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# Integrating STEAM Methodology into the National Curriculum: Experience of Practical Implementation and Research

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## Abstract

This paper presents the experience of integrating STEAM methodology into the national curriculum, combining practical implementation with parallel scientific research. The study was conducted along two lines: the introduction of STEAM classes into an existing educational program and the investigation of the most workable ways to systematically embed this methodology into the national curriculum.

The research was driven by a simple necessity: any new practice, even one that appears effective at first glance, requires careful study in order to understand what results it actually produces and where difficulties arise. In this case, difficulties emerged at several levels: between teachers and students, teachers and parents, teachers and administration, as well as between schools and broader institutional actors. Each of these points of tension was treated as meaningful data rather than merely as an obstacle.

One specific observation defined the practical direction of the work: most STEAM activities, in the form in which they were implemented, were perceived by participants simply as technology lessons. The connections with science, mathematics, art, or literature remained largely invisible. To address this issue, a set of activities was developed to make these connections explicit.

The findings showed that STEAM methodology performs effectively in practice: the identified difficulties were related not to the method itself, but to the conditions of its introduction. On this basis, the paper proposes a practical integration framework that takes local context into account and is grounded in what was actually observed during the experiment.

**Keywords:** STEAM Education, Integration into The National Curriculum, Interdisciplinary Learning, Practical Framework, Local Educational Context