

## **Abstract**

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New ideas regarding the functioning of the state and public services in Europe are having a significant impact on how universities operate. These changes stem from broad public sector reforms, which are increasingly reshaping the role and structure of higher education institutions. Universities' traditional role is evolving toward a new model that emphasizes greater responsibility and accountability. In Poland, these shifts became particularly visible after the 2018 reform, when the so-called Law 2.0 was introduced, fundamentally changing how higher education is regulated. This legislation revised the evaluation framework for universities' scientific activities, shifting the focus from departments to academic disciplines.

This paper examines the evolution of scientific institutions, emphasizing their historical importance and the transformations they have undergone over the centuries. The core of the chapter analyzes the contemporary development of these institutions, focusing on the effects of recent reforms on academic staff, the diversity of scientific institutions, and their funding, both in Europe and in Poland. The discussion then shifts to systems of quality assurance in higher education, exploring the key determinants of quality, various assurance frameworks, and methods for measuring it. The chapter concludes with an overview of quality assurance practices in selected European countries.

Subsequent sections address the legal foundations of Poland's evaluation system, first through a historical lens and then through the latest regulations outlined in the Constitution for Science – Law 2.0. The following chapter presents a optimization models. The final chapter delves into the optimization process itself, utilizing constraint programming techniques and IBM's CPLEX Optimization Studio package.