ERASMUS+: A STUDY OF THE PATH OF PEDAGOGICAL INNOVATION PRACTICES

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Abstract
The main objective of this doctoral research is to identify/classify the nature of the pedagogical practices used and skills developed through the European Action Scheme for the Mobility of Students (Erasmus+) in secondary education. Methodologically, we used the qualitative method, focusing on exploratory-descriptive research through content analysis of a set of 12 articles, using NVIVO11 software. Preliminary conclusions show us that this programme has been developing pedagogical innovation paths and practices based on active pedagogies and methodologies, with a particular focus on essential learning and intercultural education. The goal is to learn from each other and, together, learn to live together and become citizens for the world.

ERASMUS+ • EDUCATION • PEDAGOGICAL INNOVATIONS • SKILLS

ERASMUS+: UM ESTUDO DA ROTA DAS PRÁTICAS DE INOVAÇÃO PEDAGÓGICA

Resumo
A investigação doutoral em curso apresenta como principal objetivo identificar/classificar a natureza das práticas pedagógicas utilizadas e competências desenvolvidas por via do European Action Scheme for the Mobility of Students (Erasmus+) no ensino secundário. Metodologicamente, recorremos ao método qualitativo, focado na pesquisa exploratório-descritiva, por análise de conteúdo, de um corpus de 12 artigos, com recurso ao software NVIVO11. As conclusões preliminares revelam que esse programa tem vindo a construir trajetos e práticas de inovação pedagógicos sustentados em pedagogias e metodologias ativas, com particular enfoque nas aprendizagens essenciais e na educação intercultural. A máxima é aprender uns com os outros e, em conjunto, aprender a viver juntos e a tornarem-se cidadãos para o mundo.

ERASMUS+ • EDUCAÇÃO • INOVAÇÃO PEDAGÓGICA • COMPETÊNCIAS
La investigación doctoral en curso tiene como objetivo principal identificar/clasificar la naturaleza de las prácticas pedagógicas utilizadas y las habilidades desarrolladas a través del European Action Scheme for the Mobility of Students (Erasmus+) en la educación secundaria. Metodológicamente recurrimos al método cualitativo, enfocado en la investigación exploratoria-descriptiva, por análisis de contenido, de un corpus de 12 artículos, utilizando el software NVIVO11. Las conclusiones preliminares revelan que este programa viene construyendo trayectos y prácticas de innovación pedagógica sustentadas en pedagogías y metodologías activas, con particular enfoque en el aprendizaje esencial y en la educación intercultural. La máxima es aprender unos de otros y, en conjunto, aprender a vivir juntos y convertirse en ciudadanos del mundo.

ERASMUS+ • EDUCACIÓN • INNOVACIONES PEDAGÓGICAS • HABILIDADES

ERASMUS+: ÉTUDE DU PARCOURS DES PRATIQUES D’INNOVATION PÉDAGOIQUE

L’objectif principal de cette recherche doctorale est d’identifier et de classifier la nature des pratiques pédagogiques en usage et des compétences développées à travers le programme European Action Scheme for the Mobility of Students (Erasmus+) dans l’enseignement secondaire. La méthodologie retenue est qualitative, axée sur une recherche exploratoire et descriptive ancrée sur l’analyse de contenu d’un corpus de 12 articles à l’aide du logiciel NVIVO11. Les conclusions préliminaires montrent que ce programme a construit des parcours et des pratiques d’innovation pédagogiques, basés sur des pédagogies et des méthodologies actives avec une attention particulière aux apprentissages essentiels et l’éducation interculturelle. La maxime est d’apprendre les uns avec les autres ainsi qu’en groupe, et d’apprendre à vivre ensemble et à devenir des citoyens du monde.

ERASMUS+ • ÉDUCATION • INNOVATION PÉDAGOIQUE • COMPÉTENCES
Introduction

The rapid growth of information, technology, data science, robotics, Big Data and artificial intelligence has caused a real revolution in our daily lives. In this sense, there is a need to prepare each and every one of us, especially young people, for an intercultural, digital, entrepreneurial society, implementing interactive pedagogical projects and practices that facilitate the inclusion of people, their talents, their aptitudes, knowledge, skills and attitudes, in several contexts and in areas geared towards the near future, which is looking increasingly uncertain and challenging.

All societies are constantly changing, especially in terms of technologies and migratory movements, requiring a new understanding of how we learn, how we relate and how we train professionally (Pacheco, 2019). March 2020 indelibly sets a new time of living and history itself, due to the Covid-19 pandemic, as it has forced sociability at a distance, as ways of thinking and acting, in order to create conditions of balance between knowledge, understanding, creativity and critical thinking (Perfil dos Alunos à Saída da Escolaridade Obrigatória [Paseo], 2017). Reality in the world is complex. The challenges are innumerable. We live in times of great tensions and paradoxes – social, economic and educational. Despite this, the school continues to pursue its mission, that is, to contribute “to the full and harmonious development of the personality of individuals, encouraging the formation of free citizens” (Lei n. 46, 1986, own translation; Delors et al., 1996). Hence, the importance of educating for truth and hope, in this sense, “each person is at the center of education and all human activity” (Azevedo, 2011, p. 125, own translation). “Education, at all times, whether in a school or social context, is always a relationship, an encounter between two freedoms, two freedoms that look at each other face to face, eye to eye” (Azevedo, 2011, p. 125, own translation). It is based on these assumptions that we have chosen the Erasmus+ Programme as our object of study, as “a programme of people for people” (Cunha & Santos, 2017, p. 17, own translation), which has been under development for more than three decades and from which we aim, in the period 2017-2022, to trace the route of pedagogical practices, based on the analysis matrix of Paniagua and Istance (2018). Since its inception, the purpose of the Erasmus Programme has been to enable people with humanistic skills and, therefore, with knowledge capable of facilitating dialogue and cooperation between a wide range of cultures and institutions (European Commission, 2023).

In this context, promoting inclusive, quality education involves guaranteeing effective, long-lasting learning that is consistent with the challenges of our times. A commitment that requires everyone’s effort and participation. At its core, Erasmus+ enables and favors participatory and dialogical work methodologies, in which cooperative and networked learning is encouraged (European Commission, 2023). Hence, the need to better understand what kind of pedagogical practices promoted by teachers and schools participating in the Erasmus+ Programme are successful, as evidenced by several authors (Aguilar & Pavón Vázquez, 2017; Amorim & Cosme, 2017; Farella et al., 2020; Fisker & Clausen, 2017; López et al., 2017; Mazohl et al., 2018; Moreno-Fernández et al., 2018; North et al., 2021; Novak et al., 2018; Rocha & Orvalho, 2019; Sá et al., 2021; Villalba et al., 2018).

Erasmus+ is based on innovative, disruptive, entrepreneurial, quality practices that are relevant to the promotion of diverse skills, values and fundamental (in)formal learning throughout life (Parlamento Europeu e o Conselho da União Europeia [Pecue], 2013, p. 2, own translation).

The opportunity to generate new perspectives on life, new horizons through the exchange of young people and dialogue between cultures, which facilitates participation, solidarity, understanding and cooperative learning, as defined in the new Erasmus+ Programme (European Commission, 2023, p. 12). In the case of Portugal, the goal is to triple the mobility of students from Portuguese institutions studying in Europe by 2027, which means “increasing mobility to around 30,000 students per year” (Governo da República Portuguesa [GRP], 2023, p. 1, own translation).
The principle of Erasmus+ is human development, in the sense of challenging every teacher and student to rethink themselves, to come up with innovative, high-quality teaching and learning environments (United Nations Educational, Scientific and Cultural Organization [Unesco], 2021; Vincent-Lancrin et al., 2019), and thus generate the opportunity for sustainable life futures, in which social justice and equity are achievable goals. Accordingly, schools have the mission and challenge of “training young people who, in addition to mastering traditional skills, can differentiate themselves in global markets through their creativity and innovation” (Figueiredo, 2011, pp. 17-18, own translation).

Improving our education system will only be possible through a series of pedagogical changes and a learning culture based on dialogue and increasingly interactive methodologies (Guijarro & Raimondi, 2000). The recommendations of Paniagua and Istance (2018) are clear: educational success lies in the creative application to new teaching situations (Schleicher, 2016), whose learning is (needs to be) personalized, done in collaboration and in order to train people (all people) for life as citizens (Correia & Cavadas, 2020). This is a demanding and very complex process that involves continuous dialogue between people and institutions, always taking in consideration and valuing equity and social justice (Correia & Cavadas, 2020; Jesus & Azevedo, 2020; Licht et al., 2020).

The key assumptions contemplated in Erasmus+, as basic contributions to the sustainable growth of the individual, to quality work and to social cohesion (European Commission, 2023, p. 6) as a path to a better and healthier future, are the motto that sustains our desire for this study, which involves identifying and characterizing the nature and type of pedagogical practices promoted and developed by the Erasmus+ Programme, particularly in the field of secondary education.

The Erasmus+ Programme: State of knowledge in secondary education

The Erasmus Programme, a project of the European Union, was born 35 years ago (GRP, 2022) with the aim of enabling higher education students to study in another European country. Between 2007 and 2013, the Programa de Aprendizagem ao Longo da Vida [Lifelong Learning Programme] (Palv), was in force, the aim of which was to contribute to the development of an Advanced Knowledge Community by promoting exchanges, cooperation and mobility between education and training systems and thus constitute a global reference network of quality for teaching and learning (Pecue, 2013, p. 1). It was in 2014 that European Union Regulation n. 1.288/2013 renamed it Erasmus+, and it now covers school education, vocational education and training, adult education, youth and sport (Pecue, 2013, p. 2).

The Erasmus+ Programme is an example of the globalization we are experiencing today, which brings with it the possibility of embracing international projects, broadening previously unthinkable horizons and giving rise to more eclectic and holistic learning.

To think about education today is to look for new educational approaches, linking the local, the regional and the universal, in order to expand and optimize real opportunities for access and success for all.

Erasmus+, as a European Union programme in the fields of education, training, youth and sport, sponsors educational, professional and personal development and sport, sponsors educational, professional and personal development, and its prerogative is to activate “cooperation, quality, inclusion and equity, excellence, creativity and innovation at the level of organizations and policies in the field of education and training” (European Commission, 2023, p. 6, own translation). These principles are in line with the most recent national education policies, both in terms of the student profile for the 21st century (2017), curricular flexibility, collaboration between teachers, students, schools, parents and local authorities (Decreto-Lei n. 55, de 6 de julho de 2018), and inclusion, as
“the right of all children and students to access and participate fully and effectively in the same educational contexts” (Decreto-Lei n. 54, de 6 de julho de 2018). This requires all of us, as people and as institutions, to be willing to learn and to support a shared vision, through dynamics of participation and equal dialog (Hallinger, 2011; Licht et al., 2020).

From a review of the literature and from our own experience as teachers, we can see that the Erasmus+ Programme has progressively contributed to the development of more inclusive, more ecological societies that are prepared to respond to the needs of multi-ethnic societies. This is a vital effort, especially if we think about digital skills and future-oriented areas (e.g. combating climate change, clean energy, artificial intelligence, robotics, big data analysis), such as the objectives of the European Education Area, the Digital Education Action Plan 2021-2027, the European Union Youth Strategy and the European Union Work Plan for Sport.

**Structure and key actions of Erasmus+**

From the general literature on Erasmus+, we can see that its purpose is to create opportunities for dialogic learning, through mobility and international exchange between students, and thus activate “Erasmus Mundus” and intercultural education.

It is a fact that the programme includes a strong international dimension and a particular emphasis on higher education (53%). The focus is on strengthening and improving the quality of European education within the broader framework of pursuing the objectives of the Europe Strategy 2020 and the attractiveness of the European Union as a destination for studies, understanding between peoples and also for socio-economic development (Pecue, 2013, p. 2).

The great strength, from the Erasmus Agency’s perspective, is the contribution that each of these actions makes to improving performance and personal skills (e.g. learning; employability and career; entrepreneurship; self-empowerment and self-esteem; interculturality, participation, linguistic and digital skills); inter-institutional relations and cooperation for professional excellence and the realization of innovative partnerships and practices capable of including alliances and future-oriented projects (e.g. Erasmus+ teacher academy, Erasmus Mundus Actions); participatory approaches and digital methodologies as a means of approaching territories and people, whatever their condition (e.g. social, ethnic, linguistic and cultural); and, finally, support for the development of policies aimed at preparing and supporting the implementation of the European Union’s political agenda in the various sectors (e.g. education, training, youth, sport).

Taking in consideration Despacho [Order] n. 6.478, of July 26, 2017, which approves Paseo and once again consecrates “education for all” as a vital project capable of “creating conditions of balance between knowledge, understanding, creativity and critical sense”, we recognize that the foundations of Erasmus are laid in new educational paradigms, whose conceptions and approaches “are embodied in full respect for human dignity and the committed and uncompromising promotion of that dignity” (Colás Bravo, 1992). From this perspective, the pedagogical relationship between teacher and student can embrace a new dynamic and with it practices of pedagogical innovation.

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1 The public and private bodies within the sectors (education, training, youth and sport) which are covered by the programme, use the name “Erasmus+” for the purposes of communication and dissemination of information.
Methodology

Methodologically speaking, we have adopted a qualitative research paradigm, using exploratory-descriptive research (Colás Bravo, 1992), with the aim of identifying and classifying the type and nature of the pedagogical practices most used in teaching and learning processes in secondary education, through Erasmus+. With this in mind, the objectives are: (1) to identify/classify the pedagogical practices most used in teaching and learning processes; and (2) to identify/classify the nature of the pedagogical practices used within the framework of Erasmus+. This research strategy will help us to better understand the programme and the growing motivation on the part of institutions and students to continue promoting and developing it. The set of analysis results from the study of 12 articles selected with the following inclusion criteria and search strategy: (a) reference to Erasmus+ Programme; (b) publication in the scientific databases Scopus, Web of Science and Repositório Científico de Acesso Aberto de Portugal (RCAAP); (c) time frame between 2017 and 2022; (d) application of Boolean operators “and” and “or”; (e) combined reference to Erasmus+ Programme and Pedagogical Practice Innovation, presented here in ascending chronological order (Table 1).

Table 1
Analysis corpus

<table>
<thead>
<tr>
<th>Code</th>
<th>Year</th>
<th>Country</th>
<th>Authors</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2017</td>
<td>Portugal</td>
<td>Amorim &amp; Cosme</td>
<td>A experiência de mobilidade de longa duração em alunos do ensino secundário. Contributos para a sua formação cultural e psicossocial</td>
</tr>
<tr>
<td>2</td>
<td>2017</td>
<td>Spain</td>
<td>Aguilar &amp; Pavón Vázquez</td>
<td>Understanding Europe through the elaboration of audio-visual material in secondary education: Contributions from an Erasmus</td>
</tr>
<tr>
<td>3</td>
<td>2017</td>
<td>Spain</td>
<td>López et al.</td>
<td>Simulating collaborative work among students: I competition Erasmus plus Eurobotique project</td>
</tr>
<tr>
<td>4</td>
<td>2017</td>
<td>Denmark</td>
<td>Fisker &amp; Clausen</td>
<td>Lear4Health, a European project creating health and food literacy through innovative interdisciplinary teaching and learning methods</td>
</tr>
<tr>
<td>5</td>
<td>2017</td>
<td>Austria</td>
<td>Mazohl et al.</td>
<td>Technical innovation in blended learning – concepts for the creation of high quality continuous vocational education courses using multiple devices</td>
</tr>
<tr>
<td>6</td>
<td>2018</td>
<td>Spain</td>
<td>Moreno-Fernández et al.</td>
<td>Good practices in school to educate critical citizens: The youth parliament program from the perspective of secondary school teachers in training</td>
</tr>
<tr>
<td>7</td>
<td>2018</td>
<td>Spain</td>
<td>Villalba et al.</td>
<td>Factors with influence on the adoption of the flipped classroom model in technical and vocational education</td>
</tr>
<tr>
<td>8</td>
<td>2019</td>
<td>Austria</td>
<td>Novak et al.</td>
<td>Head in the clouds: An initiative for digital learning among Roma communities in Europe</td>
</tr>
<tr>
<td>9</td>
<td>2019</td>
<td>Portugal</td>
<td>Rocha &amp; Orvalho</td>
<td>Schools 4.0 – innovation in vocational education</td>
</tr>
<tr>
<td>10</td>
<td>2020</td>
<td>Italy</td>
<td>Farella et al.</td>
<td>ARLectio: An augmented reality platform to support teachers in producing educational resources</td>
</tr>
<tr>
<td>11</td>
<td>2020</td>
<td>England</td>
<td>North et al.</td>
<td>Developing a platform for using game-based learning in vocational education and training</td>
</tr>
<tr>
<td>12</td>
<td>2021</td>
<td>Portugal</td>
<td>Sá et al.</td>
<td>Competências de educação para a sustentabilidade: Análise de documentos educativos em Portugal</td>
</tr>
</tbody>
</table>

Source: Authors’ elaboration.
In possession of these texts and bearing in mind the defined object of study, we circumscribe the question that guides our research, that is: What pedagogical practices are suggested by Erasmus+ in these documents? For this purpose, we composed two sub-questions: What pedagogical practices are suggested and promoted by Erasmus+?; What do they learn and what competence(s) do students develop through their participation in Erasmus+?

About content analysis

Content analysis is an analysis technique that involves a research procedure with unique, detailed characteristics and its own purposes, as it allows us to know the facts rigorously, objectively and with the least amount of distortion, within the particular situation being studied, and thus evaluate the evidence (Bardin, 2011; Creswell & Guetterman, 2018). Once we had the selected articles (n = 12), our corpus of data and analysis, we carried out the pre-analysis, following the technique of “floating reading” (Unesco, 2021; Vincent-Lancrin et al., 2019) of each of these sources. To this end, a matrix of five entries was created – title, objectives, methodology, results and conclusions – in order to provide a more integrated perspective of the scope and nature of each of the articles. In keeping with the main idea, the articles were coded in chronological order, from number 1 to number 12, and analyzed again, this time using NVIVO11 analysis software. The coding of the data was based on the classification devised by Paniagua and Istance (2018), with regard to clusters of pedagogical innovation (n = 6): 1) Combined Learning (AC.); 2) Gamification (G.); 3) Computational Thinking (PC.); 4) Experiential Learning (AE.); 5) Integrated Learning (AI.); and 6) Multiliteracies and Discussion (MD.), which we have adopted as 1st level analysis categories, in bold. As for the 2nd level categories, these result from the articulation between the analysis matrix of (Paniagua & Istance, 2018) and the areas of competence considered in Paseo (2017, p. 19): Languages and Texts, Information and Communication, Reasoning and Problem Solving, Critical Thinking and Creative Thinking, Interpersonal Relationships, Personal Development and Autonomy, Well-being, Health and Environment, Aesthetic and Artistic Sensitivity, Scientific, Technical and Technological Knowledge, Awareness and Mastery of the Body. Because only with these skills can each student develop processes leading to the construction of healthy, sustainable life projects, in a way that is both rational, creative and consistent with the challenges of a plural society (Table 2).
### Table 2

Pedagogical practices: 1st and 2nd level categories, with code, source and frequencies

<table>
<thead>
<tr>
<th>Pedagogical practices</th>
<th>Code</th>
<th>Number of sources (n)</th>
<th>Frequency (fn)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Multiliteracies and Discussion</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scientific and Technological Knowledge</td>
<td>MD.SCT</td>
<td>9</td>
<td>93</td>
</tr>
<tr>
<td>Critical and Creative Thinking</td>
<td>MD.PCC</td>
<td>10</td>
<td>76</td>
</tr>
<tr>
<td>Personal Development and Autonomy</td>
<td>MD.DPA</td>
<td>10</td>
<td>66</td>
</tr>
<tr>
<td>Information and Communication</td>
<td>MD.IC</td>
<td>9</td>
<td>46</td>
</tr>
<tr>
<td>Interpersonal Relationships</td>
<td>MD.RI</td>
<td>9</td>
<td>35</td>
</tr>
<tr>
<td>Well-being, Health and the Environment</td>
<td>MD.BSA</td>
<td>5</td>
<td>27</td>
</tr>
<tr>
<td>Languages and Text</td>
<td>MD.LT</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Aesthetic and Artistic Sensitivity</td>
<td>MD.SEA</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td><strong>Experimental Learning</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methodology – Work Project</td>
<td>AE.MTP</td>
<td>10</td>
<td>70</td>
</tr>
<tr>
<td>Teaching – Questioning</td>
<td>AE.EQ</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Different Pedagogies</td>
<td>AE.PD</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td><strong>Integrated Learning</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interdisciplinary Activities</td>
<td>AI.AI</td>
<td>9</td>
<td>39</td>
</tr>
<tr>
<td>Drawing and Arts</td>
<td>AI.DA</td>
<td>2</td>
<td>26</td>
</tr>
<tr>
<td><strong>Computational Thinking</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Programming – Robotics</td>
<td>PC.PR</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Augmented Reality</td>
<td>PC.RA</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>Mobile Devices</td>
<td>PC.DM</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>3D Modelling and Printing</td>
<td>PC.MI3D</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td><strong>Gamification</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Games</td>
<td>G.J</td>
<td>3</td>
<td>22</td>
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<tr>
<td>Self-learning</td>
<td>G.A</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td><strong>Combined Learning</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Inverted Classroom</td>
<td>AC.SAI</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>Microlearning</td>
<td>AC.M</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: Authors’ elaboration based on the analysis of the report by Paniagua and Istance (2018) and Paseo (2017).

From the analysis, we can see that the various practices mentioned in the texts respect teaching and learning processes considered to be pedagogical practices that mobilize knowledge, skills and attitudes consistent with the principles proposed for the 21st century (Paniagua & Istance, 2018; Paseo, 2017).

2 In this study we will use the expression subcategory as a synonym for 2nd level categories.
Results

The use of the aforementioned clusters served to identify/classify the nature of the pedagogical practices produced in the context of the projects developed and funded by the Erasmus+ Programme, while the Perfil dos Alunos à Saída da Escolaridade Obrigatória [Profile of Students Leaving Compulsory Schooling] enabled us to better understand how demanding and complex the current paradigms of knowledge and learning are. Education and generative learning are currently the fundamental lever for the progress of new societies and the possibility of responding to the diversity of our students’ needs, by increasing everyone’s participation in the life projects of the community(ies).

From the written discourse of each of the articles studied (n = 12), we identified the pedagogical practices used, the categorization of which (1st and 2nd levels) is shown in Table 2, in descending order of the number of recording units, identified here as frequency or assertions (nf). Having analyzed each of the 1st and 2nd level categories, we recognize that their designation agrees with those also prescribed by Paseo, which include knowledge, skills and attitudes (Paseo, 2017).

For the Multiliteracies and Discussions (MD.) category, the number of recorded assertions is over 300 (nf = 365). The aim is to promote debate, questioning and understanding of phenomena of a diverse nature (e.g. cultural, social). In this domain, there are eight 2nd level categories – MD.SCT; MD.PCC; MD.DPA; MD.IC; MD.RI; MD.BSA, MD.LT; and MD.SEA, whose assertions range from 93 to 5, the highest being for Scientific and Technological Knowledge (MD.SCT) and the lowest for Aesthetic and Artistic Sensitivity (MD.SEA).

With regard to Scientific and Technological Knowledge (MD.SCT [nf = 93]), nine (F1, F2, F4, F5, F7, F8, F9, F10 and F11) of the 12 texts state that the participating students developed skills that they didn’t know about and that they believed would be very useful in the future; an opportunity that enabled a significantly improvement of skills related to new technologies and at the same time facilitate exchanges between countries and cultures (F10). And thus, activate and encourage Critical and Creative Thinking (MD.PCC [nf = 76]) in order to “develop new ways of thinking and acting dynamically in a global market economy” (F10). This is a privileged context for providing attractive teaching and learning realities for cultural and human development (MD.DPA [nf = 66]).

It is clear that the quality of the Information and Communication processes (MD.IC [nf = 46]) improves with the promotion of innovative practices associated with new technologies, the current need and digital training (F8, F10), but also the Interpersonal Relationship itself (MD.RI [nf = 35]), as it facilitates dialogue, interaction, trust and progressively the creation of positive environments for learning and well-being (MD.BSA [nf = 27]), mostly based on the logic of Experiential Learning (AE. [nf = 87]), with skills visible in various activities and/or productions such as “simulation exercises” (F5, F12), “debates” (F12), “creation of educational videos” (F2) and/or “creation of short films” (F2, F3, F4, F8).

Challenges and demanding strategies that have been progressively promoted both from the Erasmus+ Programme and more recently due to the Covid-19 pandemic experienced worldwide since 2020. In this context, efforts have been made to create positive environments for critical thinking, creativity and, above all, learning through innovative approaches and integrated teaching and/or learning methodologies.

Integrated Learning (AI. [nf = 65]) assumes and integrates creative experiences and the active involvement of students, in a dynamic that is intended, whenever possible, to be interdisciplinary (AI.AI [nf = 39]) and/or associated with Drawings and Arts actions (AI.DA [nf = 26]), challenging realities especially in terms of how the process is provided to captivate students (and teachers). Activities traditionally conducted in classrooms are developed in
synchronous and/or asynchronous class sessions, which means that students watch a video of lectures, for example, pre-recorded before class and then carry out work or activities with their peers and/or teacher (F7). Efforts have been made to create positive environments for critical thinking, creativity and, above all, learning through “micro-learning using and learning to handle, for example, mobile devices, working with QR codes and/or searching for information on the Internet” (F8).

Within the framework of Computational Thinking (PC.), the possibility of developing collaborative skills in terms of problem solving (PC [nf = 40]), Robotics (PC.PR [nf = 15]), Augmented Reality (PC.RA [nf = 13]), Mobile Devices (PC.DM [nf = 7]) and 3D Modelling and Printing (PC.M13D [nf = 5]) gained impact. “Recent technological developments make modern technologies such as Augmented Reality, Educational Robotics and 3D printers particularly appealing for school contexts” (F10, own translation) and highly desirable, above all because they have developed skills in “creating and exploiting educational content, for the mobile system, with QR codes” (F2, F5, F6, F7, F8, F10, F12), in 3D Modelling and Printing, using the ARLectio platform, allowing teachers to motivate students by adding 3D materials (F10).

Over the years, all the actions/activities have been developed with the aim of educating and training for human development, through exchange experiences (F1), which “include education, employment, health, housing, as well as horizontal and structural measures focused on promoting interculturality” (F2, F8), in which case the processes go through different learning and personal development stages.

Gamification (G. [nf = 32]) is addressed in 3 (F7, F8, F11) of the 12 texts, and appears in two 2nd level categories: Games (G.J [nf = 22]) and Self-learning (G.A [nf = 10]). In the first case, teachers were trained in the form of workshops to be able to design, implement and develop game-based learning, which is recognized as beneficial in terms of motivation, creativity (F7, F8, F11), self-learning (G.A [nf = 10]), knowledge, interpersonal and interdisciplinary relationships (F8, F11). In essence, the game works as a strategy that activates and increases student participation. It is a challenge for teachers to adapt learning content in a playful way to keep students motivated and the learning process active. “The importance of Game-Based Learning (GBL) for student learning is increasingly recognized as beneficial for engagement, creativity and motivation” (F11).

With regard to Combined Learning (AC. [nf = 23]), covered in 5 (F2, F5, F7, F10, F11) of the 12 texts, it comprises two 2nd level categories: Inverted Classroom (AC.SAI [nf = 19]); and Microlearning (AC.M. [nf = 4]). In the first subcategory (AC.SAI [nf = 19]), 4 (F2, F5, F7, F10) of the 12 texts state that students develop digital and technological skills (F2), using different devices (e.g. computers, tablets, smartphones) and different teaching methodologies. “The flipped classroom approach can help improve vocational education by changing traditional classes and teaching students other important soft skills, such as teamwork and collaboration, reflection, digital skills and self-learning” (F7). The intention is to promote learning and the acquisition of technological, collaborative, reflective and self-learning skills, freeing up class time for more personalized guidance and focused discussion, which are essential for the full exercise of citizenship, human development and pedagogical techniques. An example of this is the Technical Innovations in Blended Learning project, which focuses on multimedia material that can be used on various devices and pedagogical techniques such as microlearning and the flipped learning approach (F5).

Discussions and conclusions

In the 21st century, specifically in 2006, the European Commission classified high quality education for all as vital; training and lifelong learning; educational support using interactive...
teaching and learning methods, dialog and know-how capable of activating participation and mutual learning (European Commission, 2023).

Within this framework, the Erasmus+ Programme has been promoting and developing different pedagogical paths and practices, especially for schools, teachers and, in particular, the students who benefit from it. The main goal, as we have already mentioned, is to learn from each other and together learn to live together and to be citizens of/for the world, in order to build more inclusive, cohesive, enterprising and sustainable societies.

“The world is becoming increasingly incomprehensible and spectral” (Han, 2022, p. 11, own translation). Thinking about and building our common destiny (Delors et al., 1996, p. 15) implies an effort on the part of all of us and the need to develop skills capable of dealing with the issues and dilemmas of our times, particularly with regard to situations of inclusion. The aim is to activate interculturality and intergenerationality and, from there, “build more and more trust in others (people and institutions) and jointly develop institutional rules that are well matched to specific contexts” (Azevedo, 2011, p. 339, own translation).

From this perspective, the Erasmus+ Programme opens borders, facilitates dialogue between people, institutions and cultures and activates cooperation and collaborative networks, a process that challenges us to better understand what continues, after more than 30 years, to mobilize and motivate students and teachers to join the programme and travel to other contexts and realities. Hence, the aim of our study, namely the two research sub-questions systematized here: What pedagogical practices exist and are promoted by the Erasmus+ Programme; What do participating students learn and what skills do they develop through their participation in Erasmus+?

The research process began by identifying and/or mapping the pedagogical practices mentioned in each of the 12 articles that have been studied and explored. For the purposes of critical data analysis, we used Paniagua and Istance’s (2018) six clusters as a first-level categorization matrix, i.e.: MD., AE., AI., PC., G. and AC. Each of which, associated with the key competences of Paseo (2017; Paniagua & Istance, 2018), gave rise to the 2nd level categories (see Table 2).

In the light of the explored texts, the Erasmus+ Programme has generated knowledge and skills of a diverse nature, as well as the creation and dissemination of equally diverse educational resources, such as short films (F2, F3, F4, F8), videos (F2, F4, F8) and/or educational games (Unesco, 2015). These are fundamental skills and competences for exercising and developing active and collective citizenship (F2; Paseo, 2017, p. 17). And, in this sense, all children and young people need to learn to “respect themselves and others; to know how to act ethically, aware of the obligation to answer for their own actions, to weigh up their own and others’ actions against the common good” (Paseo, 2017, p. 17, own translation).

At the same time, Erasmus+ has enabled teacher professional development through specialized training in the form of MOOC Courses (F8) and/or workshops (F11), combining new technologies with new pedagogies and learning methodologies (F5).

Cooperation between institutions and people gradually generates moments of reflection (F6, F9), human development (nf = 66) and positive changes in behavior and mentalities (nf = 93), giving rise to a sense of well-being and a sustainable future (F4, F8, F10). Most of the studied texts refer to the nature of the pedagogical practices that were promoted, developed and evaluated in the various projects (e.g. Technical Innovations in Blended Learning – TIBL; FabLab SchoolNet; Construyendo la ciudadanía europea a través de la educación mediática; European Learning Environment Formats for Citizenship and Democracy – ELEF; Head in the Clouds: Digital Learning to Overcome School Failure; Teacher Education for Sustainability – TEDS; Eurorobotique; FlipIT! – Flipped Classroom in the European Vocational Education; GATE:VET; Learn4Health and School Network 4.0) geared towards European citizenship (F2). As a result,
a diverse range of opportunities for knowledge, interculturality, inclusion and entrepreneurship are experienced and lived. The evaluation is very positive and the testimonies are very encouraging.

Erasmus+ encourages the development of a humanist profile, demystifying cultural barriers and stereotypes, some of which are still inculcated in many of us. Hence the need to better understand how relevant and emblematic it is to live an experience of this nature. From the triangulation of the data, it is possible to see that Erasmus+ offers the opportunity for cultural, educational and relational exchange, playing a key role in building European citizenship by mobilizing knowledge, skills and attitudes that generate greater and better human development.

Effectively, Erasmus+ promotes and facilitates a better understanding of interpersonal relationships, valuing democratic, humanist principles, through conscious, active, responsible civic participation, affirmed by greater involvement, knowledge and dialogue between students, teachers and institutions (European Commission, 2023, p. 90). It is an interactive, entrepreneurial and continuously engaging programme, in which students learn above all to be more autonomous, reflective and much more creative. A trajectory that has enabled cooperation and the “integration of different values and ways of thinking, acting and interacting” (F4) and which includes different fields of knowledge (e.g. education, science, health). At the heart of this is the desire to stimulate and develop collaborative learning based on projects and bringing together learning communities across generations and cultures.

To sum up, all this enables us to say that the main pedagogical practices identified under Erasmus+ are in line with the central analysis (Paniagua & Istance, 2018; Paseo, 2017) and, as such, are the practices considered to be pedagogical innovation (Paniagua & Istance, 2018), as they use pedagogies in which the student is the main protagonist, in the construction of dialogic, intercultural learning and greater involvement, participation, especially in terms of experiential (nf = 87), integrated (nf = 65) and interdisciplinary (nf = 39) learning (Novak et al., 2018; Rocha & Orvalho, 2019).

It is through academic mobility that a different approach to teaching and learning is promoted, as Amorim and Cosme state (2017) as well as Villalba and collaborators (2018). Aguilar and Pavón Vázquez (2017) and Sá and collaborators (2021) note, however, that it is the new perspectives of and on the world that carry within them the opportunity to “value respect for human dignity, the exercise of full citizenship, solidarity with others, cultural diversity and democratic debate” (Paseo, 2017, p. 15, own translation).

The underlying motto is one that is imbued with the principles of school for all, and has to do with the imperative need for all of us together to be able to respond fully to the multiple challenges of today’s world and to sustainable ways of life that respect the environment and the well-being of and for all of us, as reiterate Fisker and Clausen (2017).

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