Chapter 10
Examples of Good Practices in Erasmus+ Projects that Integrate Gender and STEM in Higher Education

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Abstract The European Union promotes the realization of European projects through different programs, among which the Erasmus+ program stands out in the educational field. These projects deal with different topics, including gender and STEM in the different educational sectors, Higher Education included. In addition, the projects are cataloged and can be searched and consulted in the Erasmus+ Project Results Platform that allows filtering and choosing by educational sector, project type, by specific tokens, as well as selecting those that are labeled as success stories and/or good practices. Knowing which have been the projects that have been considered the most outstanding, successful, and/or good practice in the field of gender and STEM in Higher Education and finding the aspects that characterize them can be a source of inspiration to deepen in this field of research based on current experiences that have worked. This is the purpose of this chapter, which shows these outstanding projects as references in the field of STEM empowerment among women in Higher Education.

Keywords STEM · Gender · European Projects · Erasmus+ · Education

10.1 Introduction

The society in which we live is diverse and as such it is necessary to meet the educational needs of all groups and ensure that everyone feels included. It is necessary to train all citizens to be competent for the development of an adequate professional and personal life. This entails working on equity and diversity in our educational centers and is one of the principles of the educational law in Spain (BOE, 2020). In addition, this same law also considers gender equality as one of the objectives in all

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educational stages. UNESCO has defined a series of Sustainable Development Goals (SDGs) (UNESCO, 2021a) the fourth being for education. Within this objective, two of the goals seek equity, access, and democratization of higher education; the third and five targets are linked with gender equality, guaranteeing an inclusive and equitable quality education, and promoting lifelong learning opportunities for all. Specifically, gender equality is a cross-cutting objective present in most of the SDGs. The data compiled by UNESCO, through its Institute of Statistics (UNESCO, 2021b) shows a gender gap in professional careers related to Science, Technology, Engineering and Mathematics (STEM), both in an educational and professional context, therefore achieving work to reduce these differences is a great social challenge. These SDGs targets (UNESCO, 2021c) are as follows:

> "Target 4.3: By 2030, ensure equal access for all women and men to affordable quality technical, vocational, and tertiary education, including university" (p. 1).

> "Target 4.5: By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous people, and children in vulnerable situations" (p. 1).

An example of this need and challenge, regarding STEM and gender, is shown in compass brief number 13 published by the IEA in April 2021 on female science and mathematics teachers (Hastedt et al., 2021). This publication points out the need to make STEM teachers aware of their strengths and develop their self-efficacy based on the following findings:

> "There is no direct relationship between the gender of the teacher and students' performance in science and mathematics. Grade 4 and 8 students taught by female teachers perform just as well in science and mathematics than their peers taught by male teachers. Yet, results show that female science and mathematics teachers have less self-efficacy than their male counterparts" (p. 1).

The European Union also works to achieve the SDGs and has among its goals the improvement of education, achieving greater equity, and attention to diversity. To this end, among other things, it promotes the implementation of European educational projects with funding aimed at improving teaching–learning systems (UE, 2021a), the Erasmus+ Programme (UE, 2021b) stands out in this area. This program finances educational projects at all levels, including higher education, so that institutions implement and explore new educational methodologies with projects that have among their priorities: inclusion and diversity, digital transformation, the environment and the fight against climate change and participation in democratic life.

In the Erasmus+ programme there is a database, known as Erasmus+ Project Results Platform (E+PRP) (UE, 2021c), in which a compilation of all the funded projects is available, identifying those that have been classified as good practice or success story. Therefore, reviewing successful projects in any field, and specifically in STEM and gender, can be of great help to see what practices are helping to reduce the gap in this educational and professional field.

Knowledge of successful projects can serve as a beacon to achieve, on the one hand, what is working well in other institutions and, on the other, detect possible needs to expand the scope of research.

For the revision of the projects in E+PRP, the methodology of systematic reviews of research projects (García Holgado et al., 2019b, 2020c) is really useful because it provides a perfect approach to analyze projects because it gives an overview of current trends, allowing the identification of gaps and opportunities. This methodology is the one that is being used in the research on "Methodological guide for the successful use of digital technologies in education: Improving learning through European educational projects" (Alonso de Castro & García-Peñalvo, 2020a, 2020b, 2021) in order to collect information on successful projects within the framework of Erasmus+ related to eLearning and the same technique is applied for the sample of projects that are presented in this chapter.

Within the framework of the GRIAL research group, in which the development of this chapter is carried out, some contributions that seek to understand the gender gap in higher STEM studies both in Spain and in Europe stand out (García-Holgado et al., 2019a, 2020a, 2020b; Verdugo-Castro et al., 2019, 2020a, 2020b, 2020c). There are several analyses that include intervention proposals, interviews, and case studies that give an idea of the importance of this topic for the group. Therefore, it is considered a topic of great relevance in the group, and this justifies analyzing practical examples of projects that have been considered good practice. For this reason, this chapter provides specific cases of projects classified as good practice in Erasmus+ Projects Platform and that have worked on STEM and gender in higher education so that we can take note of the factors that have been useful in the institutions involved. At the same time, the situation of projects of this type within the framework of Erasmus+ and the possibilities of future work will be analyzed.

In the analysis of projects that meet the established criteria (Erasmus+ , Good Practice, higher education, STEM, and gender), at this moment, a total of 5 projects have been found out of the total of 19 existing linked to STEM and gender and the more than 35.500 of higher education projects in Erasmus+ . In addition, there is another project labeled as good practice in higher education, which also works to improve the attraction to STEM careers, which although it is not focused on women, can be considered useful for them as well. Therefore, below we are going to see these six projects with the information gathered from E+PRP and the projects websites, followed with the main conclusions.

10.2 Project 1—Augmented Reality for Science Education

This project has been coordinated "Via University College" and had five partners: "University of Manchester", "Skolen I Midten", "Fundación Pública Gallega centro Tecnológico de Supercomputación de Galicia", "Hogskolen i Oslo og Akershus", and "Centro Público Integrado O Cruce". A total of six partners from higher education, IT and education, and the school sector from different countries (Denmark, Norway, United Kingdom, and Spain).

It has to do with improving the attractiveness of STEM subjects in schools. It is a transversal project that covers different educational levels, not only Higher Education,

since as can be seen in the composition of partners there are both Universities and Foundations and educational centers. Therefore, it is a multi-stage project, in which Universities play an important role in researching results, but which is also applied in non-tertiary level schools.

In addition, it does not focus on the stimulation of women in the STEM field but tries to improve the attractiveness toward these areas in all sexes. As such, it is also valid for women, who through the use of technology, in this case augmented reality (AR), will be encouraged to see science from a practical point of view and will be encouraged to choose careers and professions related to the field of study. In short, it tries to raise awareness and promote a taste for STEM from the base of education to instill it from an early age. All the information about this project can be found on: https://ec.europa.eu/programmes/erasmus-plus/projects/eplus-project-details/#project/2014-1-DK01-KA200-000773 as well as on the project webpage http://www.ar-sci.dk/.

10.2.1 Project Context

This project focuses on meeting the need to work on new educational approaches and methodologies through new technologies as a means of improving teaching–learning processes. Specifically, it focuses on issues related to the teaching and learning of science and, in addition, to the teaching of the necessary skills in the twenty-first century in educational centers.

It is based on the fact that science subjects pose problems or obstacles for a large number of students in European schools. Science subjects are often considered "difficult" and require high levels of abstraction. This has led to a decrease in the interest of young Europeans in scientific subjects, both during their formative stage and as professional opportunities. The main goal of this project is that science education can be reinforced through the use of AR, through active and collaborative learning, as well as the interaction and visualization of central scientific knowledge. Furthermore, the technology is believed to have matured enough to introduce it into school contexts and involve teachers in the design and production of AR materials.

10.2.2 Project Objectives

The main goals of the project are to improve the quality of science teaching and learning processes with innovative methodologies; increase the motivation and attitude of students toward science education; achieve a student-centered model for science education, facilitating inquiry-based teaching, collaboration, and active learning; and strengthen and improve teaching and learning through technology, increasing the attractiveness and didactics for students and teachers.

It seeks not only to increase student participation but also to get teachers sufficiently trained in new technologies so that they get more involved with their students and this has been done using augmented reality technologies.

10.2.3 Project Results

The methodology developed in the project presents a student-centered approach. From the tests carried out in the educational centers, a high motivation on the part of the students in the use of technologies such as AR has been detected and this helped them to understand the most abstract concepts. In addition, it was possible to attract more attention to STEM topics. Specifically, 76% of the students stated that they learned through collaboration with their peers and 60% observed a different role in their teaching staff. After the third round of testing in educational centers, 75% of the students, who participated in the tests, indicated that their interest in STEM subjects had increased.

The project has made it possible to foster collaboration between schools, teachers, students, teacher trainers, researchers, and developers of educational technology.

The main results for this project have been: a user guide, webinars on AR in science teaching, needs analysis scientific articles, materials development, guide for the uses of AR in science education, 6 Piloting and pilot reports, and a full list of AR-materials.

10.3 Project 2—Engendering STEM

The project is a partnership coordinated by "City of Glasgow College" with five partners: "Instituto Específico de Formación Profesional Superior Miguel Altuna", "Stichting VHTO" and "Edinburgh Napier University" from three countries: United Kingdom, Spain, and Netherlands. All of them have a link with the promotion of gender equality within the STEM field and belong both to the field of education at different educational levels and also in the workplace.

The focus of the project is on the growing gap in professional training and employment in the Science, Technology, Engineering, and Mathematics fields, within the framework of the European Union. In addition, it highlights that female participation in the labor market is very low in these areas. Therefore, it seeks to develop a qualified workforce in STEM to meet the demands of the labor market by increasing and involving the female population. This implies overcoming the barriers perceived by this population. One of the keys is to empower employers and teachers to improve their work practices in order to achieve more inclusion and attractiveness on that field. The information of the project is compiled on: https://ec.europa.eu/programmes/erasmus-plus/projects/eplus-project-

details/#project/2017-1-UK01-KA203-036834, and the project website https://www.engenderingstem.co.uk/).

10.3.1 Project Context

The main goal of the project is to recognize the factors that distinguish small and medium-sized companies (SMEs) from STEM that have achieved equality and diversity in the workplace and those that still have large differences. Specifically, it sought to identify effective strategies to improve gender equality in institutions, as well as the different forms and stages of participation.

As an added target of the project, it highlights that it sought to achieve a positive impact on the hiring of women in the STEM sector, especially in the area of SMEs. Additionally, they proposed to support the personnel selection and talent retention processes in this area. In turn, provide educational resources to improve understanding and knowledge of relevant issues in the field. All with a free or low-cost flexible educational content approach.

To achieve this, the project has worked on the development of a self-assessment toolkit, together with some good practice guides in increasing gender equality, as well as a tailor-made training program.

10.3.2 Project Objectives

The most outstanding objectives of the project have been:

- Achieve better knowledge and awareness of gender equality within the STEM sector by training as many participants as possible.
- Involve agents and institutions related to the field of work in online activities throughout the project, fostering interactions on social networks, participation to create best practice guides and other project results.
- Seek support from SMEs to test and assess the validity of the Toolkit for the self-assessment of gender equality, reviewing the hiring, retention, and promotion policies and practices, as well as in the writing of the personalized evaluation report according to their specific needs.
- An additional objective was to increase the average number of women hired by participating SMEs.

10.3.3 Project Results

The project delivered has developed three key products:

- Publication of the research carried out on gender equality, as well as the guides of the best practices detected.
- Online Diagnostic Toolkit for Self-Assessment of Gender Equality.
- Blended learning training program.

Through these products generated in the project, the following milestones have been achieved:

- 1,191 participants have been trained in the STEM sector on actions to be carried out for gender equality in this field.
- Involve 2,587 institutions for the development of resources, guides, and interaction in social networks and website.
- Support 56 employers of STEM SMEs in the use of the self-assessment Toolkit for practices and policies applied in relation to gender equality in their companies.
- 47% of the employers who participated in the project have increased the number of women hired in their organizations.

In addition, the project guarantees long-term sustainability through the development of networks of employers, trainers, teachers, and researchers, as well as the implementation of all the tools generated within the procedures used by the project partners.

10.4 Project 3—Innovative Women Entrepreneurs of the Future

This project is a strategic partnership in the field of Higher Education in which the coordinator is "Bursa Technical University" that worked with five partners, "Politecnico di Torino", "I3P—The Innovative Companies Incubator of Politécnico di Torino", "Silesian University of Technology", "Technopark Gliwice", and "KOSGEB—Small and Medium Enterprises Development Organization". The organizations are from three different countries: Turkey, Italy, and Poland have varied profiles of the educational and business field connected to STEM. The information of the project is available on https://ec.europa.eu/programmes/erasmus-plus/projects/eplus-project-details/#project/2016-1-TR01-KA203-035231 and also on the project website https://www.innowoment.org/.

Additionally, this project is included on the research work "Methodological guide for the successful use of digital technologies in education: Improving learning through European educational projects" (Alonso de Castro & García-Peñalvo, 2020a).

10.4.1 Project Context

The project is based on statistical data on women entrepreneurs in Europe which indicates that women only represent one third of all entrepreneurs in science and technology sectors. This in turn has to do with the proportion of female students studying science, technology, engineering, and mathematics in higher education. Precisely for this reason, among the priority areas for higher education institutions of the EU Modernization Agenda is the stimulation of entrepreneurial capacity through learning in interactive environments and improving their ability to participate in the creation of companies.

10.4.2 Project Objectives

The following objectives of the project stand out:

- Raise awareness about the gender gap in technological fields and encourage more women to study Science, Technology, Engineering, and Mathematics.
- Train in transversal and entrepreneurial competences, such as critical thinking, problem solving, creativity, analysis, knowledge of digital tools, and foreign languages. For which, courses, seminars, workshops, and mobilities for learning will be developed within the framework of the Erasmus+ programme.
- Develop training materials for all potential entrepreneurs.
- Establish a roadmap to achieve an efficient business ecosystem so that potential entrepreneurs can participate in the training network, mentoring and with the support they need.

10.4.3 Project Results

The results of the project have been compiled into two books.

- A book on ‘Experiences of innovative women entrepreneurs of the future’, which is a complete guide not only for women, but also for all people who want to start their own companies.
- An electronic book entitled ‘A roadmap for a successful incubator’ has also been implemented, which seeks to serve as a manual not only for future entrepreneurs, but also all institutions that wish to support business creation.

Apart from those books, video clips have been developed in order to encourage more female students to study Science, Technology, Engineering, and Mathematics degrees, as well as to promote the creation of their own companies. Additionally, it was provided an Online Learning Toolkit.

10.5 Project 4-Euro4Science: Exploring "CSI Effect" and Forensic Sciences to Boost the Appeal of Science to Young People and Reinforce Interdisciplinarity in European High Schools

The project is a partnership coordinated by the University of Aveiro (Portugal) and in which two schools (in Portugal and the United Kingdom), an NGO (Bulgar-ia) and 2 SMEs (Portugal and Poland) participated. Institutions with varied profiles that add value to the purposes of the project.

The project focuses on the problems derived from early school leaving in addition to the need to improve the attractiveness of science, technology, engineering, and mathematics for young people, which is key to having people trained for the needs of the world of work. To do this, it takes advantage of the fact that young people are particularly open to the Crime Scene Investigation (CSI) iconography to use this theme as a strategy to reduce early school drop-out, as well as to promote cultural exchanges and interdisciplinarity to improve social inclusion. The information of the project is available on: https://ec.europa.eu/programmes/erasmus-plus/projects/eplus-project-details/#project/2014-1-PT01-KA200-001012 and the project website http://euro4science2.eu/.

10.5.1 Project Context

Euro4Science's main objective was to implement innovative educational practices, tools and methodologies to improve the quality of the teaching–learning process with regard to the attractiveness of science-related subjects and careers.

10.5.2 Project Objectives

Among the most relevant objectives of the project are as follows:

- Encourage interdisciplinary pedagogical approaches, with the collaboration in the implementation of an Educational Toolkit in Forensic Sciences.
- Participation of teachers in experimental education by testing and using the Toolkit and participating in various activities of the project.
- Increase the motivation of European students toward culture and scientific professions through participation in scientific activities with experts.
- Contribute to reducing early school leaving due to greater motivation for teaching and a broader knowledge of possible career options, including those related to scientific fields.

- Pay particular attention to the messages conveyed to girls, to increase attractiveness toward science subjects and degrees in science-related fields.

10.5.3 Project Results

Euro4Science, managed to increase the attractiveness of scientific subjects through motivational activities linked to the "CSI Theme", as well as involving teachers and students of different ages at an international level. This was achieved through:

- A forensic science education toolbox in 4 languages (English, Portuguese, Bulgarian, and Polish) was implemented and tested.
- 3 "CSI weeks" with motivating activities for students and with the participation of the entire educational community.
- Workshops for teachers; exchanges between groups of students and international conferences "CSI @ school".

10.6 Project 5—Early Identification of STEM Readiness and Targeted Academic Interventions

This project is a partnership led by the University of Leuven (KU Leuven) with three key partners (Hamburg University of Technology [Germany], University of Žilina [Slovakia] and KU Leuven [Belgium]), in addition to three supporting partners (Budapest University of Technology and Economics [Hungary], Aalto University [Finland] and University of Birmingham [UK]) and a partner of the European network (European Society for Engineering Education—SEFI). The three key partners are STEM education research experts and the supporting partners provided relevant information and carried out case studies within their universities. In turn, having the SEFI network has made it possible to effectively disseminate the results throughout the project. As in the rest of the projects this variety of institutions enrich the work and provides a better impact in all the stakeholders.

The E+PRP URL for the project is https://ec.europa.eu/programmes/erasmus-plus/projects/eplus-project-details/#project/2014-1-BE02-KA200-000462 and more detail information could be found on the project website https://iiw.kuleuven.be/english/research/readystemgo.

10.6.1 Project Context

The project seeks to promote scientific and technological development in Europe through adequate training in secondary and higher education. Although it is true that there has been an advance in the enrollment of science, technology, engineering, and

mathematics studies in most European countries, dropout rates are high, and it is necessary to work on the retention of students in these programs. Hence, the main goal of this project is to increase student retention rates in higher education STEM studies by early identification of those students at risk of dropping out. In addition, gender equity and equal opportunities are among its priorities.

10.6.2 Project Objectives

To achieve the main goal of the project, three objectives were established:

- Identification of the key competencies necessary to successfully pass the first year in a STEM program.
- Development of a comprehensive inventory with diagnostic tests that allow measuring different competencies, with an assessment of their predictive validity.
- Research on which intervention tools are best suited to help at-risk students and assess their efficiency.

10.6.3 Project Results

The first result was the holding of focus group discussions of first-year students, and some results were, for example, that first-year students found it difficult to adapt to the demands of higher education, as well as problems with understanding when they should apply reasoning based on formulas. Afterward, a quantitative survey was carried out on the experience of the first year and the obstacles encountered with 1,451 students from all the partner universities of the project.

A Learning and Study Strategies Inventory (LASSI), which also contained questions on educational background, was then provided to more than 9,000 first-year students and the results were linked to performance at the end of the first year. Students with poor time management skills were at higher risk of low performance or dropping out at the end of the first year. Educational background also had an impact on performance.

In addition, a Science Learning Attitudes Survey was conducted measuring the epistemological beliefs of more than 700 first-year students. The results were that 48% of the students indicated that they applied strategies based on formulas when solving engineering problems. Additionally, it was created an inventory with more than 100 diagnostic tests and concept inventories to measure academic and non-academic skills, all with a focus on STEM.

10.7 Project 6-Robotics Opportunities (to Foster) STEM Education

The project is based on an association led by "Universita degli Studi di Firenze" with the collaboration of eleven partners of multiple profiles and countries: "Ankara Ozel Tevfik Fikret Anadolu Lisesi", "Iis Ferraris Brunelleschi Empoli", "Instituto Politecnico do Porto", "Middle East Technical University", "Tartu Kivilinna Kool", "Istituto Comprensivo Don Lorenzo Milani", "Technische Universitaet Graz", "NPO Robootika", "Istituto Tecnico Tecnologico Statale Silvano Fedi Enrico Fermi.

Tartu Ulikool"and "Ufficio Scolastico Regionale per la Toscana".

The ROSE association is based on improving prospects given the current crisis context and youth unemployment in Europe, which contrasts with the difficulty of companies to hire engineers, technologists, and scientists. Therefore, the project addresses the improvement of STEM education using robotics and addresses the needs to reduce the gender gap by involving all genders, with special attention to women, and making science more attractive for all. The E+PRP URL is https://ec.europa.eu/programmes/erasmus-plus/projects/eplus-project-details/-project/2014-1-IT02-KA200-003,660 and the project webpage http://www.roseproject.eu/.

Furthermore, it is one of the projects included on the research work "Methodological guide for the successful use of digital technologies in education: Improving learning through European educational projects" (Alonso de Castro & García-Peñalvo, 2020a).

10.7.1 Project Context

The project focuses on improving the level of key competences, paying special attention to their relevance to the labor market, as well as promoting quality improvement, excellence in innovation and internationalization at an educational level, through increased transnational cooperation. All this on the basic objective that is based on enhancing the attractiveness of STEM disciplines using robotics and automation. It worked to make STEM disciplines more attractive to students from an early stage by informing them of the professional possibilities that can be offered in this area. On the other hand, focusing on the field of robotics and automation, will encourage them to continue studying. Gender, minorities, and accessibility issues are also tackeled, seeking to cover a social need, since participation in STEM disciplines is not sufficiently balanced.

10.7.2 Project Objectives

The main objectives of the project are:

- Work at an educational level to improve employability and competitiveness through better training of the population in science, technology, engineering, and mathematics.
- Empower and improve the attractiveness of STEM subjects and professions at the school level.
- Development of student competition models, with special attention to younger students to whom these initiatives are not suitable, looking for alternatives in those cases.

10.7.3 Project Results

The products resulting from the project have been:

- A questionnaire and survey to analyze the starting point. The answers to the questionnaire are available on E+PRP and the project website.
- A questionnaire at the end of the project to measure the results and impact on the attractiveness gained in STEM areas within students. Answers are also available on E+PRP and the project website.
- The design of a vertical Curriculum in Educational Robotics for Italian Schools developed in Italian.
- Didactic Units and assessment rubrics for the vertical Curriculum in Educational Robotics.
- The design of a Vertical Curriculum in Educational Robotics for Schools—Summary in English.
- A video for the dissemination of ROSE Project.
- Rubric for assessment of class activity.
- Analysis report.

10.8 Conclusions

This chapter has presented six projects classified as good practice in the Erasmus+ project results platform that are related to STEM and five of them that also work on gender-related aspects. The projects are associations of institutions with different characteristics: Universities, non-tertiary educational centers, NGOs, SMEs, Foundations, etc. This variety of institutions provides great value since it allows working on important aspects of STEM and gender such as improving the attractiveness of STEM subjects and degrees through innovative methodologies, tools, seminars and

workshops, networks, etc. as well as increase the number of women working in STEM.

All the projects analyzed on this chapter use of cutting-edge technologies such as augmented reality, robotics, technology in the forensic field, and online resources.

The projects also work on aspects related to improving attractiveness of STEM, entrepreneurship, and the reduction of early school leaving, key aspects to achieve an educational system more prepared to have trained people to meet the needs of the world of work.

Some characteristics common to all these projects, and that deserves to be highlighted as a reference for other projects, are as follows:

- The projects analyzed seek to work on motivation toward STEM professions within the educational field, creating interesting materials and resources for students from an early stage as well as guides and support materials for teacher training in improving teaching–learning processes.
- All have developed tangible resources that are available on their websites to the entire educational community. The fact of providing the materials in an open way and disseminating them among the stakeholders increases the impact capacity of the projects.
- The resources developed are aimed at the students and teachers who are going to use them, a fact that favors their implementation within the study programs of educational institutions as common tools. This will help to go on using them beyond the Erasmus+ funding period.
- All the resources implemented have been tested with participants related to the area of research: students, teachers, educational centers, and experts within the scope of STEM. Involving people identified as having a need for such resources or who have problems with their studies, and carrying out tests of their development is very useful to measure the degree of validity of the model that is developed. In addition, it guarantees that their use and improvement are maintained over time.
- Technology and innovation are important factors in all projects, as well as novel methodologies that can attract the target audience of each research. Technology not only helps in motivation but also allows the teaching–learning processes to be adapted to the real needs of everyone.
- Another notable feature is the networking with educational institutions and other organizations that complement and help to implement new technologies or provide experts in the field of study. Networking encourages collaboration, exchange of good practices, and, at the same time, it favors dissemination among peers, increasing the impact and real implementation of the products that are developed in the projects within the institutions.
- Online learning, either with eLearning or in a blended mode, is a general trend in all the projects reviewed. In fact, two of the projects included in this sample of good practices are linked with eLearning and are part of the research "Methodological guide for the successful use of digital technologies in education: Improving learning through European educational projects" (Alonso de Castro &

García-Peñalvo, 2020a, 2020b, 2021), research in which good practice projects in Erasmus+ are also analyzed.

Additionally, in relation to the number of existing Erasmus+ projects in higher education on the subject discussed in this chapter, there is a lot of room for innovation and development of educational resources through the Erasmus+ Programme in this educational field within the areas of STEM and gender. Only 19 Higher Education projects have explicitly worked on STEM and gender and knowing that there are more than 35,500 Erasmus+ projects in Higher Education.

In summary, even knowing that there are only few examples of good practices available in higher education under the umbrella of Erasmus+ , the ones that exist are a good example that serves as inspiration to review those that have had a great impact and attend the needs of higher education institutions in the field of STEM and gender.

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