

An Integrated Science Education Center in an Innovator Primary School

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Abstract

A lifelong integrated education of every individual, in formal, non formal and informal context, whith a view to an intelligent, sustainable and inclusive development is presently, an unanimous recommendation of international, entities and organizations (eg. UNESCO, UNICEF, UN, OECD, OEI, EU). In this context, the central role of scientific literacy of individuals can be oversized as the driving force of development, productivity and competitiveness of nations and as one of the pillars of the exercise of citizenship activities in political, social and cultural life.

To achieve these purposes it is necessary a strong emphasis on a quality education from the earliest years of life. To do this, is fundamental: (re) thinking perspectives in education, teaching and learning; response to the widely recognized need for initial and in service teachers training; and ensure the existence of infrastructure and resources that support the achievement of such aspirations.

This study is intended as a contribution to the operationalization of these intentions in the particular field of science education at the primary school, with an underlying perspective on integrated science education.

This study present the development (design, plan, implement and validate) of an Integrated Centre of Science Education (CIEC) as part of an innovator primary school in Portugal. Based on guidelines from the literature [1], the expertise of the multidisciplinary team and the contributions of external evaluators proceeded to develop the concept CIEC and its physical space support, space of formal education - science lab for primary school, space of non formal - Science Center of CIEC.

Assuming as a contribution to the improvement of science education in the early years of schooling, this study presents as a result, guidelines for: the development of primary school laboratories; the development of science centers, and or similar spaces of non-formal science education and their running.

[1] Graça , I. (2010). *Como construir e dinamizar uma exposição interactiva de ciências.* Dissertação de mestrado não publicada, Universidade de Aveiro, Aveiro. Portugal

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