

# TEDS - Framework for Education for Sustainability: enhancing competencies in Education

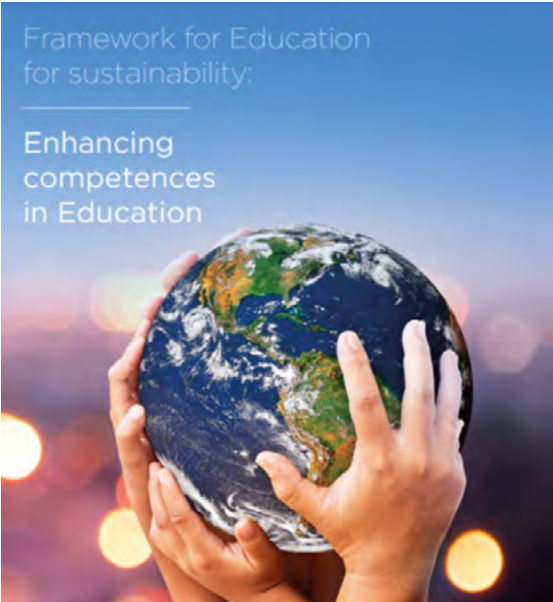
Kalle Juuti<sup>1</sup>, Anni Loukouvies<sup>1</sup>, Jari Lavonen<sup>1</sup>, Milla Haäkkinen<sup>1</sup>, Patrícia Sá<sup>2</sup>, Ana Isabel Andrade<sup>2</sup>, Jane Machado<sup>2</sup>, Cristina Sá<sup>2</sup>, António Moreira<sup>2</sup>, António Mendes<sup>2</sup>, Betina Lopes<sup>2</sup>, Bruna Batista<sup>2</sup>, Francisco Silva<sup>2</sup>, Filomena Martins<sup>2</sup>, Gabriela Portugal<sup>2</sup>, Helena Araújo e Sá<sup>2</sup>, Manuela Gonçalves<sup>2</sup>, Mónica Lourenço<sup>2</sup>, Nilza Costa<sup>2</sup>, Rui Vieira<sup>2</sup>, Vânia Carlos<sup>2</sup>, Dora François<sup>3</sup>, Bruno Lebouvier<sup>3</sup>, Philippe Tanguy<sup>3</sup>, Carole Voisin<sup>3</sup>, Vincent Caruana<sup>4</sup>, Mark Mifsud<sup>4</sup>, Estela Dauksiene<sup>5</sup>, Margarita Tereseviciene<sup>5</sup>

1 – University of Helsinki, Finland  
 2 - Department of Education and Psychology & CIDTFF, University of Aveiro  
 3 - Université de Nantes, France  
 4 - University of Malta, Malta  
 5 - Vytautas Magnus University, Lithuania

**FIGURE 1**  
 The framework presents some principles to design teaching activities organized by competencies for education for sustainability.

Project TEDS (Teacher education for sustainability) aims the design of proposals for and from in-service teacher education concerning education for sustainability (EduS). Therefore, the project is focused on preparing schools to educate for sustainability through in-service teacher education thus contributing to the EU level goals for a more sustainable society. The project is being developed by a team including researchers from 5 European countries: Portugal, France, Malta, Lithuania and Finland. The first product delivered is a framework based on the interaction between knowledge, skills and values important for the education for sustainability. Four topics were selected: Environment and natural resources, Responsible use of digital technologies, Dialogue, diversity and social inclusion and Economic and financial literacy. The selection of these topics reveals that knowledge related to sustainability is not exclusively centered on the environmental sphere, although this is undeniably a crucial aspect of this concept. The framework was built on the results of the deductive content analysis of policy documents, dissertations, and PhD theses in each country using a software of qualitative analysis developed in the University of Aveiro (webQDA - <https://www.webqda.net/>). This analysis was focused on looking for evidence of the presence of education for sustainability competencies and suggestions to promote sustainability in schools in those documents.

Project TEDS adopted a system of five transversal education competencies for sustainability: i) systems-thinking competency, ii) strategic competency, iii) anticipatory competency, iv) normative competency, and v) interpersonal competency. The framework was the base for the third phase of the project (IO3). This phase demanded the conception, implementation and assessment of teacher education modules involving in-service teachers working with 6 to 17-18 years old students in the five countries taking part in the project.



COMPETENCY	DESIGN PRINCIPLE
tems-thinking competency	Understanding the importance of analyzing the role played by people different from us, in society.
nticipatory competency	Previewing consequences (positive and negative) of certain attitudes towards persons or social groups, in terms of understanding the role they play in the human society.
Strategic competency	Learning to accept that differences are important, because they have positive consequences for social balance.
Normative competency	Analyzing present norms and values, to identify their possible contribution to dialogue and social inclusion.
terpersonal competency	Individually or collectively analyzing one's conception of other people/groups, based on the idea of acceptance.

