STEAM PROJECTS WITH KIKS FORMAT FOR DEVELOPING KEY COMPETENCES

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INTRODUCTION

Key competencies most of the European curricula have been echoed but the initiatives implemented have worked at most three of them.

STEM project based learning has the characteristics of the interdisciplinary approach but have been limited to some.

Integration of STEAM projects with KIKS format could contribute to the integrated development of the key competences.

METODOLOGY

qualitative study
observations and interviews with students, teachers and KIKS trainers

267 high school students
distributed in 53 teams, from 29 centers of Finland, England, Hungary and Spain

Project design
STEAM

five dimensions

1) STEAM content integration
2) Problem solving in context
3) The research processes
4) The design
5) Cooperative work

RESULTS

Multilingual and literacy competence

Mathematical competence and competence in science, technology and engineering

Digital competence

Personal, social, learning-to-learn competence, and entrepreneurial competence

Citizenship competence, and cultural awareness and expression competence

CONCLUSIONS

Project-based learning promoted the development of mathematical, scientific, technological and engineering competencies, and the KIKS format enhanced literacy and multilingual skills.

The rest of the competencies were stimulated by the combination of both approaches.

The development of competencies occurred as a result of the prolonged participation of the subjects in the program (minimum two years).

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