

## COMPARISON OF EUROPEAN UNION COUNTRIES IN TERMS OF EDUCATIONAL AND TECHNOLOGICAL COMPETENCIES OF THEIR SOCIETIES

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### ABSTRACT

This study examines the educational and technological competencies of societies across European Union countries, aiming to understand their role in supporting socio-economic development in a rapidly changing world. The analysis draws on a comprehensive set of variables that go beyond traditional indicators, incorporating aspects particularly relevant in today's fast-evolving, digitally driven world—such as lifelong learning, digital skills, and knowledge of foreign languages. Using multidimensional statistical methods—linear ordering and cluster analysis—the study identifies groups of countries with similar competency profiles and highlights high-performing nations. While the research focuses on the EU, its conceptual and methodological approach is applicable in a broader, global context. The results offer a foundation for future comparative studies beyond the European region. The findings have clear practical implications for educational policymaking, particularly in terms of identifying strengths, addressing systemic weaknesses, and fostering competencies essential for long-term development. The study contributes to the ongoing debate on how education and technology can be leveraged to increase societal resilience and economic competitiveness.

**Keywords:** educational and technological competencies, European Union, multidimensional analysis, linear ordering, cluster analysis

### INTRODUCTION

In today's world, marked by globalization and rapid technological progress, education systems are essential for enhancing national competitiveness and innovation potential. For example, countries with a more educated population typically experience higher productivity and better employee compensation [1]. Education contributes not only to the development of human capital but also drives innovation by supporting the creation and application of new technologies, helping nations stay competitive in a constantly changing global landscape [2]. Moreover, it strengthens the capacity to grasp complex systems, respond to change, and pursue lifelong learning. The variety of educational models worldwide reflects diverse strategies to equip societies for contemporary challenges. Within the European Union, establishing a fully unified education system remains a goal hindered by historical, cultural, and economic disparities. However, considering the EU's open labour market and focus on balanced growth, it is especially important to identify which systems most effectively foster career success, adaptability, and societal progress. This study addresses a current research gap by providing an in-