 – Department of Economics, Management, Industrial Engineering and Tourism & CIPES, University of Aveiro

4 – Department of Economics, Management, Industrial Engineering and Tourism & CIPES, University of Aveiro

5 – IPAM – Marketing School for Business & CIPES, University of Aveiro

6 – Department of Social, Political and Territorial Sciences & CIPES, University of Aveiro

FIGURE 1

Dimensions of Analysis for organizing research and cultural activities in polytechnics and their societal impact.

The interest for assessing performance in higher education led to the incorporation of performance indicators (PIs) in the management of higher education institutions (HEIs). Recently, there have been political attempts addressing the possibility of introducing research performance in HEIs' funding. Within this scenario, and considering the specificity of the polytechnic mission in the Portuguese context, this research aimed at developing a set of PIs for managing the performance of research and cultural creation activities and their impact on the regional context, in Portuguese polytechnic HEIs.

Five theoretical dimensions have been proposed and empirically validated (through interviews and focus groups with polytechnic representatives) to frame the diversity of the aforementioned activities: *Knowledge Transfer*, comprising activities involving a high level of entrepreneurialism and a low level of connectedness (e.g. start-ups); *Service Provision*, involving activities highly linked to the environment and very entrepreneurial (e.g. consultancy); *Collaborative Research*, integrating activities low in entrepreneurialism and highly connected to the environment (e.g. projects with non-academic partners); *Scientific and Artistic Production*, comprising activities that are not highly linked to the environment nor very entrepreneurial (e.g. scientific publications); and *Societal Impact*, reflecting the impact of these activities in the region.

A set of PIs was then defined for each dimension (totalising 29) and the Delphi technique was applied to reach consensus among specialists (polytechnic HEIs' presidents) regarding the PIs. Two rounds of this technique led to a final list of 23 indicators.

This final set of PIs emerged as a valid instrument, which can be used by polytechnic HEIs, not only as a self-assessment tool to improve their performance, but also as a management tool, allowing them to establish goals, define their own profile and the strategies to achieve it.

