

Women in the Stone Sector: Challenges and Opportunities from an Educational Point of View [†]

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Abstract: In the era of Industry 4.0, gender discrimination still exists especially in be male-dominated workplaces, such as the stone sector. Combating gender discrimination in the stone sector is a demanding task that calls for integrated planning and targeted interventions. This paper presents the results of the “WinSTONE” Erasmus+ project, aiming at the development of suitable training tools for the integration of women in the stone industry. Based on the main challenges, as well as on the emerging opportunities for women in the sector, a training methodology is being developed to deal with the actual needs.

Keywords: gender equality; stone sector; educational needs



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1. Introduction

The stone sector represents a worldwide increasing market. However, the female workers are in the minority in the whole value chain of this industry due to lack of a gender integration.

In the EU-27 countries, women's employment in the mining and quarrying sector is estimated at approximately 13.8% and in the construction sector at approximately 9.8% [1], presenting variation from country to country. In addition, job positions offered to women are different from the ones offered to men, resulting also in lower-paying jobs for women. In the EU in 2018, women earned 14.8% less than men when comparing their average gross hourly earnings [2]. Differences exist even in the same employment subject. The largest differences in hourly earnings are observed in managers, a position held by about one-third of women in the EU [2].

On the other hand, in recent years, the percentage of women completing higher education in the EU is higher than that of men [2]. Although one should expect that this would result in the elimination of discrimination in both education and the labor market, in the EU in 2019, only 41% of scientists and engineers are women [3]. In fact, the percentages in engineering are even worse. In the specialty of mining engineering, less than one-quarter of graduates are women, while in the specialty of civil engineering, the percentage of women is a little higher (Figure 1).

As indicated by the numbers presented in Figure 1, the professional orientation of women still remains mainly toward the theoretical sciences or in fields that are more suitable for women, as they are dictated by social stereotypes. Importantly, one of the challenges the stone sector in the 21st century is facing is to highlight the issues of gender equity and female labor participation in a sector in which women should have an increasing presence. The WinSTONE project claims that integration of women in the stone sector is possible and also effective for both women and the stone industry.

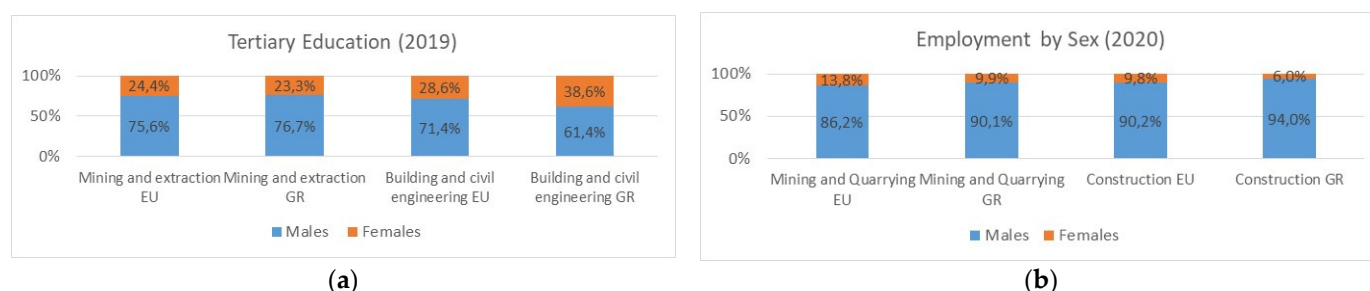


Figure 1. Percentages of women (a) in tertiary education in 2019 and (b) in employment in 2020 (down). Source: [1,4] (authors' own editing process).

2. The Training Needs of Women

An approach to the question of the presence of women in the stone sector requires a definition of the term “educational needs”, which, according to Knowles [5], is what one should learn for his own benefit, the benefit of an organization or society. The term reflects the gap between an existing and a higher level of qualifications required for his effective performance, as defined by himself or in the framework of the organization or society in which he belongs.

In this particular case, the training needs for the integration of women in the stone sector could be divided into two main areas. The first is the acquisition of deep knowledge in gender equality issues, and the second is the development of skills that will create opportunities in the whole value chain of the stone sector, from quarrying to the retail store stage.

The challenges for women's employment in the extractive industry, in general, and in the stone sector in particular, are the social stereotypes, the low rate of women in leadership roles, the limited flexibility to counterbalance family responsibilities, and the increased discrimination and harassment [6].

The current workplace culture with regard to the above challenges and the real facts that could promote women's empowerment in the stone sector are summarized in Table 1.

Table 1. Challenges to deal with in order to promote gender diversity in the extractive industry.

Challenges	Workplace Culture	Facts Reinforcing Diversity
Pervasive stereotypes	Only men can work in risky, dirty, and difficult environments. The stone industry has a masculine identity since it requires physical strength. Thus, it is not a place for women. This outdated stereotype continues to undermine the capabilities of women and deter women from seeking employment in the sector. Women have been traditionally underrepresented in fields such as engineering and geology, meaning that there has been a smaller pool of women with the technical skills to work in the wider area of the mining sector [6].	In the era of industry 4.0, the ongoing automation of traditional manufacturing and industrial practices and the use of smart technology, restricting physical effort, could serve as a positive catalyst for women's engagement in the stone sector. Moreover, evidence has shown that when companies recognize the opportunity of a more diverse workforce and supply chain, they can increase productivity, reduce costs, and strengthen social license to operate [7].
Low rate of women in leadership roles	The mining sector represents some of the lowest rates of women in leadership, at only 7.9 percent of women on the board of directors in the top 500 mining companies globally [8].	The experience has shown that including women in managerial positions has a positive impact on social development, workplace culture, and productivity. For this reason, many multinational mining companies are setting targets to increase women in managerial and executive roles [6].

Table 1. Cont.

Challenges	Workplace Culture	Facts Reinforcing Diversity
Limited flexibility for family	The extractive industries do not often promote a family-friendly workplace. This barrier tends to be more widely felt by women with increased family responsibilities. Due to the male-dominated culture of the sector and the often-remote locations, demanding absence from home and long shifts, women with families often cannot negotiate employment opportunities in the extractive industry [6].	Research has shown that increasing family-friendly policies, such as childcare, parental leave, and health policies can be cost-effective interventions [9]. The implementation of a number of work-life policies can lead to greater gender equality [10], creating opportunities for women's career development and reduced gender pay gaps [10]. Managers can be confident that work-life programs are likely to translate into increased employee productivity, and the costs associated with work-life programs should be covered by such increased productivity [11].
Increased discrimination and harassment	Women report higher rates of discrimination and harassment in the extractive industries than their male counterparts, including verbal, physical, and/or sexual harassment, ranging from intimidation to sexual violence against female employees [6].	Dealing with this issue is complex in every working environment. However, the awareness of the need to incorporate harassment and gender-based violence policies and training as a prerequisite to creating supportive working environments [12], as well as the provision of leadership opportunities for women, would pave the way to address these risks.

Opportunities for women in the whole value chain of the stone sector should not include only “female-typical” work tasks but also jobs with higher responsibilities.

The primary goal must be to limit prejudice and stereotypes that place men and women in opposite ends and even under the umbrella of inequality in favor of men by using reasoning based on logical argumentation. Thus, it will be proved that these opinions lack rationality and scientific argumentation. Opinions that place such distinctions on biological, or brain-structure-related factors are now scientifically unfounded [13] except for some body-structure-related factors (e.g., muscle mass) that could reasonably cause some differentiation between men and women tasks. The use of research and documentation through examples could play a key role in contributing to this direction.

More precisely, it would contribute to deconstructing the notion that engineering [14] and technology [15] are sectors exclusively for men, or that only men can work in dangerous and difficult environments that is the prelude to excluding women from the forefront over time [16].

The historical reference to the women's emancipation movement and the use of historical examples with special reference to women who defended the obvious with their attitude, is likely to contribute to developing feelings of intimacy among the trainees who study the aforementioned cases. The selection of incidents and examples from the stone sector or other related fields, in which women take action, could act as inspiration for the trainees. A great example could be the first women engineers, who had a presence in this field but also took leading positions.

In addition, such a program should aim at both male and female employees. Gender equality is not a women's issue. Particularly on the issue of gender division of labor, emphasis should be given to strengthening the two genders' common characteristics among employees. Dealing with the same subject, as well as highlighting common problems, common experiences, everyday life, and perhaps interpersonal relationships, should be used to weaken beliefs based on gender discrimination.

Teaching should focus on highlighting the differences between “sex” and “gender” in order to dissolve existing disorientation but also to change existing attitudes, social values, and roles associated with gender [17]. Women should be aware of the advantages that their engagement could offer to the stone sector, boosting in that way their self-confidence and their self-esteem, and learn how to promote themselves. Men should also be aware of the advantages and be ready to accept women's involvement.

The other vital objective of the training programs is to set all the specific qualities necessary for women to be competitive in the sector. More specifically, the training program should provide the following features:

1. The necessary historical and theoretical background so that the trainees obtain the required knowledge about their professional subject that better be taught in a wider frame than inside the strict lines of the position's requirements. The industry should be studied as a whole while emphasizing its place during the historical and social evolution. This background could help trainees build their professional profile, be efficient, and be flexible in undertaking work tasks.
2. All the skills needed for successful development in their professional field, and to ensure the smooth operation of the business. Nowadays, companies' operations are becoming more and more digital, which necessitates strong computer skills, software knowledge, and analytical skills [18]. These skills could also enhance communication skills and promote networking, which are also imperative.
3. Technical knowledge and skills of all stages of the value chain, from quarry planning production to distribution of final products in the market (value chain). Sales and marketing strategies are an integral part of the value chain of the stone sector.
4. The self-improvement and continuous development of employees by cultivating skills such as being a good listener, speaker, and collaborator, having empathy, flexibility in thinking, strategic thinking skills, creativity, and the ability to inspire and persuade.

More specifically, the sector's training centers and companies should provide gender-based training to develop general skills, taking into account cultural norms for women that have a relatively low level of baseline knowledge. Moreover, they have to address women's rights, especially in the areas of women's health and safety, unpaid care work, and violence against women and girls. At the same time, they should provide technical and leadership training to women in order to promote career development.

The digital transformation of the sector could be a key point in women's engagement, offering also flexibility in working hours. Although significant steps have been made, women even with a high level of education lag behind men in ICT skills, according to the data of the European Institute for Gender Equality [19]. Thus, emphasis should be given to ICT skills and new technologies, which can unlock remarkable opportunities that need to be grabbed by women. In fact, women can play a leadership role in this digital transition.

Among the key areas for an effective training program for women is the development of communication skills. Women must learn the tools to influence at all levels, from delivering presentations to chairing meetings in a male-dominated audience. They should also learn to communicate career goals to senior leaders. Taking into account that women consistently cite tension between work and personal responsibilities as a barrier to advancement, the issue of work-life balance should be included in career management planning. Training in this area should include guidance on ways to navigate responsibilities and communicate effectively about personal and professional needs [12].

3. Trainers' Characteristics

The task of tutors, who shoulder the burden of training the staff in sectors such as the abovementioned, is not easy, but it is of very high importance. As regards adult education, the additional difficulty arises from the fact that the trainees, as well as trainers, are people with a well-established educational and value system, making it demanding enough to influence their perception. This should be one of the primary factors to be taken into account when designing educational programs. Thus, a prerequisite for the successful outcome of the program is of course the trainer himself to be a carrier of gender equality perceptions [20].

Encouraging the active participation of men and women in the educational process will clearly facilitate its goals. However, trainers should take into account factors such as the extent of inequality in the public or problematic relationships (lack of trust) between the participating men and women in order to adapt the educational process to the cir-

cumstances. It may be necessary, in some cases, to precede training in groups only for women [21]. The primary role of the trainer should be to create a sense of solidarity and trust among women. Feeling a member of a group makes it easier for them to adapt to the new situation they are facing.

The trainers must also have deep knowledge of the characteristics and the evolution of the stone sector, as well as of the required technical skills and technological advancements, in order to manage to pass this knowledge to the women participating in the training program.

In addition, training staff should understand basic gender concepts (including issues on occupational stereotyping, assertiveness, managing stress and discrimination, building self-confidence, interpersonal skills, and child care issues) and they should comprehend the relevancy and application of these concepts to their work [22]. As a result, trainers should receive a deeper level of gender training, including effective strategies for gender-sensitive teaching. The effectiveness of the teaching staff depends on a variety of factors—namely, the ability to communicate and interact with female trainees, sensitivity to the multiple obstacles facing women trainees, the ability to diagnose skill acquisition level of the trainees, and the ability to adjust the curriculum to reach the particular audience.

The instructor should also behave similarly to a “psychotherapist”. They should be familiar with their audience, interact with them, and study the characteristics of the sample, as well as the general conditions in which the training occurs, in order to adapt both the program’s content and their teaching methods.

4. Design and Evaluation of the Training Program

The WinSTONE project implements a coherent methodology during the design of its training materials based on state-of-the-art approaches in the field of high-level educational materials and tools. Specifically, the following main phases of the ADDIE model, initially designed to be completed in sequential linear order, from analysis to evaluation [23–25], but later modified to follow a circular pattern that repeats itself refeeding its phase aiming to continuously improve the educational program [25,26], were implemented.

4.1. Analysis of the Training Needs

The first step in developing a training program that tackles gender discrimination was to identify and assess the training needs of both men and women participants. The gender-sensitive training needs assessment (organizational, task related, and individual) identified the gaps in the current training initiatives and in the skills of employees in the sector. These gaps were analyzed, prioritized, and turned into the training objectives, as discussed above.

4.2. Design of the Training Program

During the design phase, the specific objectives of the training program for the labor of women in the stone sector were defined as follows: to highlight gender equity issues, to prepare trainers capable of delivering the participatory and gender-based approach in the stone sector, to educate adults with an emphasis on women, to develop specific skills, such as the ICT skills or the soft skills of communication and networking, and lastly, to develop marketing strategies and raise the awareness of policymakers. The goals of the training project are in line with the goals of the WinSTONE project, i.e., expand on existing educational offerings, increase peer-networking opportunities, develop a system of support and mentorship with other women in the industry, create opportunities for women to serve on key industry jobs, recognize emerging and experienced women who excel in the industry, etc. A clear definition of the objectives is crucial since it provides a clear picture of what the training program is trying to reach, and it serves as a baseline that will be used to measure the results of the educational program after its end.

The profiles of trainees and trainers were also defined in this phase, as described in Section 3.

4.3. Development of the Training Program

During the development phase, the learning management system (LMS), a learning platform to be used, was developed. The courses were developed in the form of mass open online courses (MOOCs).

Training options for the integration of women in the stone sector include targeted workshops to promote women's economic and social empowerment (e.g., a train-of-the-trainers workshop), handbooks, site visits (e.g., enterprises and/or industrial facilities of the stone sector run/directed by women that present a high/low percentage of women employees), personal interviews, audio-visual material, and a website. A pool of methods and techniques that might be applied during the workshops consists of lectures, group work, case studies, role-play, reflective interviewing, simulation, and other activities.

4.4. Implementation

This step includes, among others, advertisement/promotion, delivery, documentation of the training course, etc. Advertisement of the training course is necessary to ensure trainees' participation and reach the targeted KPIs and could be achieved via institutional/organizational websites and social media. The final agenda of the training course should also be released at this stage. Attention should be given to complying with GDPR issues.

4.5. Evaluation

Evaluation is the final step in this process. Its importance lies in identifying what training participants actually learn and if training programs actually fulfill their purpose and meet project objectives [27,28]. The evaluation process involves several types of methods and tools. Implementing an evaluation in a training process brings considerable benefits, such as accountability, transparency in feedback, and cost efficiency. Although usually, evaluation takes place at the end of the training program, trainers should consider collecting data throughout the entire process.

One of the most acknowledged and widely used evaluation methodologies is Kirkpatrick's four-level training evaluation model [29]. The Kirkpatrick model uses a comprehensive four-level strategy to evaluate the effectiveness of any training course or program (Figure 2):

- Level 1: Evaluate learners' reactions to training. This is usually measured after training by means of a survey about the overall satisfaction of the participants with the learning experience;
- Level 2: Measure what was learned during training. This is accomplished by utilizing assessments aimed at measuring the degree of change in knowledge and skills after the training program;
- Level 3: Assess whether or not (and how much) behavior has changed as a result of training. Ideally, this is measured by workplace observations and comparing 360° reviews before and after training;
- Level 4: Finally, it is very important to evaluate the impact of participants' training program on business results. It is common to measure productivity, quality, efficiency, and customer satisfaction.



Figure 2. The Kirkpatrick four-level evaluation model [30].

Given that in the WinSTONE project, the training program is targeted at gender equality, we included criteria, questions, methods, and reports that contain gender equality considerations. The evaluation report is based on both qualitative and quantitative data, disaggregated by sex, in order to measure results and long-term outcomes for both women and men. The most widely used evaluation criteria are relevance, efficiency, effectiveness, impact, and sustainability [31]. According to the European Institute for Gender Equality [27], the evaluation process should measure the outcomes of the training program and identify the changes that have occurred as a result of the implementation of it both at the individual and the organizational level.

At the individual level, the evaluation focuses on the following changes:

- Raising awareness about the relevance of gender equality considerations in various policy areas;
- Lowering resistance to mainstreaming gender equality;
- Developing knowledge and skills on how to mainstream gender in day-to-day work;
- Developing competencies on how to use gender equality tools.

At the organizational level, the evaluation focuses on the following changes:

- Implementation of new policies, practices, and activities where gender is mainstreamed;
- Consulting with different actors to ensure that different voices are heard in the decision-making process;
- Use of gender-sensitive language and material within the organization;
- Clearly formulated performance indicators that can be used to plan future initiatives.

As far as the assessment of the training program is concerned, it is required to revisit the aims, objectives, rationale, inputs, and outputs of the program and explore the extent to which the initiative had the desired impact both at the individual and organizational level [27,32]. Moreover, it is important to assess the long-lasting effects of the training program on participants' skills and the organization's operation. The most common assessment tools are structured or semi-structured interviews, questionnaire surveys, focused group discussions, workshops, etc. [33].

To track the performance of the training course in achieving the training objectives and eventually the project objectives, metrics such as the key performance indicators (KPIs) will be used (Figure 3). There is a great variety of KPIs that are used to assess different

aspects of a training program: whether activities and processes were implemented as planned, whether the objectives or outcomes were achieved, and whether there were any unintended consequences. Regardless, KPIs should reflect the goal, objectives, and expected results of the training program. From simple parameters (e.g., number of trainers and trainees, number of workshops delivered, hours spent in training, skills acquired, training completion percentage rate), to more advanced ones (e.g., transfer of training, trainees' engagement), KPIs will ensure alignment with the WinSTONE objectives and will be also used to plan future initiatives.



Figure 3. The 5 steps in applying KPIs, from the stage of deciding what to measure to the stage of taking action, and suggested KPIs for the WinSTONE training program.

Finally, the collected data are analyzed, and the findings of the implemented training program are presented in a report. This report constitutes a critical component for future improvements in the organization's approach to training programs.

Considering the above, the key elements of the WinSTONE training program include the training needs analysis, the training objectives, the training delivery, and the training evaluation and performance (Figure 4). Moreover, complementary elements that are important for the success of the training course include tailored training, carefully aligned with the training objectives and learning outcomes training materials, rich multimedia content, practicality, microlearning, engagement, documentation, logistics, agenda, flow, etc.

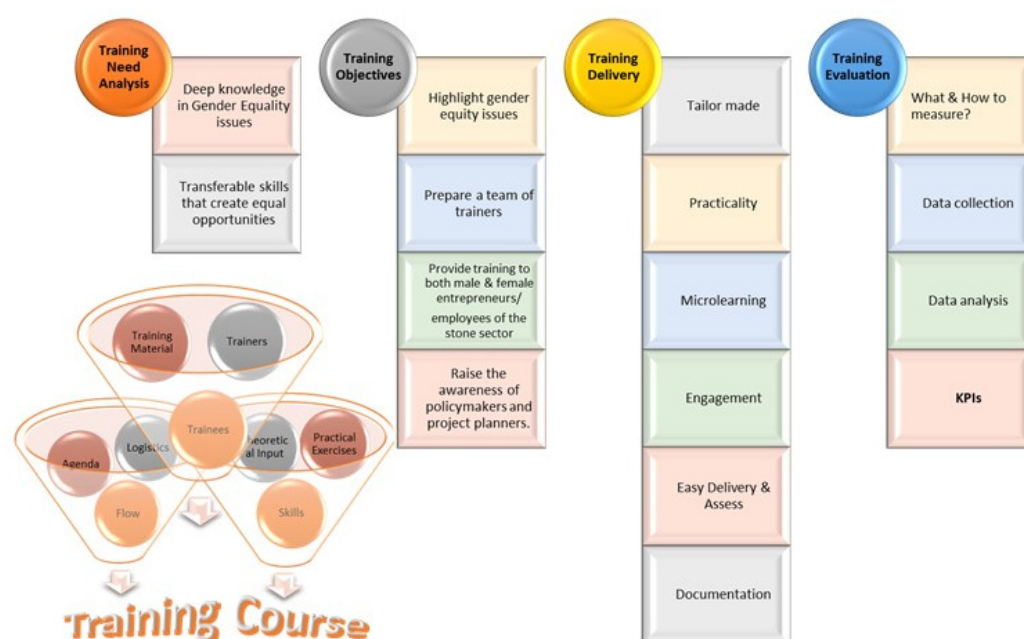


Figure 4. Elements of training design.

5. Discussion

The “regime” of gender discrimination does not proceed at a pace commensurate with that of other developmental indicators of modern society. As it seems, in terms of values and perceptions, archetypal stereotypes about male superiority are strong and resist change [34] (Council of Europe, 2015).

Fighting against stereotypes is critical in the male-dominated world of the stone industry. Tackling gender discrimination is a demanding task that calls for integrated planning and targeted interventions. It is clear that claiming the presence of women in places where the male element is predominant will be effective only if it is understood that inequality is a social construction, the result of specific economic, socio-historical conditions and not a legislative condition. Under this context, it is a situation that could be changed.

This knowledge is absolutely necessary for men not to be able to interpret reality but also to be more receptive in working with their female colleagues, as cultural stereotypes about how men and women should be are very strong and influence the self-perception of individuals, as well as their interpersonal relationships.

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References

1. Eurostat, Statistics for Employment by Sex, Age and Economic Activity (from 2008 Onwards, NACE Rev. 2). Available online: https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=lfsa_egan2&lang=en (accessed on 14 June 2021).
2. Eurostat, The Life of Women and Men in Europe, A STATISTICAL PORTRAIT. Available online: <https://ec.europa.eu/eurostat/cache/infographs/womenmen/> (accessed on 14 June 2021).
3. Eurostat, Women in Science and Engineering. Available online: <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/edn-20210210-1> (accessed on 16 June 2021).
4. Eurostat, Statistics for Students Enrolled in Tertiary Education by Education Level, Programme Orientation, Sex and Field of Education. Available online: https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=educ_uoe_enrt03&lang=en (accessed on 18 June 2021).
5. Knowles, M. *The Modern Practice of Adult Education: From Pedagogy to Andragogy*; The Adult Education Company: New York, NY, USA, 1970; ISBN 0-8428-2213-5.
6. World Bank Group Women's Employment in the Extractive Industry, World Bank Group Energy & Extractives No. 2. Available online: https://olc.worldbank.org/sites/default/files/WB_Nairobi_Notes_2_RD3.pdf (accessed on 15 June 2021).
7. International Finance Corporation (IFC). Integrating Gender in Mining Operations. Available online: <https://www.commdev.org/downloads/integrating-gender-in-mining-operations> (accessed on 15 June 2021).
8. Women in Mining (UK); Pricewaterhouse Coopers. *Mining for Talent A Review of Women on Boards in the Mining Industry 2012–2014*; Pricewaterhouse Coopers: London, UK, 2015.
9. International Finance Corporation (IFC). *Investing in Women's Employment: Good for Business, Good for Development*; International Finance Corporation, World Bank Group: Washington, DC, USA, 2013.
10. der Lippe, T.V.; Breeschoten, L.V.; Hek, M.V. Organizational Work–Life Policies and the Gender Wage Gap in European Workplaces. *Work. Occup.* **2019**, *46*, 111–148. [CrossRef]
11. Lyonette, C.; Baldauf, B. *Family Friendly Working Policies and Practices: Motivations, Influences and Impacts for Employers*; Institute for Employment Research, University of Warwick: Warwick, UK, 2019.
12. International Finance Corporation (IFC). Unlocking Opportunities For Women And Business, A Toolkit of Actions and Strategies for Oil, Gas, and Mining Companies. Available online: https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/gender+at+ifc/resources/unlocking-opportunities-for-women-and-business (accessed on 17 June 2021).
13. Tavis, C. The Mismeasure of Woman. *Fem. Psychol.* **1993**, *3*, 149–168. [CrossRef]
14. McGaw, J. No Passive Victims, No Separate Spheres: A Feminist Perspective on Technology's History. In *In Context: History and the History of Technology, Essays in Honor of Melvin Kranzberg*; Lehigh University Press: Bethlehem, PA, USA, 1989; pp. 172–191.
15. Turkle, S. Computational Reticence: Why women fear the intimate machine. In *Technology and Women's Voices*; Pergamon Press: New York, NY, USA, 1986; pp. 41–61.
16. Faulkner, W. The Power and the Pleasure? A Research Agenda for “Making Gender Stick” to Engineers. *Sci. Technol. Hum. Values* **2000**, *25*, 87–119. [CrossRef]
17. Sismondo, S. *An Introduction to Science and Technology Studies*, 2nd ed.; Wiley-Blackwell: Hoboken, NJ, USA, 2011; ISBN 978-1-4443-5888-9.
18. Hatch, D. Technology Is Changing the Way the Mining Industry Works, So What Will the Mining Jobs of the Future Look Like? Available online: https://www.miningpeople.com.au/news/what-skills-and-qualifications-will-your-future-mining-team-need?fbclid=IwAR28fbDqjs4r-vAFr_I5OAx83F2KUSsFm2Woz3oN9ErqRQZayqh6ePZ (accessed on 16 June 2021).
19. European Institute for Gender Equality (EIGE). Gender Equality Index. Key Findings for the EU. Available online: <https://eige.europa.eu/gender-equality-index/2020> (accessed on 17 June 2021).
20. Ostrouch-Kamińska, J.; Vieira, C. Gender Sensitive Adult Education: Critical Perspective. *Rev. Port. Pedagog.* **2016**, *50*, 37–55. [CrossRef]
21. Bauer, S.; Finnegan, G.; Haspels, N.; Deelen, N.; Seltik, H.; Majurin, E. *Gender and Entrepreneurship Together: GET Ahead for Women in Enterprise: Training Package and Resource Kit*; International Labour Organization: Geneva, Switzerland, 2004.
22. OXFAM. Position Paper on Gender Justice and the Extractive Industries. Available online: https://www.oxfam.org.au/wp-content/uploads/2017/04/EI_and_GJ_position_paper_v.15_FINAL_03202017_green_Kenny.pdf (accessed on 15 June 2021).
23. Branson, R.K.; Rayner, G.T.; Cox, J.L.; Furman, J.P.; King, F.J.; Hannum, W.H. *Interservice Procedures for Instructional Systems Development: Executive Summary and Model, Vols 1-5*; U.S. Army Training and Doctrine Command: Ft. Monroe, VA, USA, 1975.
24. Allen, W.C. Overview and Evolution of the ADDIE Training System. *Adv. Dev. Hum. Resour.* **2006**, *8*, 430–441. [CrossRef]
25. Kurt, S. Definitions of the Addie Model. Available online: <https://educationaltechnology.net/definitions-addie-model/> (accessed on 14 June 2021).
26. Branch, R.M. *Instructional Design-The ADDIE Approach*; Springer: New York, NY, USA, 2009.

27. European Institute for Gender Equality (EIGE). Gender Equality Training. Gender Mainstreaming Toolkit. Available online: <https://eige.europa.eu/publications/gender-equality-training-gender-mainstreaming-toolkit> (accessed on 17 June 2021).
28. International Labor Organization (ILO). Trainers' Manual: Women Workers' Rights and Gender Equality: Easy Steps for Workers in Cambodia. Available online: https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/documents/publication/wcms_bk_pb_172_en.pdf (accessed on 17 June 2021).
29. Kirkpatrick, D.L.; Kirkpatrick, J.D. *Evaluating Training Programs: The Four Levels*, 3rd ed.; Berrett-Koehler: San Francisco, CA, USA, 2006.
30. Boland, J.W.; Brown, M.E.L.; Duenas, A.; Finn, G.M.; Gibbins, J. How Effective Is Undergraduate Palliative Care Teaching for Medical Students? A Systematic Literature Review. *BMJ Open* **2020**, *10*, e036458. [[CrossRef](#)] [[PubMed](#)]
31. Organization for Economic Co-operation and Development (OECD). OECD Toolkit for Mainstreaming and Implementing Gender Equality. Implementing the 2015 OECD Recommendation on Gender Equality in Public Life. Available online: <https://www.oecd.org/gov/toolkit-for-mainstreaming-and-implementing-gender-equality.pdf> (accessed on 14 June 2021).
32. International Labor Organization (ILO). *A Manual for Gender Audit Facilitators: The ILO Participatory Gender Audit Methodology*, 2nd ed.; ILO (International Labor Organization): Geneva, Switzerland, 2012; Available online: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---gender/documents/publication/wcms_187411.pdf (accessed on 18 June 2021).
33. UN Women Training Centre Gender Equality, Capacity Assessment Tool, 2nd ed.; UN Women Training Center: New York, NY, USA, 2016; ISBN 978-1-63214-064-7. Available online: https://trainingcentre.unwomen.org/RESOURCES_LIBRARY/Resources_Centre/2_Manual_Gender_Equality_Capacity_EN.pdf (accessed on 15 June 2021).
34. Council of Europe. *Combating Gender Stereotypes in and through Education, Report of the 2nd Conference of the Council of Europe National Focal Points on Gender Equality*; Council of Europe: London, UK, 2015.