

Benchmarking in education across European countries: from global vision to regional perspective

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Abstract. Setting strategies aligned with regional capacity to drive policy improvement towards a European vision is the focal point of this study. We propose a benchmarking approach using Data Envelopment Analysis to set attainable targets that direct improvements. The approach was applied to 148 regions, covering 25 European countries.

Keywords: EEA strategic framework, benchmarking, European countries, Data envelopment analysis, target setting, education policy

Introduction. The European Education Area (EEA) strategic framework, developed by the European Commission, aims to benchmark and monitor progress toward a common European vision and to foster convergence across Europe through shared indicators and common policy goals. The EEA strategic framework, which defines the direction of education policy development for the ongoing decade, sets common goals for all member states, but each region has a different capacity to implement them. This study seeks to highlight the differences in education policy across EU regions. For this purpose, the most suitable strategy towards the vision of the EEA strategic framework has been identified for each region, considering their capacity.

Methodology. In this study, we employ a benchmarking technique to set strategies for each region by learning from the best practices of regions with similar capacity. This is why the analysis is conducted within the framework of Data Envelopment Analysis (DEA), which is a methodology that enables to evaluate the performance of regions from a perspective of benchmarking on the basis of targets set on the best practice frontier. We defined a new indicator framework that allows us to consider capacity and within-country heterogeneity, and as a result, we can devise the most suitable policy intervention strategies for each Member State at the regional level.

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Results and discussion. The proposed approach was employed for 148 regions, covering 25 European countries. The analysis uses four indicators: early childhood education and care, early leavers from education, tertiary education attainment and participation of adults in learning. On average, the participation of adults in learning is the area that needs the most improvement. Despite more than half of the regions having met the EU goals in early childhood education and care and in early leavers from education, some regions would need to undertake significant improvements. Regarding tertiary education, some regions outperformed the EU goal by more than 20 percentage points by 2024. However, this indicator varies considerably across regions, as indicated by the high standard deviation. Based on the results, the mismatch between EU goals and regions' capacity can be identified. The common goals could be seen as unachievable given the EU regions' actual performance. Although three Swedish regions outperform them, most of the analysed countries would need to make significant improvements across indicators to reach the defined EU goals. By employing the proposed approach, the most suitable strategy towards the vision of the EEA strategic framework can be identified for each region, considering their capacity. This study embodies an interdisciplinary approach by integrating educational effectiveness theory, demography, and operational research perspectives. Its findings can support the development of interventions aligned with regional demographic and economic characteristics. Results are beneficial for policy interventions as they allow improving performance in education towards the European vision, considering regional capacity.

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