

COMPETÊNCIAS DE EDUCAÇÃO PARA SUSTENTABILIDADE: ANÁLISE DE DOCUMENTOS EDUCATIVOS EM PORTUGAL

COMPETENCES FOR EDUCATION FOR SUSTAINABILITY: ANALYSIS OF EDUCATIONAL POLICY DOCUMENTS IN PORTUGAL

COMPETENCIAS PARA LA EDUCACIÓN PARA LA SOSTENIBILIDAD: ANÁLISIS DE DOCUMENTOS DE POLÍTICA EDUCATIVA EM PORTUGAL

Patrícia Sá 

CIDTFF, Universidade de Aveiro – Portugal

Ana Isabel Andrade 

CIDTFF, DEP, Universidade de Aveiro – Portugal

Jane Machado 

DEP, Universidade de Aveiro – Portugal

Cristina Sá 

CIDTFF, DEP, Universidade de Aveiro - Portugal

Resumo: O estudo que se apresenta está inserido no projeto TEDS - Teacher Education for Sustainability. Este é um projeto Erasmus+ e envolve cinco países Europeus: Portugal, França, Lituânia, Finlândia e Malta. O principal objetivo do projeto TEDS é proporcionar aos formadores de professores e professores europeus o conhecimento e as ferramentas necessárias para implementarem nas suas práticas uma educação promotora de sustentabilidade. Dentro deste projeto, um dos objetivos foi compreender o modo como as competências chave de educação para a sustentabilidade estão presentes nos documentos educativos de cada um dos países participantes. Este artigo refere-se à análise realizada aos documentos educativos portugueses. É um estudo qualitativo, que se insere no paradigma interpretativo. É um estudo exploratório, de carácter descritivo-interpretativo e orientado para a identificação e descrição das principais características relacionadas com as competências chave de educação para a sustentabilidade presentes nos documentos oficiais portugueses orientadores do ensino e da aprendizagem. Depois da análise, validação e discussão dos resultados da análise de conteúdo realizada ao corpus, estes parecem indicar que os documentos educativos analisados são compatíveis com as competências chave consideradas no quadro de referência orientador. Todos os documentos apresentam diferentes aspetos das várias competências, evidenciando a sua importância na fundamentação de uma prática educativa promotora de sustentabilidade.

Palavras chave: Competências-chave; Sustentabilidade; Documentos Educativos Portugueses

Abstract: The present study is part of the TEDS - Teacher Education for Sustainability project. This is an Erasmus+ project and involves five European countries: Portugal, France, Lithuania, Finland and Malta. The main aim of the TEDS project is to provide European teacher educators and teachers with

the knowledge and tools necessary to implement an education that promotes sustainability in their practices. Within this project, one of the objectives was to understand how key competences in education for sustainability are present in the educational documents of each of the participating countries. This article refers to the analysis carried out on Portuguese educational documents. It is a qualitative study framed on the interpretive paradigm. It is an exploratory, descriptive-interpretive study aimed at identifying and describing the main characteristics related to the key competences in education for sustainability present in the official Portuguese documents that guide teaching and learning. After the analysis, validation and discussion of the results of the content analysis carried out on the corpus, these seem to indicate that the educational documents analyzed are compatible with the key competences considered in the guiding reference framework. All documents present different aspects of the various competences, highlighting their importance in the foundation of an educational practice that promotes sustainability.

Keywords: Key competences; Sustainability; Portuguese Policy Documents

Resumen: El presente estudio es parte del proyecto TEDS - Teacher Education for Sustainability. Este es un proyecto Erasmus + e involucra a cinco países europeos: Portugal, Francia, Lituania, Finlandia y Malta. El principal objetivo del proyecto TEDS es proporcionar a los formadores de profesores y profesores europeos el conocimiento y las herramientas necesarias para implementar una educación que promueva la sostenibilidad en sus prácticas. Dentro de este proyecto, uno de los objetivos fue comprender cómo las competencias clave en educación para la sostenibilidad están presentes en los documentos educativos de cada uno de los países participantes. Este artículo hace referencia al análisis realizado sobre documentos educativos portugueses. Es un estudio cualitativo, que encaja en el paradigma interpretativo. Se trata de un estudio exploratorio, descriptivo-interpretativo, cuyo objetivo es identificar y describir las principales características relacionadas con las competencias clave en educación para la sostenibilidad presentes en los documentos oficiales portugueses que orientan la enseñanza y el aprendizaje. Tras el análisis, validación y discusión de los resultados del análisis de contenido realizado sobre el corpus, estos parecen indicar que los documentos educativos analizados son compatibles con las competencias clave consideradas en el marco de referencia. Todos los documentos presentan diferentes aspectos de las distintas competencias, destacando su importancia en la base de una práctica educativa que promueva la sostenibilidad.

Palabras clave: Competencias clave; Sostenibilidad; Documentos de Política Educativa

1. Introduction

The study presented in this article is part of the TEDS - Teacher Education for Sustainability project (2019-1-PT01-KA201-060830). The TEDS project is being developed in the context of five European countries (France, Finland, Lithuania, Malta and Portugal) and different teacher education institutions (Université de Nantes UN - Helsingin Yliopisto - UH, Vytauto Didžiojo Universitetas - VMU, Università ta' Malta - UOM, Universidade de Aveiro - UAVR), which are working in collaboration with their partners, school teachers and teacher educators belonging to schools association training centers in diverse regions of Europe.

In order to promote education for sustainability (EduS) and to contribute to reach the European Union (EU) level goals for a more sustainable society (European Commission, 2020), the main goal of the TEDS project is to equip European educators (teachers and teacher

educators) with state-of-the-art knowledge and tools for the contexts of practice. Thus, a framework of reference for designing teacher education programs for EduS will be constructed, assuming that the participation of teachers and teacher educators is crucial in this process. The following objectives were defined to achieve the referred project goals:

- i. To enhance local and international collaboration in teacher education for sustainability (EduS);
- ii. To review knowledge produced on sustainable education and/or EduS within the scope of teacher education;
- iii. To analyze educational policy documents (national and transnational), school curricula and Teacher Education Programs (TedP) concerning EduS in different parts of Europe;
- iv. To characterize and understand the social representations of teachers and teacher educators on EduS;
- v. To conceive, validate and make available programs which support professional learning in-service Teacher Education Programs in order to share concepts and practices on EduS;
- vi. To conceive, implement and assess paths for EduS in social, linguistic, cultural, economic and environmental diverse contexts with the effective implication of teachers and teacher educators in TedP;
- vii. To develop case studies that will function as paradigmatic examples in teacher education for an EduS directly linked to real teaching and learning situations in schools;
- viii. To share and discuss, in different contexts and levels, as well as with different interlocutors, case studies envisaging knowledge construction about teacher education and education for sustainability within and between regions and countries;
- ix. To create and validate a framework of reference to support the development of teacher education programs focused on sustainability in contexts of European education.

This project assumes teacher education as an unfinished and central process in contemporary and globalized societies characterized by diversity at different levels. Aiming to promote professional knowledge for social transformation, it is essential to support professional learning of teachers and teacher educators, and to create conditions for the development of teacher education programs, mainly by placing teachers and teacher educators as partners in the construction of their own educational paths, in this case of EduS.

To achieve all the previous objectives, the TEDS project is organized in five Intellectual Outputs (IO): IO1 – Framework for EduS; IO 2 – Social representations of teachers and teachers' educators on EduS; IO 3 – Multimodal in-service teacher education programs; IO 4 – multimodal case studies and; IO 5 – Framework on in-service teacher education for EduS.

The main objective of IO1 is the construction of a framework of reference on education for sustainability (EduS) in order to guide the future actions of educators and teacher educators. To attain this objective, the different international teams carried out an analysis and systematization of research literature and national benchmarking level strategies. This article refers to the content analysis of national educational policy documents, carried out by the Portuguese team within the scope of IO 1.

2. Methodology

The research question that oriented the study was: “How and to what extent do the sustainability competences appear in the Portuguese official guiding documents for teaching and learning?”. Thus, the aim was to understand whether, how and what to extend the key competences for EduS are present in Portuguese educational policy documents.

Given the considered research question, this is a qualitative study based on the interpretative paradigm. It's an exploratory, descriptive-interpretative study, aimed at identifying and describing the characteristics related to key competences in EduS present in the Portuguese official guiding documents for teaching and learning.

The method of qualitative content analysis was chosen – due to its applicability to our intention to analyze text data through a systematic classification process of coding, with the purpose of identifying specific aspects (Elo & Kyngäs, 2008; Frey, 2018; Hsieh & Shannon, 2005).

In order to proceed with the qualitative content analysis, the following tasks were carried out:

- a) Identification and reading of scientific papers (published in scientific journals) to build the categories of content analysis;
- b) Identification and selection of educational policy documents;
- c) Exploratory content analysis of some educational policy documents;
- d) Discussion and definition of the categories of analysis according to EduS;
- e) Selection of 6 documents for Portuguese educational policy;
- f) Organization and analysis of data with the support of webQDA software;
- g) Discussion and validation of the results of the analysis among the project partners;

Our analysis started with a scientific literature review. During task (a) – identification and reading of scientific papers to build the categories of content analysis - the international TEDS team discussed the academic work of Wiek et al. (2011a; 2011b; 2015) and the potential of sustainability competencies to direct our analysis and the forming of EduS design principles. The international team agreed to specify our intention for the analysis to be identifying the appearance of sustainability competencies in the documents of analysis for each country. The concept of sustainability competences became the basis for constructing the analysis matrix. Sustainability competencies are educational concepts that differ from conventional syllabuses and didactic approaches. Competency-oriented teaching focuses on asking what problem-solving strategies, concepts, and abilities for social action should be developed in learners. Sustainability competencies are not restricted by boundaries of subjects or specific content knowledge (de Haan 2006). Instead, they represent cross-cutting and transversal learning objectives that are needed to deal with the complex challenges we face in today's reality (e.g. UNESCO, 2017; UNESCO, 2018a; Wiek et al., 2015).

The matrix was organized into five categories, which correspond to the five key competencies identified in the reference literature adopted: systemic thinking competence, anticipatory competence, normative competence, strategic competence and interpersonal competence. Each of these categories is organized into subcategories, which were defined based on the operationalization of the concepts, proposed in the studies carried out by Wiek, Withycombe and Redman (2011), and Wiek, Withycombe, Redman and Mills (2011), which are the basis of the key competences for EduS proposed by UNESCO. The final structure of the analysis matrix is presented below:

- I. Systems-thinking competence
 - a. Recognize and understand relationships
 - b. Analyze complex systems
 - c. Think about how systems are embedded within different domains and different scales
 - d. Deal with uncertainty
- II. Anticipatory competence
 - a. Understand and evaluate several futures (possible, probable and desirable)
 - b. Create one's own visions of the future
 - c. Apply the principle of precaution
 - d. Assess the consequences of actions
 - e. Deal with risk and change
- III. Normative competence
 - a. Understand and reflect on the norms and values that underlie people's actions
 - b. Negotiate sustainability values, principles, goals and targets (in contexts of conflicts of interest and concessions)

- IV. Strategic competence
 - a. Collectively develop and implement innovative actions that promote sustainability (locally and in wider contexts)
- V. Interpersonal competence
 - a. Be able to learn from others
 - a. Understand and respect other people's needs, perspectives and actions (empathy)
 - b. Understand, relate to and be sensitive to others (empathic leadership)
 - c. Handle group conflicts
 - d. Facilitate collaboration and participation in problem solving

Corpus of analysis: the Portuguese educational policy documents

The selection criteria for the political documents considered for analysis were discussed at different transnational and national meetings and took into account the educational reality of each country (for example, legal regulations, guiding documents for different educational levels, from preschool to secondary education). In Portugal, for the selection of educational policy documents, it was conducted a search in official governmental websites to identify and collect the documents that would constitute the corpus. The inclusion criteria considered by the Portuguese team were the transversality (non-disciplinary specificity) and educational scope of the documents, namely, from Pre-school Education to the 3rd Cycle of Basic Education (CBE).

After the definition of the criteria for the constitution of the corpus, 6 national educational policy documents were considered. Below, the corpus of analysis is presented with a brief description:

- **Basic Law of the Educational System – n. 46/1986**
 - ✓ It is a Law that establishes the general framework of the Portuguese education system. It holds the main principles and guidelines by which Education should be governed.
- **The Curricular Guidelines for Preschool Education – 2016**
 - ✓ The Curricular Guidelines for Preschool Education are intended to support the construction and management of the curriculum in the kindergarten. The document includes a *General Framework* (foundations and principles of childhood pedagogy, intentionality and organization of the ambiance) and points to *Content Areas* (personal and social development, expression and communication, knowledge of the world) to be developed.

- **Profile of Students Leaving Compulsory Education - Dispatch n. 6.478/2017, 26 de julho**
 - ✓ The Profile of Students Leaving Compulsory Education is a recent reference document for the organization of the whole education system, which contributes to the convergence and articulation of decisions inherent to the various dimensions of curriculum development. The main purpose is to contribute to the organization and management of the curricula and to the definition of strategies, methodologies and pedagogical-didactic procedures to be used in teaching practices. The document is structured under *Principles, Vision, Values and Areas of Competence*, and is divided into six parts, namely, *Introduction, Principles, Vision, Values, Competence areas, and Practical implications*.

- **The National Strategy for Education for Citizenship - 2017**
 - ✓ The National Strategy for Education for Citizenship (ENEC) was defined by a work group created for this purpose in 2017, responding to a request of the Secretary of State for Citizenship and Equality and the Secretary of State for Education. This strategic document integrates a set of rights and duties that must be present in the citizenship education of Portuguese children and young people, so that in the future they become adults with a civic conduct that privileges equality in interpersonal relationships, the integration of difference, respect for human rights, and the valorisation of democratic citizenship. The document covers a total of 15 pages and is divided into seven parts, namely, *Introduction, International and National reference documents, Assumptions and starting points, Expected learning outcomes in Citizenship and Development, Operationalization of Citizenship and Development, and orientations for Teacher Education and the Articulation with stakeholders*. Notice that the most relevant section for the TEDS project is the one concerning teacher education. This section mentions the need to integrate Citizenship Education in pre-service teacher education and to develop continuing professional development programmes for in-service teachers. These should take on a theoretical and practical nature, and should be centred on the school, on its priorities, needs and contexts, in conjunction with the school's curricular and extracurricular activities.

- **Environmental Education Framework for Sustainability - 2018**
 - ✓ The Environmental Education Framework for Sustainability is organized by levels of education and teaching cycles and was developed by Direção Geral da Educação (DGE) do Ministério da Educação (General Education Directorate of the Ministry of Education). It is considered a guiding document for the implementation of that area of education for citizenship in preschool, basic and secondary education. The aim of this document is to encourage the introduction of cross-cutting themes in order to contribute to the change in behaviour and attitude towards the environment by young people and children, and also by their families and communities. It includes a glossary and a list of resources grouped according to their nature and purpose. It is supposed to support teacher education and actions concerning environment and sustainability issues. The document covers a total of 124 pages and is divided into five parts, namely, *Introduction, Environment and Sustainability, Organization and Structure of the Framework, Themes, Subthemes, Objectives and Learning Outcomes*.

- **Decree Law – n. 240 – 2001 – Teaching Profile**
 - ✓ Describes the general professional profile of early childhood educators and teachers from primary to secondary education.

Corpus analysis procedures

The content analysis of the documents in the *corpus* was carried out based on the aforementioned matrix. The documents were distributed among the different members of the Portuguese team.

This content analysis was carried out following the steps and procedures defined by Bardin (2014), namely:

- i. In order to understand the documents structure and organization, a pre-analysis was carried out, which consisted of a floating reading of their content;
- ii. “Text clipping” operations were carried out to code the excerpts in the categories;
- iii. In order to do its coding and categorization, a more detailed exploration stage of all the material gathered was carried out. In this stage, the text was divided into units of meaning and a code was assigned to each of these units (Bardin, 2014; Costa & Amado, 2018).

The analysis was performed using the webQDA software (www.webqda.net). Table 1 presents a coding example made for the Systemic-thinking competence. The first column presents the System-thinking category and its sub-categories, the second one concerns the total number of evidence found in the corpus for each of the categories and subcategories considered and the third column refers to the total of the documents where the evidence were identified.






 system-Thinking II	237	20
▲  System-thinking comp...	69	11
 Recognize and und...	56	13
 Analyze complex sy...	26	8
 Think about how sy...	26	10
 Deal with uncertainty	11	8

Table 1: Example of Codification of the System-thinking Competence (Fonte: WebQDA – June 2020)

After the content analysis of the corpus documents was carried out, the procedures and results of this analysis were validated by the members of the Portuguese team, that were organized into 5 groups. Each group was in charge of validating one of the categories and subcategories in all the documents of the *corpus*. The validation process made it possible to standardize the criteria used for the analysis, in this stage some of the excerpts were decoded and / or recoded. Only after this standardization the results were systematized.

Through the validation work, the team also identified some limitations and / or difficulties during the categorization process, namely:

- i. the distinct nature of the documents analyzed (political and academic) was seen as one of the main difficulties in using the same categories;
- ii. the different understanding of the meaning of the categories and subcategories by the members of the team, mainly, considered their experience and training, which eventually led them to categorize differently the excerpts of the selected texts;
- iii. the discrepancy on the type of registration units considered. Some excerpts were very long and dense, with no clear highlight of the component that had justified the decision on the categorization carried out, as opposed to very short, almost meaningless extracts;
- iv. the disagreement among some elements of the team on the type of analysis to be carried out, namely content analysis *versus* document analysis. After discussing, the team

decided for content analysis with discourse analysis outlines. In the first case, the WebQDA software was used to identify the different categories in the documents selected for the *corpus* and, in the second, the researchers, organized into groups, interpreted, according to the purposes of the project, the excerpts that translated the different competencies (categories of analysis shared by all teams) to understand how these competences are perceived and presented to education professionals to guide their pedagogical-didactic work;

- v. there were several difficulties in using the WebQDA software by some members of the team.

3. Main Results: key competences for EduS in the corpus

As mentioned, the analysis was carried out to explore the presence and understanding of key competences for EduS in the Portuguese educational policy documents. Table 2 presents a systematization of the distribution of key competences across the six documents.

Political documents	Competences					Total
	System Thinking	Antecipatory	Normative	Strategic	Interpersonal	
Environment Education Framework for Sustainability	28	19	4	29	8	88
National Strategy for Citizenship	0	1	6	1	13	21
Student Profile	8	6	10	11	16	51
Basic Law of the Portuguese Education System	2	23	17	22	15	79
Teacher Profile	0	2	4	3	5	14
Pre-School Guidelines	4	0	0	0	12	16
Total	42	51	41	66	69	269

Table2: Representativity of the key competences across the different policy documents analyzed

The analysis of the results allows us to conclude that the five key competencies are present in all educational policy documents analyzed. As indicated, there is no document in which at least some of these competencies are not present, the number of registrations varying from 69 to 41, and in 3 of the 5 documents all competencies are represented.

The key competence with the greatest representation in the corpus is Interpersonal competence, with 69 references, followed by Strategic competence, with 66 registrations. The competence that least emerges is Normative competence, with a total of 41 evidence items.

The document with the highest number of references for the key competences for EduS is the Environmental Education Framework for Sustainability, with 88 references. In this

document, the Strategic and Systemic Thinking competencies are presented with great evidence.

The Teacher Profile and Pre-School Guidelines documents are the ones with the least amount of evidence regarding the key competences: 14 and 16 respectively.

The nature of the different documents, some more directed to the action of teachers and teacher educators and other more directed to research, as well as the date of publication (from 1986 to 2018), may be the reason for the differences found.

Key competencies for EduS in Portuguese educational policy documents

In order to enable a deeper understanding of the analysis performed, the presentation of the way in which the documents analysed understand the key competences for EduS, the analysis of the corpus, will be made competence by competence.

System-thinking competence

This competence is associated with the need to educate for reasoning of a high cognitive level, implying the understanding, analysis, and evaluation of different kind of information, as can be seen in this excerpt from the Student Profile:

“The skills of problem solving are related to the processes of finding answers to a new situation, mobilizing reasoning with a view to decision making, the construction and use of strategies and the eventual formulation of new questions.”

In this cognitive process of understanding, analysis, and evaluation, recognition emerges of the multidimensionality of current problems, and of their cause-effect relationships.

The system-thinking competence is related with the analysis of complex systems associated with the explanation of the complexity of the current planetary situation and the responsibility that human beings have in this situation.

The process of cognitively apprehending the systemic dimension of extrinsic and intrinsic ‘reality’ to the subject (s) implies, in the corpus, the development of an ability to understand and to act that knows how to deal with uncertainty and complexity. In other words, dealing with uncertainty is being able to respond to challenges that arise, to make responsible decisions and to solve problems, even this subcategory is the least present in educational policy documents.

The content analysis carried out allows to emphasize three key aspects:

- the competence of systemic thinking is the most referenced in the documents that regulate educational activity, in an academic logic of valuing thought, to the detriment of attitude and action;

- the competence of systemic thinking is closely associated with what appears in the literature as critical thinking, for example; in the perspective of the documents it is important to educate to identify and understand relationships between objects in the world, it is important to educate to know how to analyse complex systems, it is important to educate to understand the interdependence between systems, problems and objects, in order to know the domains of action and thought that is necessary to be analysed, as well as the problems that must be solved in order to arrive to sustainability.

Anticipatory competence

The presence of the anticipatory competence in the analysed documents can be seen in the idea, already conveyed by the *Brundtland Report*, that the current development cannot compromise the possibility of future generations to satisfy their needs. This idea is explicitly presented in the document *Environmental Education Framework for Sustainability*: "*The current global crisis is making it increasingly urgent to promote development that responds to the needs of the present without jeopardizing the satisfaction of the needs of future generations*" (2018, p. 5).

In general, the development of this competence is presented, in these documents, as something that should be learned on at a cognitive, social and emotional level, and also present, transversally, in flexible curriculum management modes. Thus, it is recommended in educational policy documents to deal with it in a continuous cycle and in progression of "reflection-anticipation-action". The same documents also indicate that the development of this competence is carried out through challenges linked to real life, that is, in specific cases, these going beyond the classroom and the school, and considering the implications of decisions and actions taken, both for the future of the individual and the collective.

The need to educate for the selection, analysis and critical interpretation of information about possibilities for the future is highlighted, confronting and evaluating alternative points of view on actions for transforming the world. It is about educating to anticipate other territories, based on concrete cases, through simulations and informed debates, reflecting on the importance of certain decision-making for the future of places, regions and the world in general, this it is, for the common good, local and global.

Normative competence

This competence is very present in the educational policy documents considered, specifically in relation to an education that privileges the understanding of norms and values supporting the actions of the subjects, taken individually and/or collectively. These educational policy documents explain norms and values to work in relation to learners, to school and the society, as well as in relation to the teaching professional activity of the educational actors (for example, teacher, educator).

Some of these documents explicitly present the rules and values that should characterize a school capable of educating for sustainability, as can be seen in the following example:

“The future of the planet, in social and environmental terms, depends on the education of citizens with skills and values not only to understand the world around them, but also to seek solutions that contribute to put us on the path of a more sustainable and inclusive development.”(National Strategy for Citizenship, 2017, p 3).

The discourse of the documents values a school with autonomy, a school capable of educating: (a) through flexible curriculum management; (b) for rights and duties in relation to the environment; (c) for participatory citizenship; (d) for human rights, for dialogue and for change; (e) for diversity; (f) for critical thinking; (g) for literacy - scientific, informational, environmental and literary; and (h) for democracy. In a synthetic way, and according to the literature (Bamber, 2019), we can say that diversity, equality, integration / inclusion, respect, democracy, participation, justice and solidarity are chosen as values to promote in contexts educational, in order to build more sustainable societies.

More implicitly, but always related to the norms and values previously mentioned, we find in the discourse for the Portuguese educational system the need to educate to be able to negotiate these same principles and values, defining precise objectives so that they can be achieved with consensus, managing conflicts and diversified interests, always in the pursuit of the construction of a better future for all.

Strategic competence

In relation to strategic competence, an education for the development of actions that promote sustainability, both locally and globally, is advocated. Nor does it reduce it to concerns related to sustainability in the environmental sphere. Although development, education and sustainable are the words that dominate the codes most representative of the sources under analysis, all spheres of sustainable development (society, economy and environment) are represented in the corpus, however with greater emphasis on issues related to the environment. Perhaps an interpretation of this fact lies in the reference essentially to the environmental issue

present in the *Brundtland Report* (WCED, 1987), which presents what is considered to be the first proposal for the concept of sustainable development. EduS must also not be reduced to the acquisition of knowledge and know-how, rather it proposes its articulation with education for global citizenship (valuing knowledge, skills, attitudes and values), in preparation for the exercise of active and responsible citizenship.

EduS is achieved by working in a transversal and transdisciplinary way, flexibly managing the curriculum and opening the school to the community. It is about educating to learn throughout life, in an interdisciplinary way, contextualized locally and that contributes to global think and act (“think globally, act locally”), it is essential to educate students so that they come out and be understood as social actors involved in informed decision making.

The documents refer to the need to invest in renewed and innovative educational practices adapted to the society of the century XXI, involving active learning that leads to the acquisition of knowledge that students can associate with their experiences, and contributing to the development of skills that make them interventional and critical citizens, “*Identify concrete examples of actions that promote intergenerational responsibility. Make responsible decisions in the face of different options related to the resources used.*” (*Environmental Educational Framework for Sustainability, 2017*).

Interpersonal competence

The development of interpersonal competence is very present in the qualities indicated for the educator (s) / teacher (s) (Decree-Law nº 240/2001), as well as in the other documents. Thus, it is important to educate to:

- knowing how to carefully identify and respect the cultural and personal differences of students and other members of the educational community, valuing different knowledge and cultures and fighting processes of exclusion and discrimination;
- manifest relational and communication skills, as well as emotional balance, in the various circumstances of their professional activity;
- encourage the participatory construction of democratic coexistence rules, managing, with security and flexibility, problematic situations and interpersonal conflicts of different nature.
- to value teamwork.

Overall, in the documents analysed, ideas such as the respect and appreciation of the cultural diversity of children / young people, families and the community are highlighted; collaborative and problem-solving work; enhance learning situations in conjunction with the community; organizational capacity; empathy, as can be seen in the *Pre-School Guidelines*:

“*Know and accept personal characteristics and social and cultural identity, placing them in relation to those of others; Recognize and value social and cultural ties.*” (2016, p.).

Interpersonal competence appears associated with other dimensions, within the scope of EduS, in the defense of a curriculum for diversity and sustainability, underlying the idea that educating for the understanding of the other presupposes understanding the world in its diversity and complexity. Globalizing and integrating work is aimed at covering different dimensions of sustainability, namely economic, environmental, social, historical, linguistic and cultural issues. This work leads to an education for global citizenship (based on values, such as social justice, equity, peace).

4. Conclusion

After analyzing, validating and discussing the results of the content analysis carried out on the corpus, the Portuguese TEDS team considers that the results achieved indicate that the national guiding documents are compatible with the key competences for EduS. The main ideas emerging from the analysis for each one of the five key competences can be systematized as follows:

System -Thinking competence:

- i. The recognition and understanding of *relationships* seem to be associated with the multidimensionality of current issues and their complex cause-effect relationship;
- ii. The *analysis of complex systems* is associated with the explanation of the complexity of the current planetary situation and the responsibility that human beings have in this situation;
- iii. The complexity of the systems is also addressed through interactions at different scales, for example, local / global; part / whole; present / future;
- iv. The importance of *learning to deal with uncertainty* appears in several of the documents in the *corpus*, which identify the current world context as a context of rapid transformation and uncertainty. Dealing with uncertainty is being able to respond to challenges that arise, to make responsible decisions and to solve problems.

Anticipatory competence:

- i. The precautionary principle is associated with anticipatory competence. It is addressed in the relationship between decision making and prevention of future problems;

- ii. The need to educate for the selection, analysis and critical interpretation of information about possibilities for the future is highlighted, confronting and evaluating alternative points of view on actions for transforming the world;
- iii. Dealing with risk and uncertainty is associated with ideas such as the globality of the current problems, the uncertainty and unpredictability of the future and the need to develop and promote competences that allow students to consciously decide and take action;
- iv. It is recommended that the development of this competence be carried out through challenges related to real life (going beyond the classroom and the school) and considering the implications of decisions and actions taken, both for the future of the individual as well as of the collective.

Normative competence:

- i. This competence is very present in the educational policy documents, namely in relation to an education that privileges the understanding of norms and values that support the actions of the subjects, individually and collectively;
- ii. The educational policy documents spell out norms and values to work on in relation to the student to be educated, the school and the society to be built, as well as in relation to the professional activity of the educational actors;
- iii. Diversity, equality, integration / inclusion, respect, democracy, participation, justice and solidarity are chosen as values to be promoted in educational contexts in order to build more sustainable societies.

Strategic competence:

- i. The definition of this competence arises very much related to the intervention, that is, with the identification of actions that allow to intervene on a particular problem, or act in its prevention;
- ii. In policy documents, strategic competence arises essentially in the form of learning objectives;
- iii. In academic documents it is more related to the need of innovative guidelines for education for sustainability: an education capable of educating for the development of actions that promote sustainability, locally and globally, not reducing sustainability concerns to the environmental sphere;

- iv. The documents refer to the need to invest in renewed and innovative educational practices adapted to the society of the XXI century, involving active learning that leads to the development of knowledge that students can associate with their experiences, contributing to the development of skills that make them interventional and critical citizens

Interpersonal competence:

- i. Overall, in the analyzed documents, this competence appears related to ideas such as: respect and appreciation of the cultural diversity of children / young people, families and the community; collaborative and problem-solving work; enhance learning situations in conjunction with the community; organizational capacity; empathy.
- ii. This competence appears associated with other dimensions of education for sustainability (economic, environmental, social, historical, cultural,...), having the underlying idea that educating for the understanding of the other presupposes understanding the world in its diversity and complexity.
- iii. The key idea of balancing interpersonal and people relations with the planet also emerges in several documents.

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SOBRE AS AUTORAS

Patrícia Sá

Doutorada em Didática das Ciências pela Universidade de Aveiro (2008). É Investigadora no Centro de Investigação Didática e Tecnologia na Formação de Formadores (CIDTFF), sediado no Departamento de Educação e Psicologia da Universidade de Aveiro (Portugal). É membro da equipa do projeto TEDS - Teacher Education for Sustainability. E-mail: patriciasa@ua.pt

 <https://orcid.org/0000-0002-6415-0601>

Ana Isabel Andrade

Doutorada pela Universidade de Coimbra, (1997), é Professora Catedrática no Departamento de Educação e Psicologia da Universidade de Aveiro (Portugal). É investigadora no Centro de Investigação Didática e Tecnologia na Formação de Formadores (CIDTFF). Coordena o projeto TEDS – Teacher Education for Sustainability (2019-1-PT01-KA201-060830). E-mail: aiandrade@ua.pt

 <https://orcid.org/0000-0002-3182-9351>

Jane Machado

Doutorada em Educação pela Universidade Federal Fluminense (2015) e com Doutorado Sanduíche na Universidade de Aveiro - Portugal (2014), atualmente, realiza estudos de Pós-Doutoramento na Universidade de Aveiro, no Departamento de Educação e Psicologia. É bolsista no projeto TEDS - Teacher Education for Sustainability. E-mail: janemachado@ua.pt

 <https://orcid.org/0000-0001-8786-4108>

Cristina Sá

Doutora em Didática pela Universidade de Aveiro (1995), é Professora Auxiliar no Departamento de Educação e Psicologia da Universidade de Aveiro (Portugal). É investigadora no Centro de Investigação Didática e Tecnologia na Formação de Formadores (CIDTFF). É membro da equipa do projeto TEDS - Teacher Education for Sustainability. E-mail: cristina@ua.pt

 <https://orcid.org/0000-0002-8768-661X>

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