Methodology

Guides to mainstreaming gender in university teaching

Online Teaching

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Xarxa Vives d'universitats

ONLINE TEACHING WITH A GENDER PERSPECTIVE

GUIDES TO MAINSTREAMING GENDER IN UNIVERSITY TEACHING

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FOREWORD

What is the gender perspective and what relevance does it have in teaching undergraduate and graduate programmes? When applied to a university setting, the gender perspective or gender mainstreaming is a comprehensive policy to promote gender equality and diversity in research, teaching and university management —all areas affected by different gender biases. As a cross-cutting strategy, it involves all policies taking into account the characteristics, needs and interests of both women and men, and distinguishing biological aspects (sex) from culturally and historically constructed social representations (norms, roles, stereotypes) of femininity and masculinity (gender) based on sexual difference.

The Xarxa Vives d'Universitats (XVU, Vives Network of Universities) encourages a cohesive university community and reinforces the projection and the impact of academe in society by promoting the definition of common strategies, especially in the gender perspective scope of action. It should be highlighted that policies that do not take into account these different roles and diverse needs and are, therefore, gender-blind do not help to transform the unequal structure of gender relations. This also applies to university teaching, where we offer students a compendium of knowledge to understand the world and intervene in their future professional practice, providing sources of reference and academic authority and seeking to promote critical thinking.

Knowledge transfer in the classroom that is sensitive to sex and gender offers different benefits, both for teachers and for students. On the one hand, deepening the understanding of the needs and behaviours of the population as a whole avoids partial or biased interpretations —both theoretically and empirically— that occur when using man as a universal reference or when not taking into account the diversity of the female or male subject. In this way, incorporating gender perspective improves teaching quality and the social relevance of (re) produced knowledge, technologies and innovations.

On the other, providing students with new tools to identify stereotypes, social norms and gender roles helps to develop their critical thinking and skill acquisition that will enable them to avoid gender blindness in their future professional practice. Furthermore, the gender perspective allows teachers to pay attention to gender dynamics that occur in the learning environment and to adopt measures that ensure that the diversity of their students is addressed.

The document you are holding is the result of the biannual 2016-2017 work plan of the XVU Gender Equality Working Group, focused on gender perspective in university teaching and research. At an initial stage, the report entitled La perspectiva de gènere en docència i recerca a les universitats de la Xarxa Vives: Situació actual i reptes de futur (2017) [Gender Perspective in Teaching and Research at Universities in the Vives Network: Current Status and Future Challenges], coordinated by Tània Verge Mestre (Pompeu Fabra University) and Teresa Cabruja Ubach (University of Girona), found that the effective incorporation of gender perspective in university teaching remained a pending challenge, despite the regulatory framework in force at European, national and regional levels of the XVU.

One of the main challenges identified in this report in order to overcome the lack of gender sensitivity in curricula on undergraduate and postgraduate programmes was the need to train teachers in this skill. In this vein, it pointed out the need for educational resources that help teachers provide gender-sensitive learning.

For this reason, the XVU Gender Equality Working Group decided to produce the collection *Guides for University teaching with a gender perspective*. This was coordinated in the first phase by Teresa Cabruja Ubach (University of Girona), M. José Rodríguez Jaume (University of Alacant) and Tània Verge Mestre (Pompeu Fabra University), and in the second and third phase by M. José Rodríguez Jaume (University of Alacant) and Maria Olivella Quintana (Universitat Oberta de Catalunya).

A total of 22 guides have been produced to date. Eleven were produced in the first phase, six in the second and five in the third, and were written by teachers who are experts in applying the gender perspective in their discipline at various universities:

ARTS AND HUMANITIES:

ANTHROPOLOGY: Jordi Roca Girona (Universitat Rovira i Virgili)

PHILOLOGY AND LINGUISTICS: Montserrat Ribas Bisbal (Pompeu Fabra University)

PHILOSOPHY: Sonia Reverter-Bañón (Universitat Jaume I)

HISTORY: Mónica Moreno Seco (University of Alacant)

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Electronic Telecommunications Engineering: Sònia Estradé Albiol (University of Barcelona)

In addition, a methodological guide on online teaching with a gender perspective has also been added to the collection, in response to the changes in teaching that universities had to adopt as a result of the COVID-19 pandemic during the 2019/2020 academic year.

METHODOLOGY:

Online teaching with a gender perspective: Míriam Arenas Conejo and Iolanda Garcia Gonzalez (Universitat Oberta de Catalunya).

Learning to incorporate the gender perspective in subjects merely implies a reflection on the different elements that constitute the teaching-learning process based on sex and gender as key analytical variables. In order to review your subjects from this perspective, the guides to mainstreaming gender in university teaching provide recommendations and instructions that cover all the following elements: objectives, learning outcomes, content, examples and language used, selected sources, teaching methods and assessment, and management of the learning environment. After all, incorporating the principle of gender equality is not just a matter of social justice but also teaching quality.

M. José Rodríguez Jaume and Maria Olivella Quintana, coordinators

01. INTRODUCTION

The decision to produce an online teaching guide with a gender perspective was taken during the peak of the COVID-19 pandemic, an event that forced most universities to engage in emergency remote teaching to varying degrees in 2020 and 2021. The guide arises from the concern that the highly probable transition to increasingly digital university teaching models will be a barrier to the major efforts that have been made in recent years to incorporate the gender perspective in teaching in higher education. The authors of these reflections are Iolanda Garcia and Míriam Arenas, members of the Faculty of Psychology and Education Sciences at the Universitat Oberta de Catalunya, who have extensive experience in mainstreaming the gender (and inclusive) perspective in this type of teaching.

Unlike other guides focusing on how to approach the gender perspective from specific disciplinary areas, this one considers pedagogical practice as a whole, regardless of the field of knowledge. In other words, it aims to focus on every aspect involved in the teaching and learning process, from both the perspective of design and practice and its evaluation. It therefore considers the introduction of critical reflection and discussion not only in terms of "what" is taught and learned, but also regarding "how" and "where" the learning takes place.

In this case, the "how" and "where" are unequivocally mediated by technology and the digital environment. The guide addresses the well-known exclusion of women from these two areas and presents a paradox. While there is clearly a digital and technological gender bias, distance education also has vast inclusive and emancipatory potential for women and other socially discriminated groups, who have traditionally found refuge and opportunity in this method of learning. Therefore, the main challenge posed by online education with a gender perspective is how to maintain the emancipatory potential of distance education in a space so heavily mediated by technology.

According to the authors, if this goal is to be achieved, a "how" and a "where" are essential, based on the observation that online education consists of a series of human-technology interactions, which require technologies and digital learning environments to be designed from an inclusive perspective. This means providing the university community with digital and/or hybrid settings that are accessible, open, safe and free from stereotyping, discrimination and violence.

This innovative guide presents a wide range of good practices – many of which took shape at the Universitat Oberta de Catalunya – and it shows that creating a proposal for online teaching with a gender perspective requires a profound transformation of higher education institutions.

02. GENDER BLINDNESS AND ITS IMPLICATIONS

We focus on a subset of pedagogical practices in this study, namely those mediated by the use of digital technologies. This means we must consider a new variable: the educational use of ICT as a factor that cross-cuts and reshapes all the dimensions of analysis of pedagogy and, therefore, the role that the gender perspective may represent in each one.

2.1 What do we mean when we talk about online teaching?

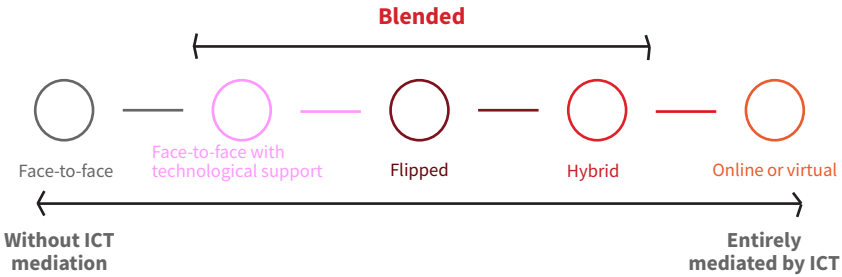
Terms such as online teaching, distance education, e-learning and digital learning have often been used interchangeably, despite referring to substantially different things. This has to do with the speed at which the field of technology-supported education, considered in its broadest sense, has evolved and with the diversity of teaching and/or learning situations in which it can take place today. It is also related to the fact that various authors and tendencies have used different expressions, terms and definitions depending on their particular approach to the phenomenon, which are determined by factors such as the discipline or professional sphere, the geographical location or the time period (Sangrà, Vlachopoulos, Cabrera & Bravo, 2011).

The history of distance education as a technology-supported method or arrangement in which students learn without being in the same (physical) place or time as their teachers and fellow students, from the use of postal correspondence to radio or television, has spanned several generations. It has gradually evolved across the ages thanks to the impetus provided by technological and pedagogical breakthroughs (Taylor, 2001; Patterson, 2009). The educational use of the internet initially, followed by the advent of the social web or web 2.0, signified a qualitative leap in terms of the openness, reach and flexibility of communication and learning, and shaped much of the current potential of distance teaching. In other words, all types of online education can be considered distance education, but not all models of distance education are based solely on the use of digital networks and technologies. Meanwhile, the term "open education" has often been used in a similar way to "distance education". However, this refers to education that eliminates barriers in order to ensure equal learning opportunities. This may involve removing admission requirements tied to prior qualifications or facilitating access to groups that are potentially excluded due to disability, socioeconomic constraints or other factors (Bates, 2019). As a result, in the strict sense of the term, open education may or may not be distance education.

Given this backdrop, it is useful to clarify some of the most commonly used terms related to online teaching:

- **Online or virtual education or teaching**: a distance learning format in which education is provided exclusively and completely via the internet (synchronously, asynchronously or both) and is technologically and pedagogically tailored for a virtual environment. Another of the terms used for this format is e-learning, although this has generally become more closely associated with lifelong learning in companies.
- **Blended learning**: "semi-distance" education arrangements or those that combine face-to-face and online education. This can take various forms depending on the organization, the time, and whether the face-to-face or online component is prioritized (and therefore the type of student involvement that it enables). In its more limited use of virtual environments, it can mean a minimal adjustment of face-to-face teaching. This is the most widely used format by most face-to-face universities in Catalonia.
- **Hybrid learning**: although this term is often used interchangeably to refer to blended or mixed formats, some more specific definitions cite the flexibility it offers students to move between face-to-face and online learning environments, as well as the fact that it optimizes the use of digital technologies.

Section 7 of this guide contains a glossary with more extensive definitions. Identifying the common denominators and distinguishing features of these formats is useful for analysing how educational inclusion and exclusion work and the specific role that the gender perspective can play in each situation. All these formats can be portrayed graphically as being on a spectrum from face-to-face education to fully virtual education (Bates, 2019).



From the perspective of students, or at least a subset of them, it could be said that technology's penetration into all facets of life increasingly fosters a subjective experience of continuous or seamless learning, in which students move smoothly between different learning scenarios across different devices, locations and learning activities. This means that the boundaries between face-to-face and virtual learning environments are blurring, rather that being experienced by learners as breached walls between watertight compartments. This experience leads us to a new way of understanding educational environments, one in which they form part of learning ecologies. These are entire landscapes made up of physical and virtual settings in which students participate by means of activities, tools, materials and relationships that provide formal and informal learning opportunities (Barron, 2004).

The educational crisis brought on by the COVID-19 pandemic has prompted new terms describing the sudden change in how education is provided. In an article published in the *Educause Review*, which quickly become popular, Hodges et al. (2020) proposed the term "emergency remote teaching" to designate "a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances". The authors emphasize that this response cannot be considered online teaching, as it was not conceived, planned and designed as such, nor does it have the necessary support ecosystem. One of the most problematic aspects of this response has been the accessibility of learning activities and resources; in other words, the difficulty of ensuring that all students have access to education under equal conditions. Every educational format faces the challenge of being sufficiently inclusive, flexible and student-centred. In this regard, making apt

decisions requires taking into account a number of criteria, including the target students' profile and the conditions in which they study; the discipline and the type of learning outcomes to be achieved; and the technological support available and accessible to the recipients (Bates, 2019).

Distance education has often come with the promise of inclusion, accessibility and social mobility, attracting students who have found it most difficult to access other educational models: women, people with disabilities, and working class people, among other groups. Indeed, women have accounted for the majority of students in these educational formats since their inception in correspondence education (Torras, 2015; Rensfeldt & Riomar, 2010; von Prümmer, 2000). Although distance education has enabled more women to gain access to higher education, has this contributed to the transformation of gender inequalities and/or power relations? Considering that educational programmes and the technologies used to deliver them have traditionally been designed from an androcentric point of view, this can hardly be said to have been the case. Women did not make the transition from being mere "consumers" of distance education to claiming their place in the production and distribution of knowledge until the 1980s (von Prümmer, 2004).

Studies and research aimed at incorporating a gender perspective in these educational formats have proliferated since then. Plus, they no longer focus solely on how to increase access for women, but also on other relevant issues such as those cited by von Prümmer (2004): What variety of courses are available and how are they structured? Are students evenly distributed across the different educational options or is there horizontal segregation by gender? What are the contents of the courses and how are they presented? What types of student services are available and what types of communication are used? Are different learning styles taken into account, and are opportunities for interaction and communication given? (von Prümmer, 2004).

These debates intensified with the widespread incorporation of ICT in distance education, taking place at a time when the diversity of women's experiences was also beginning to become a focus of discussion. This diversity is related to factors such as age, profession, prior knowledge and care responsibilities, but also to matters related to the technology itself. That is, whether the student has their own computer or shares one (in the workplace, internet cafes, libraries, etc.),

the quality of their internet connection, the availability of peripheral devices (printers, speakers, microphones, cameras, etc.), previous experience, attitudes towards e-learning, and knowledge and skills for online communication, among others (Kramarae, 2001; Mattern, 2009). These studies have become increasingly complex in the wake of further contributions on the diversity of gender experience and expression, such as intersectional theories, and as ICTs have become more prevalent in the professional and personal life and leisure time of many women. As a result, the very concepts of "digital divide" and "digital literacy" have also taken on new nuances in recent years. There are even new generations of "digital natives" who, while not necessarily possessing good digital skills, are certainly less resistant to the use of ICTs as a learning tool (Bruestle et al., 2009; Remmele & Holthaus, 2013). Finally, we cannot ignore the fact that in recent years, thanks to their gradual inclusion in technology training, women have gone from technology consumers to technology producers, in some cases, with clearly feminist and transformative goals.

Talking about the gender perspective in e-learning therefore entails addressing the issue of digital inclusion-exclusion, and thus problematizing the relationship between gender, the use of ICT and learning, given how the discourses and practices have evolved in recent decades.

2.2 Gender and ICT

Gender and ICT research has largely focused on analysing the exclusion of women in relation to the traditionally androcentric designs of technological devices and how they reproduce and reinforce hegemonic masculinity (Sørensen, 2013). This perspective has highlighted the masculine and sexist dominance of technology and the situation of gender discrimination and violence against women in ICT, but it has also engendered a technophobic and pessimistic perception of the relationship between women and technology, as it has focused exclusively on negative aspects, shortcomings and the difficulties of being "like men" (Vergés, 2019, pp. 2-3). From this perspective of exclusion, one of the goals has been to increase the number of women participating in ICT to break down the "gender gap", but this has often failed to consider the androcentric and sexist design of these technologies, which means that women (and other excluded groups) have

adapted to these tools, rather than the other way around. This perspective can also have an essentializing effect by considering that there are certain feminine and masculine characteristics which explain the differences in relation to ICT (Biglia & Jiménez, 2012). Some feminists have therefore decided to go beyond these approaches, condemning the lack of visibility and content dealing with the interests of women in ICT, and the lack of a gender perspective in the design of digital tools and applications (Vergés, 2019, p. 5). However, intersectional feminisms warn that these arguments also run the risk of reproducing gender binaries, and call for digital inclusion (Sørensen, 2013), i.e. empowerment of the widest possible diversity, not just as users, but also as producers of these technologies.

Studies of the effects of ICT on the exclusion/discrimination of certain social groups have become increasingly complex in parallel with the perspective on gender and technology. For example, feminist analyses of ICT have oscillated between optimism and extreme pessimism, and as a result ICTs have been considered as both tools of liberation (during the 1970s) and of oppression (during the 1980s) (Vergés, 2013). Contemporary perspectives adopt a more complex reading, focusing on an analysis of the ambivalent nature of technologies and taking into account the dynamics of mutual interaction between gender issues and ICTs, based on the understanding that they are both constantly changing (Sørensen, 2013), fluid categories that are constructed and produced interdependently in both discourse and practice, and produce a co-construction of gender and technology (Bruesle et al., 2009). In this respect, we agree with the analysis by Biglia and Jiménez (2012) and their ambivalent view of our relationship with technology. Digital technologies are tools that organize our lives to a large extent and can be used in ways with a strong imprint of social values that heavily influence how we relate to others and to ourselves. For this reason, we must take on a gender perspective that is aware of their emotional, relational and symbolic components. At the same time, some authors point out that through our uses, we can also be builders of technologies and digital content, especially since the spread of the social web or web 2.0 culture, with its principles based on user-generated content, ease of use, participatory culture and the interoperability of products, systems and devices. Even in contexts where their level of digital skills is similar to that of men, women still tend to have a more negative self-perception of their ICT skills (Bruestle et al., 2009; Montes-Rodríguez et al., 2019) and are

more reluctant to experiment with new tools until they believe that they have gained enough skills or experience (Remmele & Holthaus, 2013).

2.3 Gender and e-learning

The same perspectives on the relationship between gender and ICT have foreshadowed the perspective on the relationship between gender and e-learning: some studies highlight how these educational models merely reinforce gender inequalities, while feminist perspectives also see their transformative potential, without ignoring their possible barriers and limitations. Our approach has been developed on the basis of this feminist perspective. Indeed, we cannot ignore the social mechanisms that generate gender inequalities (including in online education), but neither can we ignore women's agency in their learning (Koseoglu et al., 2020). This analysis of barriers and women's agency must be intersectional, as the major obstacles to accessing online learning are economic and linked to social class, level of education and employment (Kramarae, 2001; Hughes, 2007). However, even after these barriers to access have been overcome, we must acknowledge that the tools and techniques used in online education are not exempt from the ongoing power struggles over creation, access, ideas, knowledge and resources that are taking place across the ICT sector as a whole (Kirkup et al., 2010). It is therefore important to determine how inequalities operate not only in terms of access, but also in terms of motivation, capabilities and support networks (Kirkup et al., 2010), bearing in mind that different technological tools may enable or inhibit different models of participation by fostering certain types of communication and relationships that may not be the dominant forms of teaching and learning in which the students have socialized (McLoughlin & Oliver, 2000).

For example, some research has focused on identifying the possible difficulties that women may encounter due to gender-differentiated **learning styles** (von Prümmer, 2004). For example, women are assumed to prioritize collaborative learning over a more typical independent working model in online settings, and that assumption is more consistent with expectations of normative masculinity (Hughes, 2010). Women who experience the greatest difficulties with technology are also assumed to prefer synchronous communication (Montes-Rodríguez et al., 2019). Nevertheless, these arguments based on the existence of gendered learning styles risk reproducing the essentializing discourses on women's

possible difficulties with ICTs mentioned above, and among other factors, ignore some women's preference for educational models focused on autonomous learning and without any group work (Kramarae, 2001) and asynchronous communication (Vivakaran & Maraimalai, 2016). We must therefore overcome these approaches based on gender binarism and open up our analysis to other characteristics of online education, such as **transactional distance**, understood as a relational and communicative distance that creates a potential space for misunderstanding or interference between teachers and students (Moore, 1997). Despite its distorting factor, this distance has also been associated with positive effects in distance education, and in situations of asynchronous communication in particular. For example, it has been argued that asynchronous discussions can benefit women. This is because learning designs that break away from face-to-face settings can help to dismantle the power relations associated with gender in mixed contexts (Herman & Kirkup, 2008, 2016). This makes it difficult for men, who tend to intervene more often in face-to-face settings, to monopolize the discussions (Biglia & Jiménez, 2012). This transactional distance has also proven useful in addressing such sensitive issues as sexual and gender-based violence. Indeed, it enables more personalized emotional adjustments and makes people more comfortable to share experiences which would be difficult to open up about in a face-to-face environment (Heikkinen et al., 2008).

However, some studies on the effects of this **physical distance** are not so optimistic from a gender perspective. Some research has found value in the "invisibility" that online learning environments provide due to the fact that they are not inhabited like physical settings are. Accordingly, as there is no embodiment in which women or other marginalized groups can be objectivized or othered, this encourages participation by students who might otherwise feel more vulnerable or intimidated due to being discriminated against because of their physical appearance in a face-to-face environment. The problem with this approach is twofold. First, it ignores the fact that there are also markers of gender, social class, culture, etc. in online communication (Kramarae, 2001; Hughes, 2010). For example, some research shows that men's messages are longer, while women are more likely to use words of gratitude, apology or discomfort at disrespectful communication styles. Moreover, different cultures may have different views on the use of silence or the frequency of communication that is considered appropriate (Kramarae, 2001). As a result, students may end up

reproducing sexist (and racist and ableist) dynamics in online interactions, even if their communication is not mediated by physical appearance. Second, it raises a dilemma about the promise of inclusion in online education: is it pedagogically relevant to base inclusion on invisibility and passing, or on the contrary, should we transform education to make it more inclusive, recognizing the students' diversity and the plurality of their experiences and preferences? As we will discuss in detail later, one of the objectives of feminist pedagogy is precisely to enhance the students' presence and visibility through learning that is connected to their immediate reality in both a psychological sense (of personal and subjective experience) and in contextual terms (geography, social status, culture and language). This presence is increasingly viable on a virtual level thanks to tools such as the social web and social media (Vivakaran & Maraimalai, 2016; Ringrose, 2018), where self-reflection and reflective autobiographical work in learning and assessment activities facilitate a process of co-creation of knowledge by students. The initiatives promoted by the United Kingdom's Open University, which have been compiled by Herman and Kirkup (2008, 2016) and Kirkup and Whitelegg (2013), are another alternative. By "taking advantage of distance" (role models, asynchronous discussions, e-portfolios, access to open web publishing and open educational resources beyond the virtual classroom, etc.), these initiatives create emancipatory dynamics for women and open up opportunities for professional and personal development. In short, this approach prompts a switch from models where teachers and content are at the core of learning to those aimed at creating more participatory and collaborative learning environments (Koseoglu et al., 2020).

Presumably, certain semi-distance formats could offset the effects of online education's physical and transactional distance. However, compulsory face-to-face activities (even when occasional) can also be a barrier for some women due to their trouble accessing transport or incompatibility with their care work responsibilities (von Prümmer, 2004). The barrier of care tasks can also come up in online formats; because there is no requirement to physically go anywhere and one can flexibly organize their schedule, these tasks can become an invisible reality. In fact, many women's motivation for distance education (online or otherwise) has traditionally been linked to the fact that it facilitates their access to higher education, allowing them to **dovetail** their studies with work and family responsibilities (Kramarae, 2001; Lai & Lu, 2009; Biglia & Jiménez, 2012).

However, as study and learning mostly take place **in the home** in distance education, it may end up perpetuating the domestic role of women and the idea of the home as their natural environment (Rensfeldt & Riomar, 2010; Koseoglu et al., 2020). In addition, the strongly gendered negotiation of how time, space and technological devices are used inside the home ends up being privatized and made invisible. This means that in practice, many women's online studies end up becoming a "third shift" (in the evening or very early in the morning), after doing paid work and reproductive work (Kramarae, 2001; Rensfeldt & Riomar, 2010; Hughes, 2010; von Prümmer, 2004; Montes-Rodríguez et al., 2019). The **home space** therefore becomes particularly important in distance learning, because it is usually where students do much of their academic work. The different life circumstances that shape this private study space, which are also closely linked to the quality and amount of time available, are significant factors determining the conditions in which students undergo the learning experience. It is therefore important to take into account students' space and time when organizing sufficiently flexible learning activities, and to provide them with tools for regulation and self-management which, to the extent possible, enable them to organize their study space and time in the most appropriate manner. This is not to overlook the unequal distribution of space and time in terms of gender in our society. Women must not be expected to bear the responsibility of finding a time and place to study without taking these external conditions into account, as this can engender guilt among women who feel that they have to meet all these demands simultaneously. Educational institutions should therefore be able to go into this "private sphere", create forums to talk about these issues and make women aware of this basic inequality, letting them know that despite the promise of total flexibility, they may have some disadvantages compared to other students who do not have the same housework and care responsibilities (von Prümmer, 2004). This support should also fall within a more general discussion on redistributing the use of time, so that women are not forced to reduce their leisure and rest time in order to achieve their educational goals (Kramarae, 2001).

In short, when it comes to gender blindness in online learning (despite the ableist connotations of the term), it is still important to review the curriculum to ensure that it is neither androcentric nor sexist in its content or language. However, as we have seen, it is also essential to rethink the educational model we are working with, taking into account the backdrop of structural gender inequalities and the

consequences for the learning experience of women and/or other groups which have traditionally been excluded from these formats. It is at this point where the contributions of feminist pedagogy applied to online education, which we discuss in this guide, may be of interest. However, when producing this text we reviewed the literature and practices developed based on both perspectives, as reflected in the concepts we use. Accordingly, we will sometimes talk about "gender-sensitive" teaching or research, which is a concept that covers initiatives only aimed at incorporating the gender perspective, while at other times we will refer to "feminist pedagogy/teaching/research", which assumes a more clearly transformative commitment by educational and research relations (usually accompanied by an intersectional and decolonial perspective). Although we prefer this latter approach, we believe it is appropriate to include contributions from both perspectives, in order to offer a wider range of alternatives and possible sources of inspiration and to highlight the research and experience that has been achieved using these different approaches.

03. GENERAL APPROACHES FOR INCORPORATING THE GENDER PERSPECTIVE

As mentioned above, open and distance education has often been associated with greater opportunities for access and participation in learning, but it is true that online environments need not necessarily be designed according to criteria of **inclusiveness and equity**. Sator and Williams (2020) propose the following fundamental pedagogical principles to ensure inclusion in e-learning: equity mindedness, cultural affirmation and social participation. Equity mindedness entails "recognizing the ways in which systemic inequities disadvantage people who experience marginalization, critically reflecting on one's role and responsibilities in addressing inequities and reframing negative outcomes as an indicator of institutional underperformance" (Harris & Woods, 2020, p. 6).

According to Morgan and Houghton (2011) "an inclusive curriculum is one in which the right of all students to access and participate in a course is anticipated, recognized and taken into account" (p. 5). Focusing on what causes discrimination instead of the disadvantage itself (the deficit model) involves identifying attitudes, barriers, and other forms of discrimination as the cause of disadvantage. This approach anticipates and plans for the evolving rights of students and calls for changes in the system rather than in individuals, i.e. in educational institutions rather than in their students. According to these authors, an inclusive curriculum approach requires a commitment to promoting equality and diversity by incorporating the principles of anticipation, flexibility, justification, collaboration, transparency and equity in the design process. Inclusive curriculum design therefore focuses on addressing students' diversity, which is reflected in a wide range of educational, dispositional, circumstantial and/or cultural characteristics (Morgan & Houghton, 2011). Gender falls within the dispositional characteristics. However, from an intersectional perspective it should be considered as intersecting with other social and cultural characteristics, and from various perspectives (structural, institutional, historical and individual), which may act as a reason for inequality in the same way. The complexity of the intersectional approach is necessary, as a pedagogical strategy that calls for the empowerment of a given subordinate group in a particular context may clash with the multiple and varied overlapping and even contradictory understandings of subordination (Henderson, 2015). The intersectional approach must therefore go hand in hand with pedagogies that combat inequality in the distribution of power in favour of social justice and equity (Morgan & Houghton, 2011).

3.1 Feminist pedagogies for online teaching

Our proposal for incorporating the gender perspective in online teaching is based on the paradigm of **feminist pedagogy**. In other words, apart from focusing on overcoming gender differences, it brings a political and ethical dimension into education (Grup d'Educació i Gènere, 2020), and analyses how power operates through gender, race, social class, abilities and sexual orientation, among other factors (Gajjala et al., 2017). It is also based on a model for constructing knowledge and learning that is understood as a product of social interaction and as being framed in a cultural context. It is therefore aligned with the paradigm of social or sociocultural constructivism, and with the theory of situated cognition in particular (Kirkup, 2010). At the same time, it has deep roots in critical pedagogy, as theorized by authors such as Freire, and incorporates elements from other currents of thought such as culturally relevant pedagogy (Koseoglu et al., 2020) and Dewey's progressive education (Crabtree, Sapp & Licona, 2009). Because of this, it is also related to student-centred teaching and active learning approaches (FemTechNet, 2013).

Within this framework, we will focus on feminist pedagogies, the goal of subjecting all elements of pedagogical design to a reflective analysis that identifies possible gender biases (the invisibility of women and their contributions, the reproduction of sexist stereotypes, the naturalization of gender relations, non-inclusive languages and androcentrism) and proposes alternatives (Mena et al., 2019, p. 581; Mora & Pujal, 2014). Feminist pedagogy developed during the 1970s and 1980s, in the exercises involving sharing experiences in community groups during the women's liberation movement, and as a result of the need to reconfigure the dominant forms of knowledge and its production, as well as teaching in academia, which traditionally excluded women (Henderson, 2015). It is a philosophy based on feminist theory and the principles of feminist movements, which gives rise to a series of teaching practices:

> "Feminist pedagogy is a set of assumptions about knowledge and knowing, approaches to content across disciplines, teaching objectives and strategies, classroom practices, and instructional relationships that are grounded in critical pedagogical and feminist theory. It is an ideology of teaching inasmuch as it is a framework for developing particular strategies and methods of

> teaching in the service of particular objectives for learning outcomes and social change". (Crabtree, Sapp & Licona, 2009, p. 4)

Its most common features are the destabilization of the hierarchy between the roles of student and teacher in the classroom and the exchange and collective analysis of personal experience in a context of equality as a source of learning (Henderson, 2015). The incorporation of care and attention into teaching is another distinctive aspect of feminist pedagogy (Mena et al., 2019), prompting us to reconsider the diverse educational characteristics and needs of learners, which is consistent with the approaches of inclusive education referred to above.

Feminist pedagogy is structured around a series of **core principles** of pedagogical practice. These principles can be generalized as face-to-face, semi-face-to-face and online contexts, especially bearing in mind the benefits that they currently offer in terms of fostering social interaction and the personalization of learning. How to implement them is another question, and the answer would necessarily be different in each of these contexts. As the FemTechNet community puts it in the white paper entitled *Transforming Higher Education with Distributed Open Collaborative Courses (DOCCs): Feminist Pedagogies and Networked Learning* (FemTechNet, 2013), these pedagogical principles are recognized as beneficial for learning in educational research. In specific terms, many of the strategies associated with these principles or foundations have been considered high-impact by the American Association of Colleges and Universities (FemTechNet, 2013), and as such feminist pedagogy can be said to reconcile this social commitment with academic quality (Mena et al., 2019).

There were some initial objections to the possibility of putting the principles of feminist pedagogy into practice in online contexts, based on the preconception that face-to-face interactions are necessary to create the right climate for sharing personal experience or the danger that distance learning would continue to relegate women to the private sphere. However, there is now a tradition and a line of study of feminist pedagogy in the field of distance education. In the 1990s, Hopkins (1996) took up the challenge of creating personal, interactive, and care-based e-learning environments, analysing the obstacles and explaining strategies used in her own experience to overcome them. Since then, several authors have highlighted the need to overcome the face-to-face/virtual dichotomy in order to move forward, in favour of "innovative locally contextualized pedagogical

permutations which foreground learning, irrespective of the mode" (Kirkup, 2005; Kirkup, 2010; Kirkup, Schmitz, Kotkamp, Rommes & Hiltunen, 2010; Aneja, 2016).

In an attempt to compile and summarize various contributions in generic terms, which inevitably simplifies some interesting nuances between them (Vivakaran & Maraimalai, 2016; Luxán & Biglia, 2011), we present the following as the core foundations of a feminist pedagogy applicable to online contexts:

(1) A reorganization of the relationship between teachers and students that promotes the shared assumption of responsibilities and the participation of all those involved in decision-making on content and learning dynamics

(2) The empowerment of students based on an assessment of their previous knowledge and experiences in a horizontal exchange of knowledge

(3) The creation of a community

(4) The inclusion of the students' individual voices and experiences in a collective process for creating learning

(5) Respect for the diversity of identities, individual paces and experiences, and therefore the personalized design of learning processes

(6) The incorporation of a critical perspective and questioning of the structural assignment of the principle of authority

(7) The design of situated political pedagogical approaches which foster the diffraction of knowledge, experiences and learning

(8) The creation of a "safe" (friendly, welcoming) environment, which aims to overcome prejudices, stereotypes and discrimination

These proposals must be considered as being rooted in a socioconstructivist **epistemological framework**, according to which knowledge is constructed socially and not as a product of individual mental abilities. The learning process is therefore recognized as a complex social phenomenon that takes place through interaction, collaboration and negotiation in the community. This also implies having an overall perspective of the subjects and their identity in their involvement in learning, and therefore a break with the idea of separation between the classroom and the real world (various authors, 2015). In other words, the learners' emotional dimension is recognized as being related to their values and beliefs, and therefore as something that must also be recognized within the

learning process. Their diverse personal experiences are thus used as a valid form of knowledge, and it is by identifying and critically analysing the relationship between experiences, emotion and action (head, heart and hands) that a deeper and more critical understanding is fostered (various authors).

This requires learning environments based on respect for all participants, where power and authority relationships are not overlooked and individual differences are not erased while caring for others (Chick & Hassel, 2009). This implies a self-reflective exercise on the privileges and oppressions that occur in teaching relationships, among students, too, as well as a commitment to negotiation when faced with potential conflict situations (Grup d'Educació i Gènere, 2020). The initial premise is that everyone must actively contribute to the production of knowledge, with cooperation and collaboration fostered by the discussion and comparison of ideas, rather than individualistic and competitive behaviours. This requires the creation of an environment to host a learning community, which becomes a safe and democratic space for the joint exchange and creation of knowledge (Vivakaran & Maraimalai, 2016). The starting point is therefore the mutual recognition of students and teachers as active subjects in the production of knowledge (Mena et al., 2019). The definition of knowledge is also reconsidered to accommodate complex and ambivalent thinking, a plurality of voices and perspectives, with all kinds of resources used, including personal experiences or associations with the students' environment (situated knowledge) (Chick & Hassel, 2009) and from decolonial perspectives (Grup d'Educació i Gènere, 2020). Although this type of approach to knowledge seems more closely related to the social sciences and humanities, it is also important to incorporate the social and contextual dimension of knowledge in the sphere of the experimental sciences and technology (Hughes, 2010).

This practice involves developing a series of competencies or "habits of mind", to use the expression coined by Chick and Hassel (2009), that relate to our understanding of how gender inequalities permeate throughout all of society. This mainly refers to critical reasoning, written and oral argumentation, writing academic texts, and basic competencies or those related to learning to learn: writing with confidence and not in a formulaic manner; critical evaluation of information; analysis, synthesis and evaluation of arguments; reading complex texts, and initiative and a sense of ownership over one's own learning. To achieve this, students need to learn to examine how authors, texts, data, theories and so on are intersected by gender inequalities, as well as those of race, social class,

culture and other factors as a result of multiple structures of intersectional power. They also need to develop connective thinking to relate theories, stories and fictions to the here and now, in relation to themselves and others, in order to make meaningful learning possible (Chick & Hassel, 2009). Other authors refer to this same idea of developing competencies. For example, the authors of *A guide to feminist pedagogy* at Vanderbilt University (various authors, 2015) propose a framework for teaching and learning that makes it possible to align practices and beliefs by developing a range of mental habits (habits of head), i.e our ways of thinking and knowing; habits of heart, i.e. the values that guide us; and habits of hands, i.e. our practices, which are informed by our habits of head and heart. These three types of habits or abilities are interdependent and influence each other.

In these approaches, students are not the only ones who are invited to engage in a process of collaborative inquiry; rather, teachers also have to engage in constant reflection and questioning. There is therefore some degree of **role flexibility** (Vivakaran & Maraimalai, 2016), whereby teachers become a figure offering support and stimulation, facilitating dialogue, and encouraging students' participation in decision-making on the learning process itself (Biglia & Jiménez, 2012). The issue involves moving from a model of "provision" to one of care, i.e. one that takes into account the training needs of students in all their diversity, analyses whether those needs are being met, and changes the design of the learning to make it possible (Mena et al., 2019). To that end, it is essential to start by exploring and analysing the visible and invisible forms of different learning styles, in order to involve all students, especially those who are in a situation of social and material disadvantage, so that they can acquire the skills and knowledge to achieve their aspirations (FemTechNet, 2013, p. 4).

3.2 Digital learning environments and tools for feminist pedagogy

The feminist pedagogy approach is inherently evolutionary and subject to ongoing construction based on the contributions made by various groups, places and points in time (Henderson, 2015; Herman & Kirkup, 2016). It therefore aims to develop methodological and learning design models for new environments which have been improved by technology and can be adapted to any specific disciplinary field. In 2010, Kirkup, Schmitz, Kotkamp, Rommes and Hiltunen produced a manifesto called "Towards a feminist manifesto for e-learning: principles to

inform practices" (Kirkup et al., 2010). It was written from a multidisciplinary perspective (computer science, educational technology, psychology and gender studies) and aimed to integrate the principles and practices of feminist pedagogy and e-learning. Considering the fact that the principles of feminist pedagogy and e-learning practices had never been integrated, they called for the creation of an overall approach inspired by previous works such as Donna Haraway's *Cyborg Manifesto* (1984), which is one of the most influential texts in theories on gender and technology. The manifesto by Kirkup et al. (2010) contains five areas which provide the foundations for a feminist conception of e-learning, based on an analysis of issues including the concept of embodiment, the approach to human-machine interactions in the creation of knowledge, the workings of power and the reintegration of feminist ethics. The authors then reinterpreted five classic principles of feminist pedagogy based on a critical involvement of e-learning technologies and learners' human-machine intra-actions as agents in the learning process:

1. **Reform the power relations between teachers, students, knowledge and learning technologies**. Students and teachers need to be aware of educational power relations, epistemological power relations in the production of knowledge, and the creation of power in interactions between people and technology.

2. **Prioritize the empowerment of human actors** in internal actions between people and computers in learning.

3. **Build global networks of students**, incorporating solidarity and loyalty into an ethic of care for all the members of the community.

4. **Respect diversity in human-computer intra-actions**, in both the design of e-learning environments and in teaching and participation in the learning process. Respect for diversity also refers to knowledge, study and technology as agents. Encourage and train all participants to understand the bias of their opinions and perspectives in their development as academics and researchers.

5. Participate in positive challenges for knowledge and technology in order to **construct new socially engaged knowledge** in intra-action with others (humans and non-humans).

Cyberfeminism, i.e. the current school of feminism that uses ICT as a tool for empowerment (Gajjala et al. 2017) also allows for an approach to e-learning that conforms to the principles of feminist pedagogy. The FemTechNet collective (2013) has adopted strategies created and used by this movement to promote an interactive use of technology, focused on generating dynamics of dialogue using web 2.0 environments and the creation of synchronous learning infrastructures, and aimed at increasing literacy and skills in traditionally marginalized groups. The **philosophy and technologies of the social web or web 2.0** call for connection, participation, interaction and collaboration between users, transforming them into agents for transformation and producers of knowledge (Chick & Hassel, 2009; Kirkup, 2010; Patterson 2012). This also makes it possible to move away from the mass and standardized uses of some e-learning models, such as those used by many private MOOC platforms, which promote conventional and highly transmissive uses of knowledge and are seemingly insensitive to inequalities arising from class, gender, race, the digital divide or other factors, assuming them to have been already overcome. These environments overlook the fact that some students need a "safe space" if they are to be successful in learning. Unlike the early connectivist MOOCs, today's MOOCs do not use the collaborative and co-constructive potential of social media, but instead function as "industrial" learning management systems. As an alternative, the FemTechNet (2013) collective proposes a collaborative, open and distributed networked learning environment, in which feminist principles and pedagogical methods are the basis for a learning experience between participants located in various institutional, material, geographical and national environments, who may adopt diverse identities or roles as participants in the environment.

Therefore, the **design of learning environments** in the various technology-supported educational formats is crucial for attaining a coherent and well-orchestrated structure of all the pedagogical and technological components with feminist principles. However, this is a complex undertaking, and one which requires specific training. This means that ICTs have not always been used in the most appropriate way in the classroom, which has helped to perpetuate the worst versions of online education (Chick & Hassel, 2016). For this reason, the feminist perspective also calls for an **end to the division between software designers and software users**, based on the idea that as a result of its diversity, the latter group can adapt technological tools to the plurality of its needs and interests (Schmitz, Meßmer & Schinzel, 2006). The FemTechNet collective (2013) points

out that collaboration between the professionals involved in online education, including software programmers and developers, designers and computer administrators, is essential: "dismissing this crucial work of designing, setting up and maintaining a learning management system not only does injustice to those who are making honest efforts to work with educators to give us what we might need, it also dismisses the need for educators to work collaboratively with these behind the scenes workers" (Gajjala et al., 2017, p. 136). It is important to highlight the usually invisible infrastructure that makes all this activity possible, including material objects and people (FemTechNet, 2013). It is also important to explore new forms of collaboration or co-teaching, such the one presented by Rodríguez and Denolleles (2014), which gives space to people with different areas of expertise. This, according to the authors, is also a feminist way of sharing the responsibility of teaching.

Considering the workload implications of these approaches is also a feminist perspective. As with other active, inquiring, and student-centred pedagogical models, these approaches involve a considerable workload, which is often rendered invisible. This includes coordination tasks, emotional and relational work, boosting participation, facilitating collaboration and creating learning resources (FemTechNet, 2013). Furthermore, virtual formats may be more demanding for teachers, as students may expect a quick and personalized response to their queries (Kramarae, 2001). This must be taken into account, especially in a context of unstable employment conditions for teachers and in a highly digitalized work environment, which makes it difficult to "digitally disconnect" (FemTechNet, 2013). This is in addition to a university environment in which all these tasks of care (teaching, mentoring, support and services in general) are highly feminized and undervalued in institutional recognition structures, which reward the much more masculinized activities of innovation and leadership (Social Sciences Feminist Network Research Interest Group, 2017). On the one hand, students should therefore also be involved in an ethic of care in their relationship with teachers, and on the other, greater visibility should be given to the time and volume of work that this model of support for students entails, in the form of institutional recognition, without overlooking the fact that the "gap" in care also affects female researchers, as became evident during the months of lockdown in 2020 (Unidad de Mujeres y Ciencia, Ministerio de Ciencia e Innovación, 2020).

3.3 Space and the body from the perspective of online feminist pedagogy

As a boundary of the learning environment, space is a key dimension for characterizing the teaching and learning process, passing through and affecting all its other components. As discussed above, **space** can be completely virtual in technology-supported education or it can be combined with physical space. This means that the different expressions of space comprising the learning environment must be taken into account, first to identify how the various possible hegemonic forms of oppression (sexism, class discrimination, racism, etc.) manifest themselves, and second, to create spatial configurations and structures that foster inclusion and equity (Grup d'Educació i Gènere, 2020). As in face-to-face or physical environments, some characteristics of virtual environments may foster or hinder communication, and may or may not determine a hierarchy of roles in the use of spaces and the relationships taking place within them. Some technological designs and architectures may therefore foster a power relationship between the teacher and students, in which the latter assume a passive and receptive role. This reflects an understanding of teaching as a vertical transmission of knowledge (Grup d'Educació i Gènere, 2020).

Through subjective and intersubjective experiences, both physical and virtual spaces create a **symbolic space** that determines what is perceived as possible and impossible, optimal and suboptimal, appropriate and inappropriate, and can act as a means of control and of reproduction of hegemonic forms of power. These spaces can thus become both the scenario for practices of mutual care and support, as well as **violence**. As pointed out by Heikkinen et al. (2008), e-learning environments often leave a great deal of responsibility to the students, meaning they may feel lonely and alone with their experiences of violence and vulnerability, and these authors therefore recommend some kind of mentoring. Just as there has been a growing concern to identify and eradicate gender-based violence in higher education (ERAC, 2020), how it occurs in e-learning environments should also be subject to specific analysis, taking into account the more structural problem of online gender-based violence (Donestech, 2020), which also affects university students and is strongly gendered (Faucher et al., 2014; Cripps & Stermac, 2018). In this respect, it would be interesting to incorporate the experience and knowledge produced by cyberfeminism into

online learning spaces.[1] In feminist pedagogy it is therefore necessary to work so that both face-to-face and virtual spaces are perceived by all the participants as safe, open to different opinions, free from prejudice and stereotyping, and are places where hierarchies and forms of oppression can be rendered visible and subverted. However, this does not mean that the meaning of a "safe space" can be taken for granted. We agree with the observation by the Gender and Education Group (Grup d'Educació i Gènere, 2020) that safe spaces do not resemble static or fixed spaces, but are instead subject to criticism and constant reconstruction by their participants. They must be considered dynamic and transformative spaces, which implies some degree of disruption and uncertainty that must be accepted by all the participants, including the teachers.

This openness is necessary taking into account that the teaching and learning process is always **relational and embodied**, including in virtual spaces and in asynchronous formats. This means that in technology-mediated contexts, the subjective experience of "being there" can also be created through the social interactions between teachers and students and among students themselves, e.g. if opportunities are created for all participants to share their tacit experiences and knowledge (FemTechNet, 2013). According to the theory put forward by Garrison, Anderson and Archer (2000) concerning communities of inquiry, the e-learning experience occurs at the confluence of three dimensions of "presence": social, cognitive and teaching (or didactic). In the manifesto by Kirkup et al. (2010), following Donna Haraway, presence takes the form of a cyborg. In other words, presences are the product of human-technology intra-actions, with certain logics of inclusion and exclusion and possibilities of agency that are not only defined by the participants' human characteristics (age, educational level, gender, ethnicity, etc.), but also by the technological devices that are mediating the learning and interaction (hardware, software, connection, etc.). Today's digital technologies enable multiple forms of interaction and co-creation between each subject and the objects of knowledge, as well as between them and the collective, which takes us far beyond traditional forms of learning based on the simultaneous presence of learners and teachers in the classroom. Feminist education professionals who have experimented with digital technologies in recent years have highlighted promising areas of development for feminist pedagogy, such as virtual worlds

1 We provide some resources that can provide inspiration in section 5 of this guide, under the heading "Preventing online violence".

and learning through mobile devices. These environments provide a greater **sense of presence**, which encourages supportive group interactions.

The relational and embodied dimension of learning can take shape not only in formal learning spaces, but also in other digital environments such as **social media** (Hughes, 2010). These spaces are generated spontaneously and allow students to share information, clarify doubts, comment on aspects of the course and in short, create a peer support network for learning, which may combine synchrony and asynchrony, text channels (chat) and audio channels (video conferencing). The use of these networks can be promoted in online education to foster informal peer interaction away from institutional technology platforms or, at the very least, away from the structure and supervision of formal spaces. The objective may be to help set a commitment to allocating time for study, to achieve learning goals, or to keep in contact and socialize with the group. Teachers can encourage the creation of these spaces and even provide specific advice on how to establish them. As a result, these spaces become the virtual equivalent of libraries, corridors or cafeterias on face-to-face education campuses, which are crucial for both personal relationships and networking and for fostering shared study and collaborative work, as well as non-formal and informal learning without supervision from teachers. Teachers may not be in favour of using these parallel spaces, as they may create situations in which students prioritize them in the classroom, which can make it difficult to apply participatory and collaborative methodologies. The absence of teachers in these spaces can also make it difficult to continuously monitor the students' activity. It is therefore important to reach an agreement with students from the outset regarding the spaces for accomplishing tasks in which the teacher's presence is necessary and the mechanisms that make it possible to track their independent work based on trust and the endowment of progressive degrees of autonomy.

When it comes to the various spaces involved in the learning process, studying their roles, interrelationships and potential for generating a feeling of presence in virtual environments is key. This is especially true when the goal is to deliver inclusive education that encourages equal access and participation and a close and horizontal relationship both among students and between teachers and students. The challenge is not an easy one. As Hughes (2007) pointed out, these approaches have their own paradoxes: How can we design environments that simultaneously generate a sense of belonging and recognize diversity? How can we ensure that the inclusion of some does not lead to the exclusion of others?

How much do students need to know about each other to feel part of the same learning community?

Without suggesting that any one recipe is infallible, the sections below provide a series of practical guidelines aimed at achieving these goals. This is based on an understanding that it is necessary to identify which parts of the learning spaces help or hinder certain forms of expression and participation, but also that this is inseparable from the methodologies and dynamics of the classroom, from the benefits of the digital resources available, and the language used in interactions, among other factors.

04. APPROACHES FOR INTRODUCING THE GENDER PERSPECTIVE IN ONLINE TEACHING

In this guide, we focus on two of the four dimensions proposed by the Education and Gender Group (Grup d'Educació i Gènere, 2020) to conceptualize the gender perspective in education: the methodological approach in the educational process, as an approach or principle for action that guides the development of the activities, i.e. the "how", which takes place in a specific time and place with certain sociocultural conditioning factors, i.e. the "where". On a subsidiary basis, but which is at the same time inseparable in a holistic perspective of education, there are strategies and resources to reveal and overcome the gender bias in the curriculum, i.e. in the contents of learning (the "what"). Furthermore, the problematization of the "who" as a critical questioning of the forms of inequality due to gender in education, especially higher education, is a prerequisite for understanding teaching based on the assumption of an ethical-political position. Although addressing learning content is not the focus of this guide, it should be seen as part of a global approach to learning design, within which it is impossible to ignore the reciprocal influence that some elements exert on others.

A series of proposals aimed at incorporating a gender perspective in online teaching are presented below, taking into account this focus on methodology rather than on content. These approaches begin with general guidelines on the design of e-learning, which is presented below in the form of eight more specific components. These proposals have been produced following an analysis of the international specialized literature, combined with applied examples taken from international experiences identified on the internet and from professors at the Faculty of Psychology and Education Sciences at the UOC (shared in a survey conducted by the authors of the guide and fleshed out in some informal conversations). The following section of this guide also lists some resources that are considered interesting from a teaching perspective, as a possible source of inspiration in the implementation of these proposals.

4.1 Designing e-learning

The feminist, inclusive and online pedagogy model discussed in the previous sections has multiple dimensions and possible ways of being embodied in practice. Using learning **design**, it is possible to model different aspects of our practice based on this perspective. This section provides guidance for the design of online or technology-supported learning approaches from an inclusive and feminist perspective, while bearing in mind that there is no magic design formula when it comes to gender and diversity (Mattern, 2009). It is the responsibility of designers to be sensitive to different needs and conditions, to display flexiblity in adapting to this diversity, and to facilitate various forms of learning (Mattern, 2009). To ensure this, it is essential to draw from good theoretical foundations (Goel & Stein, 2012). At the same time, the learning design must be sufficiently flexible and adaptable, so that it can be modified to accommodate needs arising in particular cases and situations. Technology can help to personalize and contextualize learning, but we must understand how to harness its potential, depending on the importance and role we assign to it, in order to apply it to the design and stimulation of learning situations.

Design is present at many levels of education, especially higher education, from the instructional design of courses to the curriculum design of programmes of study, the design of faculties and classrooms as physical spaces, and of course, the design of digital learning environments. Design has a significant impact on our lives because of its role as a mediator of reality, and this is obviously also the case in the field of education. Nevertheless, many design decisions are not transparent and are not the result of collective processes of reflection and discussion involving the various people concerned. These uncritical designs may more or less consciously or intentionally contribute to perpetuating the experiences of learners in a situation of marginalization or inequality. We now turn to some inclusive design perspectives aimed at overcoming this situation, including gender-sensitive design models, universal learning design and design justice.

According to Meßmer and Schmitz (2007, p. 136), a feminist view of e-learning design needs to take into account gender structures in teaching and support technology, in order to avoid reproducing gender stereotypes and at the same time, seek inclusion strategies that: (a) focus on the diversity of learners (not only in terms of gender, but also age, class, ethnicity and socioeconomic status, as

well as the interrelationship of all these factors) and create conditions to support their various technological requirements; and (b) focus on the process of gender construction in the interaction between learners and educational technology, using a flexible and fluid concept of gender identity that goes beyond the male-female dichotomy and considers the context in which practices take place. These authors propose a **gender-sensitive and diversity-oriented e-learning design**, i.e. one that considers gender differences; the plurality and mutual relationships between individual, social, cultural and technological aspects; and the influence of these aspects on learners, their diversity, learning scenarios and e-learning systems (Schmitz, Meßmer & Schinzel, 2006). Some of the specific recommendations made by these authors are as follows:

Work and curriculum organization:

- Avoid references to gender-based divisions of labour (e.g. men for technical issues and women for content issues).
- Use definitions that are gender inclusive, e.g. media skills taking into account social and reflective skills and not just technological skills.
- Promote forms of learning that foster cooperation and increased creativity.

Teaching methods for new media:

- Focus on contextualized content rather than abstract topics.
- Refer to examples that are relevant to real life and personal experiences.
- Avoid specifications based on the context of men's lives (as opposed to women's), opting instead for non-biased gender representations, gender-neutral language, a balanced selection of topics, gender-independent role appropriations and non-biased gender content.
- Engage in teaching based on constructivist theories of learning.
- Use multimodal designs, graphic and dynamic representations, and alternative means of representation for various styles, interests and learning experiences.
- Develop sensitivity to gender stereotypes and discuss differences.

Technological support:

- Employ technologies that are user-friendly and fit for everyday use, thus avoiding technology overload.
- Provide the means for users to design and share technologies.
- Make sure the environment is designed for learner-centred learning and is based on exploration and experimentation (constructivist principles).
- Implement various options for navigation.
- Turn to specific technological developments to enhance teamwork.

As a support tool in the roll-out of a new programme of study for the UOC's Bachelor's Degree in Psychology, the teaching staff developed a series of guides for internal use to aid in course design and/or adaptation. These guides were based around the previous programme's "strengths", which were to be further enhanced in the new programme. One of these strengths was the gender perspective, and its corresponding guide was authored by Professor Ana Gálvez Mozo. This guide provides a list of specific tips and examples showing how to apply this perspective to the courses. The list contains recommendations regarding language use and the construction of knowledge (i.e. making the knowledge produced by women and about women visible, and incorporating views and contributions that reveal the weight and effects of androcentrism), as well as strategies for including an analysis of how gender differences and inequalities are shaped in a patriarchal context and how they can lead to gender-based violence. Finally, it also calls for work on how psychology can contribute to fighting against this inequality and its consequences. These guides address the various aspects to consider in the course design process: competencies and learning outcomes, contents and subject matter, teaching resources, learning activities and student-teacher relations. However, these guides are dynamic and open to new proposals and recommendations as the courses in the various fields of psychology are designed.

Other significant contributions based on the concept of gender-sensitive online teaching, such as Wiesner (2005), set out guidelines for providing appropriate "socio-technical" support systems. This includes providing a clear and comprehensive overview of the course's content structure, i.e. a meta-programme; providing versatile, flexible, interactive and anonymous learning opportunities; providing a wide range of communication channels; and taking into account different levels of (technical and content) knowledge, as well as the living and working conditions of the learners. In short, this means offering modular systems and features that can be selected (or not) on an optional basis depending on needs. They should also be simple, intuitive, adaptable by the users themselves and sufficiently open to new developments. As for providing access to and displaying information, the aim is to enhance the alternatives for presenting its complexity, interconnections and contextualization.

In the field of educational design, inclusive currents have largely been constructed based on "**universal learning design**". This focuses on the intentional creation of learning spaces and materials that support the learners' diversity and help to counteract biases in educational design. The founding principles of universal learning design are aimed at removing barriers and fostering inclusive education. Moreover, they are related to providing multiple forms of representation, action, expression and involvement (Pastor, 2019). These principles apply to the presentation of discipline-specific contents, which must reflect diverse epistemological and ontological approaches, and learners' interaction with them. According to Collier (2020), inclusive design "considers the full range of human diversity with respect to ability, language, culture, gender, age, and other forms of human difference" and therefore goes beyond accessibility and focuses on creating designs that allow this diversity to thrive. Over the last decade, fields such as higher education have seen the interpretation of the concept of inclusion and the focus for action shift from identifying specific subgroups of disadvantaged learners, traditionally because of some type of disability, towards identifying the structures, processes and practices within institutions that create barriers to equitable experiences (Wray, 2013). This creates a tension between the need to produce maximally inclusive designs and the need to monitor particularly marginalized groups.

From a critical and intersectional perspective, "design justice" has emerged as a field that seeks to highlight and reverse the ways in which design reproduces dominant or hegemonic positions (white supremacy, heteropatriarchy, capitalism

and colonialism) in terms of how objects and systems such as digital interfaces are designed and how they influence the distribution of risks, harms and benefits among various groups of people (Constanza-Chock, 2018). This movement rethinks design processes by means of creative and collaborative practices, in order to focus precisely on those people who would normally be left out or even marginalized. It therefore aims to ensure a more equitable distribution of the benefits and harms of design; achieve fair and meaningful participation in the decisions involved, and attain recognition for community-based design traditions, knowledge and practices (Constanza-Chock, 2020). To that end, it draws on shared principles around which to grow a network of professionals who intentionally create design practices that avoid reproducing structural inequality and the various forms of oppression to the best of their ability (Design Justice Network, 2016):

1. We use design to sustain, heal and empower our communities, as well as to seek liberation from exploitative and oppressive systems.
2. We centre the voices of those who are directly impacted by the outcomes of the design process.
3. We prioritize design's impact on the community over the intentions of the designer.
4. We view change as emergent from an accountable, accessible, and collaborative process, rather than as a point at the end of a process.
5. We see the role of the designer as a facilitator rather than an expert.
6. We believe that everyone is an expert based on their own lived experience, and that we all have unique and brilliant contributions to bring to a design process.
7. We share design knowledge and tools with our communities.
8. We work towards sustainable, community-led and -controlled outcomes.
9. We work towards non-exploitative solutions that reconnect us to the earth and to each other.
10. Before seeking new design solutions, we look for what is already working at the community level. We honour and uplift traditional, indigenous and local knowledge and practices.

Design justice pedagogies are based on the popular education movement established by Paulo Freire, and therefore on a critical pedagogy that aims to question reality in order to develop collective critical awareness and a sense of agency among learners as people who learn. These principles therefore bring together a series of approaches that are beyond the scope of this study, but which provide interesting ideas for pedagogical practice and the learning design that we will endeavour to cover in the following pages, including: critical community technology pedagogy, participatory action design, data feminism, constructionism) and some aspects of digital literacy (Constanza-Chock, 2020).[2]

Implementing these approaches to learning design is not an easy task, and requires constant self-analysis and evaluation of our decisions, from a perspective that is open to recognizing the forms of exclusion and barriers that they can represent for students (Collier, 2020). This involves being willing to listen to students, and also requires institutional support. Creating an inclusive and facilitative learning environment entails sharing an understanding of the values and principles that underpin pedagogical practice. Providing strategies and times to engage students in the design process can therefore help identify any possible adjustments that may be needed. All this must happen within a ongoing cycle of reflection and self-assessment of teaching, in order to gradually and progressively polish and improve those aspects that have been found to be most problematic in practice (Freie Universität Berlin, 2017c).

It is therefore necessary to consider all the design and teaching dimensions that can be influenced in order to produce gender-sensitive teaching. Some universities provide self-assessment tools that may also be useful when focusing on course design. For example, the tool produced by the University of Freiburg suggests an evaluation of the course based on eight dimensions that can be assessed independently: (a) the course profile; (b) learning outcomes; (c) teaching and learning methods; (d) assessment of students' learning; (e) study conditions (access, workload, mobility); (f) information on and promotion of the study programme; (g) study advice and support; and (h) the institutional framework.

2 The author discusses these issues in the fifth chapter of her book: "Design Pedagogies: 'There's Something Wrong with This System!'" (2020). In *Design Justice* (1st edition). https://design-justice.pubpub.org/pub/y2ymuvuk

Considering these inclusive and critical perspectives on gender-sensitive design, we will turn to a number of specific components of learning design and teaching practice for carrying out feminist online teaching:

A. Positioning teaching in the pedagogical approach and the conception of teaching and learning.

B. Formulating competencies and learning objectives.

C. Learning methodologies and activities.

D. Learning environments and resources.

E. Space/time combination: face-to-face/online and synchronous/asynchronous.

F. The educational relationship and students' involvement.

G. Assessment of learning and teaching.

H. Support for students.

We focus on this series of aspects, which we have identified as particularly critical, because they play a key role in framing feminist pedagogical principles in contexts of educational practice at university. The reference model for describing these components is the one used for online teaching or e-learning, as the focus of this guide, although in many cases the approaches are often easily transferable to learning situations that combine online and face-to-face learning, or are even entirely face-to-face. Although the programme of study is a key component as a framework for teaching action, we will not discuss specific content or topics directly, but we will instead discuss the other components in general terms. For each component, a description and guidelines and recommendations to address it are included, with an example of application in some cases.

A. Positioning teaching in the pedagogical approach and the conception of teaching and learning

Designing learning scenarios from a feminist perspective involves prior reflection and self-analysis around intentions, values and beliefs, both about what is considered "normal" or "abnormal" in society and about positioning in terms of the pedagogical principles described above and, by extension, the very concept of teaching, learning, and the roles of teachers and learners. Teaching behaviour and the design of teaching and learning situations can perpetuate hierarchical relationships without us realizing. This demands a critical reflection on stereotypes, prejudices, and the role and responsibility in supporting the diversity of students in learning situations.

To begin with, Arango Restrepo and Corona-Vargas (2016) highlighted a set of basic issues related to adopting a gender perspective which need to be further explored:

- Distinguishing between concepts such as sex, gender, gender construction, gender roles, gender expression, gender identity, sexual orientation, diversity, inclusion, equality, etc.
- Recognizing diversity, reconstructing "official versions" by including a gender perspective and shedding light on the contributions of women and other invisible groups.
- Recognizing the prevailing forms of masculinity in relation to the patriarchal social relationship model, and identifying the diverse and alternative masculinities that coexist in society.
- Being aware of the feminist movements and social demonstrations against the homophobia of the patriarchal system, and knowing the history of civil rights and the struggles of women and men outside the established patriarchal order.
- Understanding and analysing social injustice, forms of discrimination and inequality in how people are treated, micro-violence or "micro-masculinity" in interpersonal relationships, and the subtle collective processes of social action that generate discrimination, invisibility and the annulment of approaches, perspectives, etc. which are not "normalized"

in patriarchal society, which is the cornerstone of the pyramid model of gender violence.

- Developing the ability to relate to and train diverse groups around the idea of equity, and developing a sense of gender entrepreneurship to achieve a genuine transformation of gender culture in educational settings and contexts.

Dehler and Gilbert (2010) propose two possible approaches to gender-sensitive teaching practice: implicit and explicit. One of the first decisions to be made is therefore which of these approaches should be adopted. In fact, our approach includes both. In the explicit approach, work on gender competency, or at least on gender aspects, is explicitly proposed as a learning objective of the teaching plan. To that end, it expressly integrates content and issues related to gender and aims to address gender inequalities within the context of the discipline. It also discusses gender issues and encourages students to identify and reflect on their own stereotypes in order to deconstruct them. An implicit approach aims to create an environment based on respect and equity that allows different groups of students, regardless of gender, social background, culture, etc. to succeed in learning. It thrives on the principle of student diversity, their experiences and approaches to learning; it avoids attributing characteristics based on difference (gender, social class, etc.); and it reflects and analyses its own gender beliefs and expectations in order to avoid conditioning the teaching and learning process.

Reflection on practice requires benchmarks and/or points of contrast and support, from both other colleagues and at the institutional level. This means that when adopting one approach or the other, we must also be aware of a number of specific barriers that we may encounter in the context of online education (Sator & Williams, 2020):

- Respect for and appreciation of diversity must be integrated into course design in order to mitigate the existing marginalization of diversity among the students.
- Teachers' professional development does not involve specific and explicit training on producing accessible and inclusive designs.
- Online course design often does not take the diversity of students' identities and environments into account.
- Courses often attempt to adapt to different or non-normative students, when their basic design is aimed at the dominant norm.
- Eurocentric and Western epistemologies and ontologies can lead to different or non-normative people being marginalized.
- Gender, cultural, social, ethnic and other stereotypes are still present and affect communication, collaboration and learning.
- Differing expectations and perspectives on knowledge and learning, language problems, etc. can generate cultural mismatches.
- Some students may be reluctant to interact in online environments because they perceive it to be forced, artificial or even intimidating, which can lead to a sense of isolation.
- Students' digital literacy does not usually encompass skills in the specific use of digital technologies for learning.
- Access, technological uses and digital literacy differ depending on students' cultural and socioeconomic background.
- The use of new technological media always involves a learning curve, and some students need support and encouragement in this process.

Adopting a critical perspective on power in educational relationships can be transferred into areas and actions as diverse as the following (Freie Universität Berlin, 2017d):

- Being aware of students' diversity and doing everything possible to adapt flexibly, in order to prevent those differences from generating situations of inequality.
- Looking for "gaps", asking questions and exploring new perspectives. Encouraging students to broaden their deep-rooted perspectives, reflect critically on them or abandon them altogether if necessary.

- Being aware of the assumptions we make about students in order to avoid reproducing stereotypes.
- Creating an environment where mistakes are sources of learning, also called error-friendliness. Our own ignorance, prejudice and resentment can only be changed once it has been recognized. Prompting situations in which people can confront and become aware of the reproduction of power relations and the creation of discriminatory situations that have had a negative effect on certain people, in order to turn those situations into learning opportunities.
- Avoiding (un)conscious discrimination. Traditional patterns and roles (such as gender stereotypes) in teaching are reproduced both consciously and unconsciously. Some examples include the use of language; the selection of discriminatory images, materials or content; the assignment of tasks based on stereotypical roles; inconsistent recognition of the same performance; showing unequal confidence and support; and displaying unequal expectations.
- Recognizing and avoiding othering, i.e. not creating dynamics in which certain students appear to be out of the ordinary, unusual or exotic. Regardless of whether they are positive or negative attributes, this process of extracting individuals from a common norm devalues the "other" and enhances the value of the group as "normal". This involves assuming multiple identities and accepting the fact that no student has to be a representative of any particular group. It also means preventing those "others" from becoming the objects of study of people in privileged positions.
- Treating students equitably, taking into account the particular characteristics and specific needs that may exist within the group. This entails addressing the learning needs, life stories and study conditions of each student individually. It should also be understood that not all strategies for countering the unequal treatment of a specific social group need to make sense to every member of that group. This is related to the intersectionality of discrimination and inequality.

- Intervening in situations of discrimination. This involves bringing attention to them, treating them as a problem and addressing them specifically, especially in front of those who are not directly affected.
- Focusing on the structural mechanisms of inequalities in order to harness resources to reduce them. It is not a question of granting special favours, but instead of compensating for disadvantages, taking affirmative action and dismantling harmful structures.
- Creating opportunities for action instead of victimization. It is important to highlight situations of inequality, but also the voice and agency of discriminated people and examples of change and transformation. People who experience discrimination are not voiceless victims who depend on other people's generosity. They make reasoned requests and have knowledge and agency.
- Recognizing different positions. Both teachers and students can be affected by inequality and discrimination in very unequal ways, and their experiences can be very different. These varying positions lead to issues being approached in different ways and often to different needs and doubts, and some people may offer resistance or establish boundaries on certain issues. Nobody should be forced to share their situations or experiences of marginalization against their will. Communicating transparently on certain issues can lead to tensions, and frameworks for consensus which set boundaries that everyone is comfortable with therefore need to be established.
- Seeking out and promoting forums for exchange to learn from peers' comments and/or advice.
- Remembering that non-discriminatory education is a goal that can never be fully achieved, but must guide our action nonetheless. Opportunities for reflection and self-assessment aimed at continuous improvement are therefore a necessity. Structures for professional practice must be created in which self-reflection is not only possible, but is considered desirable and receives systematic support.

As teachers, we can start by asking questions such as the following:

- *What am I doing right?*
- *How can I improve my awareness of diversity and inequality?*
- *Do I agree to give up control to students to foster a more horizontal educational relationship?*
- *What do I want to change in my practice?*
- *Where can I begin?*

One of the checklists included in the resources section can be used to perform an exhaustive self-analysis of the conditions that apply across the different dimensions of teaching practice, or a specific checklist can be drawn up based on the items mentioned above.

After this reflection has been carried out, it is important to decide how feminist (or gender-sensitive) principles will be reflected more or less explicitly and transparently in the teaching plan, the values or assumptions involved, and how we expect them to permeate the classroom dynamics, relationships and language. It is important for students to understand how and why this perspective will be integrated into the course, and how they are also expected to incorporate it into their work. Students can also be provided with specific resources and recommended reading to delve deeper into the topic. In short, a kind of contract covering the gender perspective within the framework of the course must be negotiated and established with all students.

B. Formulating competencies and learning objectives

Through an initial self-analysis and by taking one's own experience in the field of knowledge and methodology, into account, as well as the course's specific requirements, it is possible to determine which learning objectives can be related to gender and diversity. These objectives must be formulated explicitly, drawing on an analysis of gender-based power relations, social structures and the educational context.

If a competency-based design is used, the starting point must be formulating the target competencies. These can be considered as part of the range of specific competencies in the discipline, or as basic or interdisciplinary competencies. Interdisciplinary or transdisciplinary competencies are those that people develop beyond their area of knowledge or specialization. They are multifunctional and

therefore enable people to continue developing and learning in different settings throughout their life. These competencies involve broad-based knowledge and a set of skills, abilities and attitudes related to students' role as individuals and members of society. Accordingly, there are cognitive, metacognitive, instrumental, affective, emotional, relational and value-related components. They may therefore be related to the habits of mind referred to in section 3.

UNESCO proposes eight overarching competencies linked to the Sustainable Development Goals (SDGs) that should be incorporated into university teaching: systems thinking competency, anticipatory competency, normative competency, strategic competency, collaboration competency, critical thinking competency, self-awareness competency, and problem-solving competency (UNESCO, 2017, p. 10). Any of these competencies can be taken as a starting point for reformulation from a feminist or gender-sensitive perspective, depending on the aspects to be prioritized.

In the case of the Universitat Oberta de Catalunya, for example, an interdisciplinary competency has been expressly defined for all bachelor's degree and master's degree programmes. The aim is to foster work on the ethical and social responsibility linked to the SDGs (Naciones Unidas, 2015), which includes a gender perspective. This is the **interdisciplinary competency of "global ethical commitment"**, defined as follows for the bachelor's degree and master's degree levels respectively:

> *Behave honestly, ethically and sustainably, exercising social responsibility and respect for human rights and diversity, in both academic and professional practice.* (Bachelor's degree)

> *Act honestly, ethically, sustainably, socially responsibly and respectfully in terms of human rights and diversity, both in academic and professional activities, and come up with proposals to improve these activities.* (Master's degree)

A toolkit was designed to support teachers in implementing this competency across their courses, and is included in the resources section of this guide. They also underwent specific training.

Another more ambitious possibility is to formulate a system of competencies designed to develop gender equality in a specific context or area. In this case, we can consider various types of skills in order to decide which ones we want to prioritize. Rosenkranz-Fallegger (2009) proposes four types:

1. Disciplinary competencies: students are familiar with the concepts and fundamental issues of gender studies and are able to demonstrate their relevance in relation to the questions, theoretical frameworks and contents in their own discipline.
2. Methodological competencies: students are able to apply their gender knowledge and skills to different scientific and professional contexts, and are therefore able to bring the gender perspective to specific situations in their professional practice.
3. Social and relational skills: students are able to recognize aspects of gender in their professional relationships, both with peers and with clients or patients, and to manage gender-sensitive informal issues.
4. The ability to reflect: students are able to reflect on how they act towards men and women and question the gender stereotypes that may be conditioning their personal attitude.

Mimbrero et al. (2017) present a competency model for the transformation of gender cultures in organizational settings. This model is based on sociocultural theory, recognizing three levels in which gender manifests itself as a power-based system of relationships: sociocultural, interactional and individual. On this basis, the authors classify the competencies into four categories: knowledge competencies in the field of equality (located on the sociocultural level), methodological competencies and participation competencies (both located on the relational level) and personal competencies (on the personal level). This model can also be used as a starting point to identify areas of competency development that may be of interest.

After the target competencies have been formulated, they will need to be operationalized to ensure they are conveyed through the learning activities and their assessment. This requires defining the specific learning outcomes that students are to achieve by completing the proposed learning activities. The learning outcomes clearly and specifically express what we want students to achieve, in terms of their ability as professionals, people and members of society

to know, adopt, act, relate and think from a gender perspective or a feminist perspective.

Examples of learning outcomes

Recognize, understand and respect functional, social, cultural, economic, political, linguistic and gender diversity.

Recognize and critically analyse the causes and effects of inequalities due to sex and gender in the professional sphere.

Learning outcomes therefore determine learning objectives and assessment criteria. They must also be closely linked to the learning activities, i.e. the scenarios and tasks that students are asked to carry out to achieve them.

C. Learning methodologies and activities

The methodological approach determines the type of learning activities that students are assigned. The chosen approach must make it possible for students to achieve the target results or learning objectives. However, making decisions about learning methodologies involves taking a series of factors into account. As we have seen, feminist pedagogy provides us with specific methodological parameters. In other words, we must consider what kind of pedagogical interaction fosters the development of critical opinions and actions around stereotyped gender norms and other issues. The methodology must also be appropriate for working with specific disciplinary content. This is closely related to the concept of knowledge and the way in which it is constructed. As a result, when choosing learning methodologies, questions such as those set out below should be asked (Chick & Hassel, 2009, pp. 201-202):

- Are the concepts presented as black and white or is their complexity and ambiguity included?
- How is the learning structured? Do students learn individually, competitively, cooperatively or collaboratively?
- Do the tasks and activities encourage students to reproduce information provided by teachers, a leading author, or other traditional authority figures? Or is meaning constructed by synthesizing authorized knowledge, peer contributions and one's own experiences?
- Do students have the challenge of exploring something new?
- Is the content of the course connected to the students' lives and to real life outside the classroom?
- Are students expected to think and engage with their learning outside the classroom and construct their own meanings and connections?

Working on disciplinary knowledge from a gender perspective also means applying a three-pronged approach that has clear implications in the methodological field: (a) tackling the professional aspects of the discipline; (b) questioning and critiquing disciplinary knowledge; and (c) producing and using research results within the discipline (Kortendiek, 2011).

a) Tackling the professional aspects of the discipline

The goal here is to raise students' awareness of the gender roles and stereotypes in their discipline, so that they can appreciate the importance of gender in professional life and take a reflective and critical (not to mention self-reflective and self-critical) attitude towards their future activities. Within this context, particular work needs to be done on communicative and relational situations inherent in the profession (e.g. between doctor and patient) and on gender-related perceptions. Discussing the history and development of a profession in gender-related terms and examining gender relations within a specific field entails asking questions such as: What are the consequences of a high percentage of women or men on professional experience? Are there professional hierarchies? How should gender-respectful personnel policies be designed? Is there a difference in pay for "women's jobs" and "men's jobs"? What sort of work/life balance is there? Can we observe a breaking down of gender-specific behaviour and typical men's/women's careers?

b) Questioning and critiquing disciplinary knowledge

Here, the objective is to encourage students to detect gender bias in their disciplines: in other words, to learn to question who researched and published what, why and how, putting the focus on androcentrism, gender dichotomies and gender sensitivity in knowledge production. This entails taking into account the contributions of women authors and researchers within the relevant disciplines. Equally, attention should be paid to any practical examples used, ensuring that these do not perpetuate stereotypes but instead adopt modernized and resistant or unusual portrayals of gender. A review should also be performed of specific teaching cultures around the subject and account taken of single- and mixed-sex learning and working situations. Another important aspect is to work on sensitivity and reflection around the language employed in the discipline. It should be gender-balanced, as it could otherwise reproduce gender hierarchies and reinforce identities associated with them.

c) Producing and using research results within the discipline

Analysing a discipline's research results from a gender perspective and thus laying bare the power relationships in academia can help show the importance of gender in a given academic and social sphere. In other words, gender issues must be considered when carrying out research or other academic work, both when producing the work itself and when exploiting its outcomes and/or results.

To start with, using diversified methods allows for the varied use of supports and stimuli that cater to a broad range of students, thereby increasing equality of opportunity. More transmissive methods can be alternated with others that actively involve students; collaborative and dialogue-based approaches requiring large or small groups can be alternated with individual work set-ups; and methods featuring cognitive focuses can be alternated with others of a more practical or applied nature. The goal is to help students connect with the subject matter in different ways and from different standpoints (experiential, experimental, analytic, historical, empirical, etc.), while also allowing them to reflect, critique, discuss and interconnect with what they have learned. When alternating methods, it is especially important to explain the processes clearly and to be transparent about the purpose in each case, so that students are certain about what is expected of them.

Beyond variety, the principles of feminist pedagogy lean towards participative strategies that foster dialogue, negotiation, reflection and analysis around specific situations that are relatable to students' realities and are thus flexible, open to constant change and reconceptualization so as to fit with real-life contexts. Self-reflection is employed as a strategy to connect curricular content with students' own lives; collaboration is used to seek in-depth knowledge to overcome prejudices; and ethical and political engagement with the community is fostered to drive social transformation (Klebesadel & Kempfert, 2004). Personal experience connected with learning goals provides the starting point for delving into academic content, above and beyond the personally anecdotal. The underlying basis here is that the process of reclaiming and constructing a narrative, to share and discuss it, adds value to experience and endows it with a "conceptual form" that permits the reformulation of the personal into the political. In short, it involves placing personal and collective experiences within academic discourse, as shaped by the concepts studied (Henderson, 2015). Some clear pedagogical points of reference would be Dewey's experiential learning, Freinet's life techniques and Freire's question pedagogy. These are suitable techniques for fostering integration. This is because, firstly, they allow for the contextualization of knowledge in real learning situations, so as to put them in practice and examine them in depth, and secondly, they help to develop students' social and reflective skills, while boosting and advancing their motivations and inclinations. This entails putting into play the values, concerns and contradictions existing in the very means of social interaction and within the framework of each specific group's reality, through teacher facilitation. Enquiry-based learning is a focus that unifies a number of learning methods, such as project-based, problem-based and case-based learning, which would fit within this global, integrative kind of experience. According to Chick and Hassel (2009), open-ended, higher-order discussions necessarily entail collaboration but also contention, the acknowledgement of contradictions and ambiguities, and the use of unresolved contradictions and simultaneous truths. They also promote an intersectional understanding of identity and interrogations of systems of power and privilege.

Learning methodologies find material form in a series of learning strategies and activities, and shape communications and work dynamics and paces. Set out below are some possible strategies, organized by underlying guiding principle:

c.1) Shared authority and knowledge construction in community:

- *Student-centred discussions/debates*: in small groups, choose a controversial, contemporary topic, investigate it, and organize and encourage a debate. The objective is that learning, meaning and understanding arise from the synergy created by the discussion itself and not from teaching staff input. If teaching staff are present during the discussion, either in person or online, constantly steering it, students may lose their sense of authority and step back from independent thought, as this teaching input suggests that they are incapable or not expected to do it alone (Chick & Hassel, 2009).
- *Small group discussions with role distribution*: online discussions with large group classes can be overwhelming and difficult to manage. The use of small breakout groups can help students "listen" to one another. Students first debate different issues and, subsequently, inform the entire class group of their conversations, via the role of the small group reporter. This role should be rotated so that representative duties are shared. Moderators or facilitators can ask questions to keep the discussion going, as well as help ensure that *netiquette* is maintained. When students share these leadership roles, they take on greater responsibility towards the classroom community, their own learning and the course (Chick & Hassel, 2009).
- *Discussion chains*: in a discussion thread initiated by the teacher or a student, students read all previous postings and look for themes and patterns in them before responding. They then respond by summarizing them, recapping them and/or contributing new ideas or new information, or offering a different perspective on the conversation (Chick & Hassel, 2009).
- *Collaborative wiki publishing*: this uses collaborative writing to take a deep dive not only into course content, but also the sense of community and recognition of multiple viewpoints, since meaning is built on a shared basis. Before and/or in parallel to starting publishing, it is important to have a discussion that can be analysed and summarized later, taking account of nuances to indicate agreements, patterns of meaning, points of disagreement, etc. This kind of work ensures mutual active listening, which is essential for being able to paraphrase classmates' contributions and for reflecting upon intellectual work. Recognizing that one's knowledge is constructed, challenged and revised by the contributions of others

helps students gain a stronger sense of authority (both their own and that of classmates). For example, one good tool could be to jointly create a glossary of the course's key concepts (Heikkinen, 2008).

- *Keyword videos*: this is a video production project, carried out alone or in teams using web-based or easily available tools, which describes a specific term from a feminist standpoint. It also responds to earlier videos and asks for comments from the community (FemTechNet project: https://femtechnet.org/docc/keyword-videos/).

c.2) Connecting learning activities with students' lives and experiences:

- *Weekly or thematic reviews*: students are asked, either periodically or after completing work on a given topic, to prepare a reflection tied to their own lives (Chick & Hassel, 2009).
- *Virtual field trips*: visits to museum, government, open data, press, news or digital library websites can be assigned to take knowledge outside of the groves of academe and to apply coursework and it make relevant (Chick & Hassel, 2009, p. 209). Students can be asked to organize and make in-person visits to geographically close sites that are of relevance to the course content and to share a report on their experience, or to explore these places based on information gathered from the internet (Heikkinen, 2008).
- *Guest speakers*: invite experts to give a talk (or record it) and publish it online; send them questions by email and post the responses online; or involve them in a chat session or online debate (Chick & Hassel, 2009).

As part of the professional internship courses on the UOC's Bachelor's Degree in Social Education, professionals with extensive experience in different fields of social education are invited to engage in joint synchronous reflection and dialogue with students and teaching staff. This encounter is structured around thematic readings and controversies previously addressed in the classroom. This methodology permits the collective construction of knowledge, insight into the context of professional practice and the inclusion of a variety of voices and experiences that broaden the viewpoint of the professional field. [Example provided by the Practicum II and III teaching staff on the UOC's Bachelor's Degree in Social Education.]

- *Projects*: service-learning, action-research, design or co-design projects, among others, connecting and engaging with reality and having an impact upon the community. Students can be asked to specifically incorporate gender-related data analysis with regard to the issues they are tackling. Projects can take a variety of online forms and formats, such as the creation of a website, wiki, blog, Facebook page, etc. (Chick & Hassel, 2009).
- *Publishing digital magazines or fanzines*: in small teams, create and/or collate and edit texts and images dealing with issues associated with the course content, giving rise to a platform for expression and the construction of meaning around the community's less visible or under-represented realities and/or voices. Use social networks and online communities to disseminate them.
- *Situated knowledge maps*: using geolocation tools, work can be carried out on course topics, examining the relationship between space, place, mobility and the production and circulation of knowledge. Students can mark locations of significance to them and their learning (FemTechNet project: http://femtechnet.org/docc/feminist-mapping/situated-knowledge-map/).

c.3) Reflecting the diversity of identities, realities and perspectives in activities:

- *Suggestion spaces*: ask students to share web links, materials and good practices associated with the topic being worked upon in a digital space accessible to everyone. In a context in which students are in geographically

different locations and/or speak different languages, this activity will also help highlight the group's diversity in a shared knowledge creation activity (Heikkinen, 2008).

- *"Beyond the classroom"*: use social media and networks, comments on specialist blogs and other similar outlets to venture beyond the confines of the classroom and seek a broader swathe of opinions and interpretations around different topics of interest to the subject, be these from an academic, professional or social perspective. The idea is to question one's own ideas and submit them to judgement in open debate spaces; carry out interviews or seek contributions offering an alternative to the hegemonic discourse; and reflect on the experience (Howkins, Heidi, 2016. Blog of the course WGS 525 - Feminist Pedagogy).
- *Technology projects*: students are promted to chose an online digital tool, which they will then analyse and use to perform an activity around the disciplinary content from a feminist standpoint, be this a training or activist-type activity. Afterwards, they should produce a brief report including (1) a description of the project and its purpose; (2) the challenges/results identified; and (3) conclusions regarding the chosen tool's potential, insights about how to improve the activity and any other thoughts (Howkins, Heidi, 2016. Blog of the course WGS 525 - Feminist Pedagogy).
- *Personal pages and sites*: publishing and sharing digital spaces in web format (using, for example, personal blog tools) can help create a sense of belonging and interconnection within the group. It can also help highlight the class's diversity in terms of age, gender, ethnicity, etc. Time could be spent at the start of the course on browsing classmates' personal pages and encouraging them to acknowledge their identities above and beyond labelled and stereotypical normalization (Chick & Hassel, 2009). Some examples of free and accessible web tools for creating these personal sites are Wix.com, Weebly, Jimdo, GoDaddy and WordPress.

As part of the activities of the Pedagogy of Interpersonal Relations course on the UOC's Bachelor's Degree in Social Education, students are asked to carry out a role-playing activity in pairs to reflect on professional practice. One of the roles is that of a professional, and the other, that of a person seeking a socio-educational service, and both students have to play both roles. This activity is supported with a range of materials on active listening and non-violent communication. The goal of the exercise is for students to connect with the embodied experience (the request for the service must be based on one of the student's own experiences); get into the role (the interview role-playing is carried out via videoconference, synchronously and in private, and analysing corporeality and non-verbal communication is part of the subsequent reflection they must carry out to be assessed); and focus on listening (a skill associated with caring professions and not highly regarded in the academic world). [Example provided by Andrea Francisco, professor at the UOC's Faculty of Psychology and Education Sciences.]

D. Learning environments and resources

This section deals with teaching materials, i.e. information and support resources for course content and the digital tools and environments that facilitate the teaching and learning process. When producing materials and/or selecting some over others, account needs to be taken of students' digital competencies and their attitudes towards technology.

Teaching materials should ideally be offered in a variety of accessible formats. More directly, in terms of content, the use of gender stereotypes should be avoided and inclusive criteria employed, not only in texts but also – and especially – in images, graphics, video and audio. This entails ensuring that there is equitable representation in terms of gender, age groups, social and cultural origin, etc., irrespective of the topic dealt with, such that the style of expression and the messages convey an equivalent status and authority as equal and active participants in all aspects of life (e.g. including women as interviewers, interviewees and speakers at events, as well as using both female and male voices in voiceovers. It also implies challenging gender stereotypes and breaking away from notions of gender roles that perpetuate gender inequalities (e.g. showing women in positions of power and in jobs not traditionally associated with the female gender).

In terms of digital tools and environments, to be consistent with the methodologies and the type of relations to be promoted from a feminist perspective, priority should be given to those that guarantee better accessibility and potential for social interaction and collaboration, above and beyond information management and transmission. As the FemTechNet (2013) authors argue, the majority of existing technology platforms are optimized to implement a transmissive teaching and learning model. Generally speaking, they leave the possibilities of organizing and administering information in the hands of a few authorized people (teaching staff and teaching assistants). What's more, because access to the spaces is restricted, content created there is only valid within that institutional space and remains limited. Put another way, it is closed to the possibility of more open, collaborative and distributed growth created by users themselves, be they teaching staff or students. Meanwhile, web 2.0 (also known as participative or social web) tools are characterized by how the content is created by the users themselves, ease of use, a participative culture and interoperability (defined as cross-compatibility between systems and users). They therefore make it possible for students to play a more active and autonomous role, and enable learning based on open exchange and collaboration on the 'net.

DOCCs (distributed open collaborative courses) are courses, or rather environments, defined by a continuum of open, networked courses. They exemplify feminist principles and pedagogic methods as decentralized and collaborative forms of learning. The concept was developed by FemTechNet, which defines it as an alternative genre to the popular **MOOCs** (massive open online courses). Unlike the latter, DOCCs are not designed to reach the masses, but rather to create partnerships between institutions and organizations and thereby build a network of feminists committed to inclusive and democratic learning. They are environments for open access, multimodal publication, collaborative research and publication, and cross-disciplinary pedagogy. The concept is based on the idea that expertise is distributed throughout networks, among participants in different institutional, material, geographic and national settings, who embody different identities and act accordingly. Connective learning experiences arise when other viewpoints, geographies, corporealities and subjectivities become key components and challenge static narratives. DOCCs are also web-based **open education resources** aimed at students, teachers and researchers as knowledge participants and creators.

Every DOCC is based on the following principles:

- It recognizes and engages expertise distributed throughout a network.
- It affirms that there are many ways and methods of learning.
- It embodies collaborative peer-to-peer communication modes and learning activities.
- It respects diversity, specificity and differences among people and network bandwidths.
- It encourages the collaborative creation of a historical archive.
- It enacts a collaborative experiment in the use of online pedagogies.

More information on this can be found at: https://femtechnet.org/docc/
Examples of feminist projects carried out through a DOCC: https://femtechnet.org/get-involved/self-directed-learners/key-learning-project/

Support tools for structuring and representing knowledge and for making concept maps, for example, are also of interest in this regard. They allow for an integrated representation of knowledge based on the layout of concepts and their relationships, which might be multidimensional and cross-disciplinary, showing how structures need not follow a specific hierarchy, and are neither closed nor completely definable. They foster an active construction of knowledge during the

creative process, which can be individual and collaborative. What's more, being in digital format means these representations can be saved and distributed, and are constantly open to republishing. Examples of tools for creating concept and mind maps are CmapTools, Coggle, Mindomo and MindMeister.

The choice of technological tools must always be based on pedagogical criteria, in addition to practical considerations. In order to begin assessing what the best combination of tools might be, we must know what kind of learning the given activity aims to foster and work out each step in the learning process. Kinds of learning could be analysis/synthesis, practice, enquiry and problem-solving, communication and discussion, collaborative knowledge construction and creation, or reflection. The students' digital proficiency must also be considered, and we should always try to choose technologies that are either familiar to them or easy to use. Whenever possible, the choice can be left to students, or they can be involved in the selection process. Any previously untried tools must be tested and, ideally, there should be a backup plan in case something goes wrong.

E. Combination of time/space: face-to-face/online and synchronous/asynchronous

Blended learning proposals entail a careful, well-though-out and flexible combination of face-to-face and online learning (in terms of environments, time and resources) so as to provide the very best learning experience. Different models can be found, depending upon the degree of virtualization: face-to-face learning can be a complement to online learning, or vice versa. In all cases, however, the goal should be to expand and connect knowledge arising at different times and in different environments. This kind of proposal comes with a set of specific requirements:

- Ensuring carefully designed learning and advance preparation, without leaving things at the risk of last-minute improvisation.
- Providing clear instructions and establishing work routines that clarify when everything has to be done and why.
- Assuring that the design is global in nature, embracing the entire learning pathway: in other words, it must be treated as a single educational offering with an integrated face-to-face/online model, with the latter including both synchronous and asynchronous activities.

- Contemplating periods of synchronous or face-to-face activities at regular intervals.
- Presenting to students the complete learning pathway and tracking the activities performed throughout the process in the online environment, so that said process may be understood and followed in its entirety.
- Selecting the right type of learning activities for each environment (face-to-face or online), based on the type of target learning in each case.
- Fostering students' autonomy, self-management and self-regulation in their learning pathways in the different environments, within a specific yet flexible framework for action.
- Establishing cross-cutting support and feedback channels in the different learning environments.

Although the final decision will come down to the specific educational context in question, some general tips should be borne in mind to be in a position to take the best possible advantage of both online and face-to-face environments.

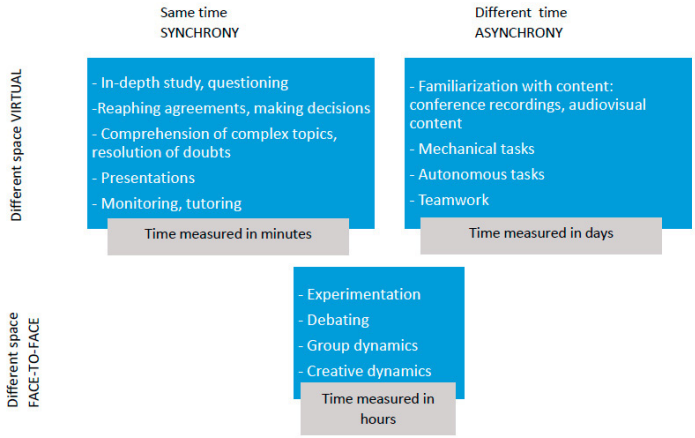
In online environments:

- Guarantee accessibility and inclusivity.
- Make sure the online learning environment is known and safe.
- Create a consistent combination of synchronous and asynchronous learning, taking into account the duration and flexibility of the activities.
- Include times of interaction between participants, in addition to between participants and content.
- Incorporate the twin-faceted (encouraging and guiding) teaching role, providing regular feedback.
- Offer spaces with varying degrees of formality and structuring. Particularly if the face-to-face sessions are infrequent and spread out over time, it is important to include online spaces for meetings and exchange that are more informal and relaxed in nature, to allow for intra-group socialization, fostering the emergence of learning, collaboration and mutual support dynamics that are spontaneous rather than established and led by teaching staff.

In face-to-face environments:

- Foster social contact activities, to create links and encourage group cohesion.
- Promote the contextualization and positioning of learning.
- Identify student difficulties, needs and interests.
- Guarantee an understanding and the continuity of learning resources, so that students do not become disengaged.

When it comes to arranging synchronous and asynchronous online learning activities, do not forget that the perception of time is different for each of these. Synchronous online activities call for high levels of engagement and attention on the part of participants, and they should therefore be more brief, of no longer than one hour. By way of contrast, with asynchronous activities, since each individual decides when to perform them, they can be intermittent, stretched out over days. That being said, there is a need to give them a certain structure, monitor them and encourage student participation in them. In this regard, it is important to make the most of asynchronous learning, so as not to overuse its synchronous sibling, reserving the latter for times when it provides added value or is simply indispensable.



The above figure classifies the recommended activities by the three quadrants arising from the intersection between the axes of coincidence (or lack thereof) in time and in space. Nevertheless, we would once again stress the fact that there is no "one size fits all" formula and decisions as to which learning activities are best suited to each situation should be made on basis of the given context, disciplinary field, learning goals, student interests and needs, etc.

F. Educational relationship and student engagement

As we have seen, the use of active learning methods fosters greater student autonomy but, at the same time, it is important to create a culture of dialogue through the creation of spaces for meeting and mutual listening, where comments can be made on the dynamics of the course, and even to promote student participation in discussing and choosing the working methods and procedures, content, assessment criteria, etc. Generally speaking, contributing one's own knowledge, experience and opinions increases motivation and the degree of engagement with learning and the course itself. Progress and gaps in learning also become more visible, allowing work to be replanned to fill these gaps, either on a one-to-one or group basis.

The establishment of a safe environment, taking care of relations and attention to diversity within the framework of the course are also key aspects. Students need to have the necessary composure and confidence to express their concerns, fears and doubts and to examine those attitudes, beliefs and motivations that may lead them to act in a certain way: for example, by exposing themselves to diversity and differing points of view. In all of this, it is vital to consider the communication situations arising at different times and in different environments, both online and face-to-face, paying special attention to the language we use.

f.1) Student engagement and changes in the teacher-student role hierarchy

Relations between teaching staff and students at universities cannot be based on equality of standing when they entail assessment and marking processes. It is therefore particularly important to be aware of your own role and of the existing hierarchy in teaching and learning situations. This means, for example, transparently communicating to students what is expected of them and also what they can expect of us as teachers, but also ceding them a degree of control by fostering their involvement in the decision-making process around different aspects of the course. It is also important to set limits on a negotiated, open

basis, reaching agreement at the start of the semester on deadlines, time to be dedicated, organization, etc.

Fostering student involvement helps empower them, in the sense of making them aware of their potential and ability to transform reality and, at the same time, provides them with tools to take the initiative and self-direct their leaning and development. This means that there is a need to transfer to them part of the control over and responsibility for developing and leading different aspects of the course. Efforts should also be made to foster their networking and the creation of communities – social and/or professional – inside and outside the academic world. All this, additionally, not only in an individual sense, but as part of a community, from the standpoint of learning as an interdependent activity sharing a common purpose.

It should be noted that the concept of engagement in online learning is complex and multifaceted. Redmont et al. (2018) suggest a framework that incorporates the following five dimensions: social, cognitive, behavioural, collaborative and emotional. Any design of online learning to promote student engagement needs to take these five dimensions into account.

Set out below are some strategies for student engagement and for developing their agency:

- *Formulating personal and group learning questions and goals*: at the start of a course or of a specific topic, distribute a survey that lets students express doubts, different perspectives and knowledge gaps. After sharing the responses, jointly assess how the course can resolve these issues and establish a route map for the group/class to work on during the course. Students can also be asked to identify their own learning expectations or goals (either individually or in small groups) and to set them down in writing, encouraging them to include gender- and diversity-related questions. These goals will be periodically examined by the group/class to jointly assess the extent to which they are being achieved. This bolsters awareness that there is a mutual dependency involved in achieving learning goals (adapted from Freie Universität Berlin, 2017d).
- *Creating and publishing a learning diary or digital portfolio*: in it, students can reflect upon a course's content and their own learning processes. These diaries or portfolios can be used as the basis for discussions and mutual feedback processes between classmates and teaching staff (adapted from Freie Universität Berlin, 2017d).

- *Recycling learning outcomes and knowledge transfer*: reusing final projects and other learning outcomes as course reference materials helps bolster the notion of constructing knowledge in the classroom and of acknowledging the academic value of students' contributions and learning processes. The presentation or publication of these outcomes on the internet, in forums, e-journals, workshops, online seminars or websites can also be encouraged, so that they remain valid and of use after the end of the academic year and the learning process during the course. This kind of exercise is consistent with the philosophy of **student-generated content**, part of the **open education** movement.

> The Sociocultural Animation course on the UOC's Bachelor's Degree in Social Education is designed in its entirety as a series of sociocultural animation workshops. The goal is for students to travel through the space and engage with it as a participant in and active part of the project. The activities are designed on this basis, with the aim that both the classroom's language and its spaces refer to the place of collective knowledge construction and political position-taking entailed by the workshops. The goal is that students can experience a learning process whose dynamics are far removed from those of a traditional education classroom. With this goal in mind, actions have included changing the names for the classroom's different communication tools, which are now called "Agora", "Wall", "Screening Room" and "Bar". This last tool is regarded as being of especial importance in an online university. Including a bar – albeit metaphorically – means acknowledging that knowledge also circulates in such environments and, thus, invites dialogue in the other environments, too. [Example provided by Andrea Francisco, professor at the UOC's Faculty of Psychology and Education Sciences.]

Partnerships with students, or partnerships in teaching and learning projects, allow us to push the boundaries of students' reassigned role as the producers and agents of change and of improvements in academic life, in the broadest sense. Partnerships can embrace a wide variety of possible collaborative practices and relationships, with varying levels of commitment and engagement on the part of students: co-teaching, disciplinary co-research, educational co-research, curricular co-creation and co-design, or review, analysis and reflection processes. This is a movement (also known as "students as partners")

which has spread powerfully through education policy in recent years and has become quite commonplace in higher education institutions in the English-speaking world.

The Socio-educational Inclusion and Networked Intervention course on the UOC's Master's Degree in Child and Adolescent Psychology: Intervention Techniques and Strategies is implementing a scheme to incorporate the voice of students into the course's design by means of cyclical co-design processes enacted through online forms, videoconferencing and a forum space in the classroom. Students' participation is voluntary and their contributions are integrated with their own reflections on the learning milestones they are achieving, as well as with the exchange of personal and/or professional experiences associated with course content, in the aim of creating the conditions for developing student agency with regard to their own learning and professional development. [Example provided by Iolanda Garcia, professor at the UOC's Faculty of Psychology and Education Sciences.]

For more information, see Garcia, I. (2020) *Partenariats amb estudiants: cap a una educació superior més inclusiva, equitativa i transformadora* https://epce.blogs.uoc.edu/ca/partenariats-amb-estudiants-educacio-superior-inclusiva-equitativa-transformadora/

f.2) Caring about relationships and awareness of diversity

Caring about relationships entails creating an open relationship based on dialogue. That is why it is crucial to offer clear channels of communication, be they synchronous or asynchronous, so that students can contact teaching staff to ask questions, voice their concerns, request more information, make comments and suggestions, etc. In the case of synchronous meetings, we recommend providing time slots that students can book, something easily done with meeting scheduling tools, which are sometimes integrated into learning platforms themselves or are provided by external options such as Google Calendar, Doodle, NeedtoMeet and Calendly.

Creating student-teacher and peer-to-peer dynamics that foster student understanding will improve relations and help the class carry out the assigned

activities, particularly group ones. In these kinds of presentation activities by teaching staff and students, combining written and audiovisual formats can help create a sensation of greater closeness.

- Above and beyond the classic presentation at the start of the course, a simple activity could be organized, arranging students at random into small groups and asking them to comment on an image, a news item, a definition, etc. and then collecting the written answers from each group.

> During these introductory/presentation activities, students may well share information that could be of use in adapting teaching into line with their needs. It is worth collating and systematizing this information in a monitoring sheet. For example, in the case of working mothers with small children, this fact could be borne in mind when it comes to being more flexible with deadlines, if they so request. [Example provided by Beatriz García, professor at the UOC's Faculty of Psychology and Education Sciences.]

Debating the concepts of "safety" and "well-being" and giving examples of specific experiences can help improve the atmosphere in learning spaces and foster dialogic relationships between all participants.

- Pairs or small groups, preferably mixed between different genders, could answer and comment on questions such as the following: What makes a good atmosphere and environment in the classroom and on campus? What is a safe environment? What makes a good student or professor? What measures can be taken in the course and in the institution as a whole to improve the atmosphere and everyone's wellbeing? The responses could then be debated among the entire group/class and some measures chosen and perhaps put into practice in the course or the faculty.

Although it may seem, from a teaching standpoint, that it would be more democratic for students to self-regulate online debates, such a laissez-faire policy may mean that more aggressive students end up dominating the conversation, creating an atmosphere that discourages the participation of certain other kinds of student. Instead, one could develop moderation and/or student training strategies to deal with such behaviour, inspired by anti-hate speech strategies on social networks (such as the @nolesdescasito Twitter account).

> Any sexist dynamics that may arise during the learning process must be analysed, and direct interventions must be carried out on a case-by-case basis, either with the whole class or with certain students. For example, bear in mind the possible temptation on the part of some men to indulge in "mansplaining"[3] in debates that take place in the classroom, a tendency to suffer from "imposter syndrome"[4] by some women or marginalized groups, as well as a tendency by some women to assume logistical and care-related duties in the organization of teamwork in mixed groups. So, in debates, it may well be worth reflecting upon mainsplaining and calling on female students to express themselves proactively and assertively, positive appraisals of work that can also be shared via assessment feedback. This gender-related pattern can also be brought up with regard to the organization of groups, inviting students to subvert it. [Example provided by Beatriz García, professor at the UOC's Faculty of Psychology and Education Sciences.]

Explicitly dealing with gender- and diversity-related power relationships requires a complicated balance whereby the circumstances and social positions of vulnerable or discriminated-against groups are laid out without treating them as victims. When it comes to discussing sensitive topics, it is a good strategy to set some rules, if possible democratically with the group of students, to ensure respectful interactions and exchanges. It is also important to introduce the concept of mistakes as a learning opportunity. This fosters transparency and creates a feeling of safety. Some recommendations would include:

- When a question is asked, explain why it is asked and what it means to the asker.
- Be authentic and selective in your own interventions: bear in mind your own thoughts and feelings and choose words to properly express yourself.

3 The concept of mansplaining was popularized through the writings of Rebecca Solnit, whose 2008 article shared her experiences of this male habit of explaining things to women whether or not the latter are already aware of or experienced in the matter. Such explanations are also accompanied by a degree of condescension and paternalism, and end up increasing women's insecurity and inhibitions, among other things.

4 Initially coined by psychologists Pauline Clance and Suzanne Imes, this concept refers to a psychological phenomenon affecting women (and other marginalized groups) with a high degree of academic and/or professional achievement who, despite said achievements, are incapable of internalizing their successes, assume that everyone is wrong in viewing them this way and live in constant fear of being unmasked as a fraud.

- Interpret others as little as possible. Rather, speak of your own personal reactions.
- Avoid making generalizations.
- If a statement is made regarding the behaviour or nature of another participant, express this in terms of what it means to you personally.
- Only one person should speak at a time because only one person can be heard at a time. Respect others' speaking time.
- Be mindful of your own body language and that of others.

This guide's resources section provides some specific resources on the organization and enabling of online groups.

The Management and Administration of Centres and Programmes course on the UOC's Bachelor's Degree in Social Education specifically addresses working in cooperative groups and managing potential conflicts. For example, for working in groups, teams of four people are created and each has to assume a role with specific duties: coordinator, rapporteur, time manager and head of internal communication. This allows for, firstly, a balanced assignment of workloads and, secondly, the highlighting of special duties to furnish them with value and recognition. The person taking on internal communication duties must take charge of managing any conflicts that arise within the group and monitor transformation processes so that the group can resolve them through dialogue before they escalate and become more difficult to handle. This role helps ensure key importance is attached to caring for the group and making it sustainable.

Additionally, part of the course involves a call for putting into practice organizational tools with feminist perspectives, particularly the "emotional rounds" group dynamic contained in the compilation made by the Mugarik Gabe collective: *Viajando por lo invisible. Cambio organizacional para la transformación feminista.* [Example provided by Andrea Francisco, professor at the UOC's Faculty of Psychology and Education Sciences.]

Communication and use of language

Developing gender- and diversity-sensitive and respectful communication skills entails paying special attention to discrimination in communication situations, detecting the discriminatory forms of language that we or others use or those that may be offensive to specific people and providing alternatives.

Since communication and language cut across the entire learning process, attention must be paid to many dimensions (institutional communications, vocabulary and expressions used in technological tools, in teaching materials, etc.). Nevertheless, here, we are focusing on interaction processes involved in the educational relationship between teaching staff and students and between students themselves.

In an online teaching environment, these interactions are mainly written (email, forums, debates, chats, blogs, etc.) and oral (videos, video/audioconferencing, etc.). And, although words will be the predominant format, we should not forget that they can often be accompanied by other elements such as emojis, images and other symbols, or non-verbal expression in oral communication. Therefore, beyond the literal meaning of the words we choose, the entire communication context needs to be borne in mind. The Association of College and University Educators (2020b) suggests five bases for inclusive language:

1. Inclusive language is not about being politically correct. It is about human dignity and demonstrating respect.
2. Understanding "why" is more important than knowing "what": it's not just about the words, it's about the assumptions and connotations that come with them.
3. Language is fluid and contextual, so there is not always a "right" answer. Terminology is always evolving.
4. It's okay to make mistakes. It's okay not to know. It's okay to ask questions.
5. Be willing to learn. The learning process is ongoing.

In an inclusive environment, we should not only work to avoid discrimination, but also put practices into place that help students feel welcome and visible within the learning space. In this regard, practices could include avoiding the masculine gender and using other language formulas designed to highlight the presence of the female gender, as well as other non-binary genders: see, for example, Harbin (2016).

The UOC's Language Service offers guidelines on the use of gender-neutral language, available in open access at https://www.uoc.edu/portal/en/servei-linguistic/convencions/tractament-generes/index.html.

This content has also, with the support of the eLearning Innovation Center and the Faculty of Arts and Humanities, been summarized in an infographic (http://hdl.handle.net/10609/129366).

Mention should also be made of the publication *Criteris multilingües per a la redacció de textos igualitaris*, created and published jointly by the university language services of the Vives Network of Universities

It is also important to use students' preferred names. This can be achieved by paying attention to how they sign off their written work, listening carefully to their oral interventions, asking how they wish to be addressed, or inviting everyone to make this clear by noting down their preferred name in a shared online space. Lastly, it is also important to bear in mind other relevant forms for referring to and addressing people who identify a certain way, without fear of making mistakes, asking questions and being prepared to learn.

This also involves openness to dialogue, inviting students at the start of the course to decide upon agreed rules for interaction, which in online contexts is regarded as "netiquette". The Association of College and University Educators (2020a) also offers some tips here on being more inclusive, proper response times, disagreeing respectfully, the importance of being concise and not digressing, and understanding and proper use of some conventions (capitalization and emojis, for example).

Throughout the course, this practical use of dialogue and reflection can also be applied to the analysis of other words commonly used due to their links with the subject matter, developing a collaborative online glossary that brings together alternative terminology and expressions that are more respectful in potentially discriminatory situations.

Lastly, in online interactions, we can include other practices sourced from non-violent communication and/or cyberfeminist strategies for violence prevention in online environments (the next section of this guide provides some examples of online resources in this area).

G. Assessment of learning and teaching

In keeping with the teaching methodologies we have described, the assessment models chosen are transformative. As such, they should assess the transformation taking place with regard to the adoption of a feminist perspective in teaching and learning practices (Grup d'Educació i Gènere, 2020). Indeed, assessment should go beyond course- and subject matter-related learning and foster a broader reflection around transfers to other spheres of life, and the very approach to training and education itself. To this end, evidence of students' competency development in their practical work should be gathered. This evidence should show how well they have applied certain knowledge, skills and attitudes, while also assessing the transformation of learning contexts. This means focusing on outcomes, but above all on the process, throughout which a wide enough range of assessment tools must be employed to, firstly, encompass the complexity of the target learning outcomes and, secondly, provide students with enough opportunities to reflect, from a variety of standpoints, on their learning.

In this process, teaching support and feedback via a dialogic educational relationship (referred to previously) are crucial. Feedback helps students to become aware of what they need to improve and how they should regulate their learning process, and to decide, after due consideration, where to concentrate their efforts.

> *Feedback is a key part of the UOC's learning and formative assessment process. A number of resources have been designed for both teaching staff and students, and are gathered together in this blog on feedback: http://efeedback.blogs.uoc.edu/*

Assessment should therefore be formative and involve students as a core part thereof, requiring their engagement and giving them agency in the process (Grup d'Educació i Gènere, 2020), thereby helping to ensure greater flexibility and a better fit with each specific context. In line with the principle of a horizontal relationship between teaching staff and students, assessment criteria should ideally be shared and negotiated between all participants, and assessment procedures should also partly transfer control over assessment to students, making use of self-assessment, co-assessment and/or peer-to-peer collaborative assessment strategies. What we are talking about is a kind of assessment based on reflection by all participants, in which feedback comes not only from teaching staff but also from peers, and in which the formation of critical judgements on the part of students, as self-assessors of their and others' learning, becomes an educational goal in itself.

- When preparing an individual project or essay, it could be suggested to students that they present their work to the entire class halfway through the process, so as to obtain comments and feedback from their classmates. The presentation must be organized and led by the student acting as speaker, and might be structured as follows: (a) the student delivers a brief, five-minute presentation of their work, highlighting what they feel are the most important aspects; (b) they start up a 10-minute (or so) conversation by posing a couple of questions to their classmates so as to receive feedback on the desired points; and (c) they make note of the comments and their ideas about them, so as to develop and subsequently incorporate them into their work. This could be carried out synchronously, using a videoconferencing tool, or asynchronously, using forum-type meeting spaces, where the speaker uploads their presentation in video format and then encourages discussion around it. In the case of large groups, a number of sessions could be scheduled in parallel using smaller groups of participant, in which turns are taken for the role of speaker.

In the Planning and Assessment and the Management and Administration of Centres and Programmes courses on the UOC's Bachelor's Degree in Social Education, students are asked to create a project or plan for an undertaking as a group. To provide dialogic, close and approachable support for the process, a time is set aside in the semester for each group to meet with teaching staff to revise and provide educational assessment of the work, in the form of a synchronous group tutorial. This space permits the collective construction of knowledge, in addition to providing formative feedback that is less focused on the mark than on the learning. [Example provided by Andrea Francisco, professor at the UOC's Faculty of Psychology and Education Sciences.]

Obviously, there must also be a guarantee that neither the environment nor the conditions of the assessment situations (e.g. the exercises, the problems, case studies and scenarios provided to students) convey any form of stereotype or gender or other form of bias, but instead employ inclusive language and ensure the greatest possible equality of opportunity for a diverse student body.

Set out below are some questions that may be of help in designing assessment from a feminist and inclusive perspective.

For assessing learning:

- Which assessment processes are best suited for evaluating learning and the development of competencies associated with gender awareness or equality? What assessment criteria are best suited to the principles of feminist pedagogies worked on during the course?
- What kinds of monitoring activities are required to help participants implement the expected changes? How can support be given to communities of learners to foster the transformation of the academic world from a feminist perspective?

To assess the course:

- How can we develop and document feminist pedagogic practices collectively and upon a reflective basis so that they may jointly be submitted for assessment and ongoing review?

- What has worked? What and where can I improve? What kind of support or training/education do I need to better tackle certain aspects? With whom can I share or exchange impressions about my experience?

At the end of the learning or competency assessment process, it is worth analysing the outcomes on the basis of gender, to see whether there is a need to make any changes to the course design. This could also be a significant factor when deciding who is to receive an excellent with honours distinction, particularly bearing in mind that this accolade comes with financial benefits. During the continuous assessment process, personalized messages could also be sent to students who previously expressed more difficulties (information that would have been identified during the presentation or subsequent interactions) and specific support offered. [Example provided by Professor Beatriz García of the UOC's Faculty of Psychology and Education Sciences.]

H. Support for students

Support for students entails dealing with a series of aspects directly or indirectly associated with advancing the learning process under appropriate, equitable conditions. This support is all the more crucial in online environments to offset the feeling of loneliness and isolation that students may sometimes experience, which can even be one of the reasons behind them dropping out.

This can involve, for example, guiding and supporting them in achieving a balance between their studies and other social duties (whether professional, family-related or personal), to guarantee successful learning irrespective of lifestyle or personal situation in terms of male or female socialization. It also calls for mentoring and advice with regard to any difficulties that may arise during their academic career. These are, in short, measures aimed at boosting and sustaining students' motivation, encouraging them to continue with their studies, and facilitating more satisfactory and richer learning experiences.

Good practices in this regard might range from the provision of informal support networks to mentoring programmes and study advice and guidance figures. Such figures remain in direct contact with students on an individualized basis throughout their entire academic pathway. Ideally, they would have experience in the relevant area of study and professional field and be in a position to provide guidance on mapping out their academic pathway. Such figures would have

to be able to identify the gender-related aspects of different organizational, relationship-related and academic issues affecting studying conditions and, if necessary, tackle them or inform those bodies or persons who can properly deal with them. Carrying out this kind of role also entails, as a starting point, reflecting on representations, such as dealing with atypical study options or those not traditionally or normatively associated with male or female socialization, and the role played by stereotypes in an advisory situation.

> At the UOC, for example, said role is assumed by the tutoring team in each bachelor's or master's degree programme. Every tutor is allocated a number of students and provides them with individualized monitoring for as long as they remain in the programme. Here are their duties: (a) act as a point of reference in study planning, designing the curricular pathway and adjusting study paces to each individual student's circumstances; (b) help decide which courses are best suited to each student profile, based on the individual student's expectations and personal circumstances; (c) support and guide students throughout their studies; and (d) advise them on everything to do with university life.
>
> For more information, see:
>
> Boixadós, Mercè, Ollé, Eva & Gutiérrez, Maite (2017). "Tutoría en la UOC: Diseño y elaboración del plan de tutoría del grado de psicología". *REDU. Revista de Docencia Universitaria*, 15(1), 305-323. https://doi.org/10.4995/redu.2017.6080
>
> Com t'acompanya el tutor o tutora de la UOC [video]: https://www.youtube.com/watch?v=gaKcVEjF_AM

The provision of technical assistance is another vital kind of support for helping to overcome potential difficulties or technical or technological obstacles faced by online learning students. With an inclusive focus, this must necessarily be associated with guaranteeing barrier-free access for any kind of learner profile, taking into account their different abilities, qualities and contexts. Accessibility as an inclusive design philosophy and practice has a particular impact on the following aspects: (a) university information websites and academic management pages; (b) learning management systems, which we at the UOC call the Virtual Campus; (c) learning materials and resources; and (d) forms of e-assessment.

The measures referred to above make sense within an institutional framework, but can also be transferred to the context of each individual course, as actions more directly associated with teaching duties and group/class dynamics, e.g. as support for learning organization and planning (planning time commitments and organizing the calendar of activities), for pursuing flexibility strategies (times, formats, channels, etc.) and for setting up groups and/or work teams. Thus, for example, it is crucial to anticipate events when designing courses. The course plan, the relevant deadlines and the teaching materials must be made public as soon as possible online, at the start of the course or, if possible, before. This way students can plan, get organized and/or contact teaching staff to clarify doubts and/or seek alternatives. Other examples of specific strategies that could be applicable in this regard include the following:

- Setting up space for requesting help: in contexts in which the degree of knowledge around the use of technologies varies, we could create such a space, easily accessible to any participant, for both requesting and offering help on specific instrument-related matters, thereby fostering the idea of a community of learning, in which not only teaching staff but students, too, provide support (Heikkinen, 2008).

05. SPECIFIC TEACHING RESOURCES FOR INCLUDING A GENDER PERSPECTIVE

Although both the preceding sections and the following one (on research) include some examples and tools that may be of help in designing online teaching, set out here is a broader, organized selection of resources providing some practical tools from a feminist perspective. For the most part, these are teaching-oriented resources, but we have also included some more general references to tools and strategies for using technologies from feminist perspectives. We believe that these may be of use in expanding on and/or examining more in-depth some issues that are not covered in so much detail in the teaching materials. We have organized the references into thematic groups, within which the works are listed in alphabetical order, by author:

Teaching from a gender and diversity-conscious perspective

Association of College and University Educators (ACUE). *Inclusive Teaching Practices Toolkit*: https://acue.org/inclusive-teaching-practices-toolkit/#sec9

Ebenfeld, Melanie. (2017). *Checklist for gender- and diversity conscious didactics*. In: Freie Universität Berlin. Toolbox Gender und Diversity in der Lehre. URL: https://www.genderdiversitylehre.fu-berlin.de/toolbox/_content/pdf/methods_checklist1.pdf

Freie Universität Berlin (2018). *Toolbox Gender and Diversity in Teaching*: https://www.genderdiversitylehre.fu-berlin.de/en/toolbox/index.html

Kisakürek, Basak & Baltic Gender (2018). *Tools and Resources on Gender–Sensitive Teaching Methods in Higher Education*. https://oceanrep.geomar.de/41854/

May, Helen & Thomas, Liz (2010). *Embedding equality and diversity in the curriculum: self-evaluation framework*. York: Higher Education Academy. https://www.heacademy.ac.uk/system/files/resources/Embedding_EandD_Selfevaluation_Framework.pdf

Trbovc, Jovana Mihajlović & Hofman, Ana (2015). *Toolkit for integrating gender-sensitive approach into research and teaching*. GARCIA Working Papers. http://garciaproject.eu/wp-content/uploads/2015/12/GARCIA_working_paper_6.pdf

National Council of Teachers of English (revised October 2018). *Statement on gender and language.* https://ncte.org/statement/genderfairuseoflang/

Universitat Oberta de Catalunya (UOC) - eLearn Center. *eLC Kit. The gender perspective in teaching*: http://hdl.handle.net/10609/129686. A resource featuring an infographic that identifies key aspects to bear in mind for incorporating a gender perspective in a university, as well as aspects associated with course design and teaching activities. It also provides a template for designing activities, which helps identify actions aimed at adopting a gender perspective in a course, and the video "La perspectiva de gènere en la docència a la UOC".

Feminist pedagogy

Daniel, Clare & Howard, Jacquelyne Thoni (curators) (2020). *Feminist Pedagogy for Teaching Online. A Curated Digital Resource*. Tulane University. https://feminists-teach-online.tulane.edu/

Díez, Arantza (2021) *Toolkit de gènere* (disciplines in the field of communication). Coordinated by Professor Candela Ollé of the Gender Group at the UOC's Faculty of Information and Communication Sciences: http://genere-toolkit.recursos.uoc.edu/

FemTechNet (2020). *Feminist Pedagogy in a Time of Coronavirus Pandemic:* http://femtechnet.org/feminist-pedagogy-in-a-time-of-coronavirus-pandemic/

Gupta, Hermangini; Thomsen, Carly; La Roche, Cat. & Essig, Laurie. *Teaching feminisms. A collection of digital tools created by students in Gender and Sexuality studies classes*: https://www.teachingfeminisms.net/

Howkins, Heidi (2016). *Blog of the course WGS 525 - Feminist Pedagogy* at Southern Connecticut State University. Examines feminist pedagogic theories for training students in the conceptualization, development and provision of courses, with a significant digital component, in gender studies in different secondary and/or post-secondary disciplines.

MIT OpenCourseware - Women's and Gender Studies: https://ocw.mit.edu/courses/womens-and-gender-studies/

Puotinen, Sara L. (2010). *Feminist Pedagogies*. An online repository of the course given at the University of Minnesota: https://wayback.archive-it.org/338/20150613052445/http://blog.lib.umn.edu/puot0002/femped2010/

Skwiot, Elizabeth (2017). *Feminist pedagogy in the online classroom*. Faculty Speaker Series. Colorado State University Global Campus [video] https://www.youtube.com/watch?v=cXlWvM7xBNg

SIMREF - Seminari Interdisciplinari de Metodologia de Recerca Feminista. The Materials section provides an interesting collection of videos and publications around feminist research. http://www.simref.net/simref/

The Collective (2015). *Equality Archive: a reliable source for the history of sex and gender equality in the United States*. http://equalityarchive.com/

Valle-Ruiz, Lis; Navarro, Kristen; Mendoza, Kirsten; McGrath, Allison; Galina, Ben; Chick, Nancy; Brewer, Sherry & Bostow, Raquelle (2015). *A Guide to Feminist Pedagogy*. Vanderbilt Center for Teaching: https://my.vanderbilt.edu/femped/

Organizing and leading online meetings

Dolan, Mara & Gunnarsson, Hanna (2020). *A feminist organizing toolkit: planning virtual meetings*. https://wedo.org/feminist-organizing-toolkit-planning-virtual-meetings/

Harquail, Celia V. (2020). *Bringing Feminist Practices into Online Work Sessions*: https://www.cvharquail.com/blog/2020/5/14/mini-book-bringing-feminist-practices-into-online-work-sessions

Rewa, Jeanne & Hunter, Daniel (2020). *Leading Groups Online. A down-and-dirty guide to leading online courses, meetings, training and events during the coronavirus pandemic*. http://www.leadinggroupsonline.org

Online violence prevention

DONESTECH. A collection of resources, news and activities on safety and privacy. It is worth checking out their entire website for a deep dive into the relationship between technology and gender from a feminist perspective. https://www.donestech.net/ambits-tematics/seguretat-privacitat

FemTechNet. *Do Better*: https://femtechnet.org/csov/do-better/ A listing of resources and tips to help keep yourself safe in digital spaces and make sure that you are not harming others with your digital practices.

Fundació per la Pau (2021) *Comunicació a les xarxes i entorns digitals socials* https://fundipau.org/pacifiquemlesxarxes/; https://fundipau.org/wp-content/uploads/2021/04/15-propostes.pdf

Institute for War and Peace Reporting: *Holistic digital security training curriculum for women human rights defenders*. https://cyber-women.com/

MariaLab - Library: https://www.marialab.org/biblioteca/

Take Back the Tech. *Safety Toolkit*: https://www.takebackthetech.net/be-safe/safety-toolkit

Digital tools for training and digital accessibility

Association of College and University Educators (ACUE). *Online Teaching toolkit.* https://acue.org/online-teaching-toolkit/

Barrett, Helen & Richter, Jonathon. *Reflection4Learning. Technology Tools for Reflection*: https://sites.google.com/site/reflection4learning/technology-tools-for-reflection

Digital Alchemists & the Center for Solutions to Online Violence (CSOV) (2016). *Research Ethics for Students and Teachers: Social Media in the Classroom*: https://femtechnet.org/wp-content/uploads/2016/06/Research-Ethics-For-Students-Teachers_Social-Media-in-the-Classroom_DA-CSOV_2016-1.pdf

Kumar, Swapna; Kumar, Vijay & Taylor, Stan (2020). *A Guide to Online Supervision*. UK Council for Graduate Education. https://supervision.ukcge.ac.uk/cms/wp-content/uploads/A-Guide-to-Online-Supervision-Kumar-Kumar-Taylor-UK-Council-for-Graduate-Education.pdf

Rosen, Stephanie & the FTN Accessibility Committee. *Accessibility report*. http://femtechnet.org/publications/accessibility-report/

Wikimedia Learning Patterns- Using Wikipedia's gaps as feminist teaching tools. https://meta.wikimedia.org/wiki/Learning_patterns/Using_Wikipedia%27s_gaps_as_feminist_teaching_tools

Xarxa Vives d'Universitats (2020). *Recomanacions lingüístiques per a les xarxes socials a les universitats.* https://www.vives.org/book/recomanacions-linguistiques-xarxes-socials-universitats/

06. TEACHING GENDER-SENSITIVE RESEARCH

Teaching online research should combine all the suggestions for online feminist pedagogy set out in the preceding sections with the contributions of feminist research. To do this, we will distinguish between the three dimensions used by Davis and Hattery (2018), based on the work by Sandra Harding: epistemology, methodology and methods.

Some of the theoretical output of feminist research has been dedicated to developing a proposed epistemology (or theory of knowledge). Most of this has focused on questioning objectivity, rationality and neutrality in the production of knowledge, which has been constructed upon the basis of a severely limited range of perspectives and experiences. So, for example, Donna Haraway's concept of situated knowledges forces us to take a position, while paying attention to the power relationships that arise in the production of knowledge: Who is observing? How and from where? Why? Who is interpreting what has been observed? How do the different technologies and methodologies employed in observation conceal (or not) certain realities? (Rogowska-Stangret, 2018). Additionally, Sandra Harding's standpoint theory highlights how our knowledge of the world is influenced by our position and that epistemic pride of place is held by the positions of the most marginalized groups. They can suggest new questions, academic problems and research agendas, forcing a re-examination of the beliefs and prejudices of the dominant groups in society and of the readings of reality previously regarded as neutral knowledge (Bowell, 2011). Nevertheless, more intersectional perspectives also point to the limitations of this premise and its positing of certain "privileged" standpoints, because one could fall into the error of essentialization due to an excessively fixed and homogeneous view of identity. Instead, they argue that situated knowledge can also be constructed from social practices or epistemic communities, in which it is the shared values or ideas that makes a group, rather than the fact of sharing the same positions with regard to different axes of power (Yuval-Davis, 2012). So, feminist research is fundamentally collaborative, committed to including diversity in researchers and assumes that participants are also co-creators in the creation of knowledge (Davis & Hattery, 2018). These principles are not only concerned with social justice but also help enhance the quality of research and innovation (Puy et al., 2015; Davidson, 2019). Such positions, associated with the "ethic of care" again inherent in feminist research, can be particularly transformative for online teaching, since, as noted

by Kirkup et al. (2010), technology-mediated learning environments often reinforce individualist learning styles that are highly focused on the transmission and creation of knowledge, and oriented more towards the market and economic return than collaboration and the social value of knowledge.

Feminist research methodology is a set of approaches and philosophies guiding research, essentially geared towards transforming gender inequalities, taking into account the experience of both women and other marginalized groups (sexual, racial, ethnic and other minorities, people affected by poverty or with a non-binary gender, among others) (Trbovc & Hofman, 2015; Davis & Hattery, 2018). So, above and beyond wishing to highlight the experience of women and/or of sexual and gender differences in research, as would be the case (for example) with gender-sensitive or gender-conscious research (Puy et al., 2015), feminist research has a markedly transformative mission, one also based on responsibility and transparency, a greater porosity between academe and the world surrounding it, and a commitment to open access material and results (Vergés et al., 2020).

Lastly, with regard to methods, a number of differing positions can be encountered. According to Davis and Hattery (2018), once a feminist methodology has been defined, any research method, in the sense of implementing data collection and analysis techniques, can be useful. For their part, Luxan and Azpiazu (2016), in their module on feminist research methodologies, place themselves in what they call an intermediate position in this debate. They regard as feminist any technique (data collection, production or analysis) based on feminist epistemological approaches, but also argue that one can make a feminist use of techniques that have been developed from other paradigms, such as surveys and discussion groups. Their manual provides some examples of these.

6.1 Teaching and learning to do feminist research (online)

So, despite having previously indicated that feminist research would go further than research with a gender perspective, we believe that there are some aspects of the latter that could be used as foundations, particularly for those students (and members of teaching staff) who are less familiar with the contributions made by gender and feminist studies to research. Nevertheless, in these cases, it would also be important for students to have previously acquired some basic knowledge of feminist theory, to help them understand the connection between

the theory and the methodology, and to help put them in a position to broaden their understanding of the issue, appreciating how feminism goes beyond gender inequalities to embrace other forms of structural inequality. Although most of the examples provided below are not designed for a specifically online environment, we believe that they are easily applicable to it, as we will show with some examples.

As a first step in designing these education programmes, one basis could, for example, be **competency design for gender-based research**, organized into different levels, as proposed by TU Berlin (Puy et al., 2015):

- **Reconstructive gender competency**: acquiring knowledge about key concepts in gender studies and about how these fit into various disciplines.
- **Field-specific gender competency**: developing skills to transfer methods and gendered epistemological foundations to one's own area of expertise.
- **Reflexive-creative gender competency**: developing skills to reflect systematically on one's own assumptions, positions, etc., such that students may transfer the gender perspective to new situations, at both a theoretical and methodological level.
- **Shaping gender competency**: learning to develop and shape new projects, questions and approaches in their own field of study based on their expertise in the gender perspective.

To accompany this, we should also design a **curriculum** that calls on students to learn how to apply a gender/feminist perspective to the different stages of research. In some cases, we can create specific areas of final bachelor's or master's degree projects with a gender and feminist perspective.

Here at the UOC, two examples can be taken from the Faculty of Psychology and Education Sciences:

Feminisms and Sexual Diversity, Bachelor's Degree in Social Education: according to Nizaiá Cassián Yde (2019), faculty professor and promoter of this bachelor's degree final project area, "it has the mission of reclaiming the wealth of diverse feminist perspectives according to which gender-based discrimination cannot be viewed in isolation; instead, there is a need to analyse the numerous relationships between different power structures and systems of inequality, discrimination and privilege, such as gender, sexual diversity, colonial and racial dimensions, one's background and ethnicity, social class, disability, age, education level or citizenship status". To provide support tools for this area, Cassián has also coordinated the creation of an open repository of learning resources for feminist research (http://tfg-educacio-social.recursos.uoc.edu/filtre/) and a UOC library guide entitled "Feminismes per a l'acció social". Soon to be published in open access, this guide includes a select bibliography of key literature on feminisms for social education students, as well as specific resources on 20 more concrete topics, conveying both approaches.

The Gender Perspective, University Master's Degree in Educational Psychology: Professor Maite Fernández-Ferrer created this master's degree final project area in the 2019/2020 academic year. The goal of the projects in this area is to perform an in-depth analysis of everything associated with equality and a gender perspective, examining topics such as affective-sexual education, the LGBTI community, transgender students, sexual diversity and male violence.

The UOC's Institutional Repository, O2, contains an **open access collection of final degree projects on gender studies** produced in a variety of disciplinary fields: http://openaccess.uoc.edu/webapps/o2/?locale=en

Davis and Hattery (2018) believe that inviting researchers to self-identify as feminists when presenting their work (embracing their research practices, outcomes and also their research agenda) is the best way to teach students what feminist research consists of. This activity is equally applicable to face-to-face and online environments, as training in research is normally carried on in small groups of students, which permits the inclusion of activities such as webinars and videoconferences, where a presentation can be followed by a Q&A session. What's more, this format enables greater accessibility, both for potential speakers and

for attendees, increased by the fact that such communication tools make both recording and retransmission possible, not to mention the open, free-of-charge sharing of the resulting videos. In line with the idea of inviting outside "experts" and with the feminist notion of broadening the concept of "expertise", Davis and Hattery (2018) also suggest involving other non-research professionals who nevertheless play an important role in academic research, such as library staff, data scientists (and, we might add, laboratory technicians), who can contribute to online training in tools that are, today, chiefly technological in nature, such as the use of databases for literature searches and the use of statistical analysis software. In an online education environment, it would also be worthwhile to place special emphasis on training students in technologies designed to strengthen open science, such as open access publication repositories, collaborative library management tools, and the use of social networks to disseminate and promote research, to name but a few.

Examples of repositories, data portals and research tools that are open access and/or that have a gender or feminist perspective:

Directory of Open Access Journals (DOAJ): https://www.doaj.org/
Allows students to search for open access articles and journals based on keywords such as gender, women, feminism and LGBTI.

EU Open Data Portal: https://data.europa.eu/euodp/en/home
Allows you to make a specific search with the keyword "gender".

iQ Observatory: http://www.quotidiana.coop/observatori/
Site providing the main indicators and data on living conditions in Catalonia from a gender perspective. It does so in an accessible and attractive way for both those unfamiliar with the topic and for specialists and activists in search of specific data.

GenPORT: http://www.genderportal.eu/
A collaborative portal sharing, on an open access basis, knowledge on science and gender at a European level.

Zotero: https://www.zotero.org/
Open source freeware for reference management, with a collaborative focus. Students can be asked to create open access collaborative reference lists and to search through existing open access lists with a feminist perspective, such as that created by Vergés et al. (2020):
https://www.zotero.org/groups/414156/metodologiasfeministas/library

RRITools: https://rri-tools.eu/en/homepage
An online, collaborative repository of tools on responsible research and innovation, with thematic filters including gender equality (https://rri-tools.eu/en/gender-equality) and type of actor involved, including the research community (https://rri-tools.eu/en/research-community).

Gendered Innovations: http://genderedinnovations.stanford.edu/index.html
A project developing practical methods around sex- and gender-based differences and inequalities and intersectional analysis in the fields of science, health and medicine, engineering and the environment. It also includes case studies showing how including the sex variable, a gender perspective and intersectional analysis fosters innovation.

As an alternative or complementary activity to inviting outsiders to talk about their research, we could offer students a curated collection of research so that it can be analysed from a gender and feminist perspective. This analysis could, for example, be based on the list of questions suggested by Trbovc and Hofman (2015), which students could subsequently apply to the design of their own research:

Identifying the research problem and question:

- Have you considered possible gender differences when formulating the research problem?
- Regarding this research problem, might there be different positions or relationships depending on gender? What about depending on male and female bodies?
- If your project deals with a society's structural issues (e.g. decision-making or policy-making), have you considered gender differences with regard to the political system, decision-making bodies and the division of ownership of relevant resources (land, income, property)? If your project addresses people's private lives, have you considered how gender differences may affect career decisions, consumption patterns, voting behaviour, parenting, etc.? Have you considered how different roles and expectations may impact the behaviour you seek to analyse?
- When compiling a list of references (literature review) for your research, do you look for gender-sensitive literature and research projects conducted in your field, or think of those spheres in which they are lacking?

Detecting gender stereotypes, inequalities and biases:

- If you are considering gender differences in your research, have you checked your own potential biases? Have you asked yourself if you are maybe projecting stereotypical roles onto how women and men behave, what they need and desire?
- Now think again. Are there any hidden aspects involving gender roles and stereotypes in your research questions and objectives?

Gender-sensitive methodology:

- Do you have male and female participants in your research sample?
- If you are producing new, original methodology, have you thought about how to integrate a gender perspective into it?
- If you are conducting surveys in your research or disseminating questionnaires, have you designed the questions so they are relevant to both women and men?
- Are you using gender-sensitive language in your project outline?
- If part of your project is conducting visual analysis, have you checked whether the images reproduce certain stereotypes about gender roles?

Disaggregating data by sex and analysing data in a gender-sensitive way:

- When collecting data, have you broken them down by sex/gender? Have you checked them against other variables to identify intersectional logics?
- When doing fieldwork with people, have you taken gender diversity into account in your sample design? When conducting laboratory or medical experiments, do you always report the sex of the cells, tissues, animals or subjects you are using? If you are using one sex only, do you justify why and point out limitations in your discussion? If you are conducting policy analysis, are you aware of the gender ratio in decision-making bodies?

Gender-sensitive results:

- Do you report data in a gender-sensitive way?
- If the result of your project is a policy recommendation, do you think about your outcomes through gender inequality and how to combat it?
- Have you checked if your publication/exhibition presents images of different genders? Have you considered whether these images maybe reproduce stereotypical gender roles?

Gender-sensitive identification of users/beneficiaries:

- Have you considered whether and how people of different genders could use the project results in different ways?
- If you are conducting medical research, do you think about how it improves the lives of both men and women? Have you considered the experience of trans people?
- If the outcome of your project is a new/improved product or technology, have you considered how it will be used and how it will benefit lives differently depending on gender?
- In what ways does your research relate to gender inequalities in society?

For a more in-depth look at how to include a gender and feminist perspective in research, Biglia and Vergés (2016) have also produced a list of questions for reflection divided into four thematic blocks: (1) equity and equality of opportunity in the research team; (2) project design; (3) project implementation; and (4) outcomes, impact and research. Even though, in this case, the focus is not on initial research training, it might well prove useful material for consultation, analysis and reflection.

Ethics is another important dimension to include in research training. In this case, we can find inspiration in some of the research ethics offerings of feminist research on the internet (and thus applicable to any kind of research involving human participants), which provide guidance questions to help us review and reflect on our research proposals, above and beyond the legal requirements that tend to

be assessed by ethics committees (Association for Progressive Communication, 2019):

1. **Consent**
   a. Is the consent informed?
   b. Have you clearly explained the goals of your research?
   c. Have you effectively communicated (taking into account language, ability and other factors) the risks and implications of the research on the lives of participants?
   d. If the ideals of informed consent are not fully achievable, can you explain and document why?
2. **Accountability**
   a. Do you know who you are accountable to – which persons or communities?
   b. Does this include a practice of reciprocity with participants and others touched by the research?
   c. Do you take ownership of the risks that participants might face?
   d. What better ways of engagements are there for you to be more transparent in your processes, results and the other stages of the project?
3. **Situatedness**
   a. Do you know and communicate your location and situatedness, i.e. your identity, culture, the body you inhabit, race, etc.?
   b. Reflecting on privilege (of various kinds) when producing knowledge: is this an active reflection that impacts the production?
   c. Are you cognisant of power relations, dynamics and how they might shift:
      i. Between researcher and research participant?
      ii. Within the field of internet research?
      iii. Institutional power relations?
   d. Are the research process and outputs open to critique?
4. **Intersectionality**
   a. Do you assume that your condition is universal? How can you address that?
   b. Do you describe and understand the context in relation to intersecting powers that are acting upon people?
   c. Do you describe people and groups as homogeneous, without taking into account that they embody multiple and various identities and realities?
   d. Is your inclusion of various people and groups tokenistic or are you advancing our complex understanding of the context in terms of intersecting powers and identities?

5. **Connection**
   a. In the process of building networks, have you clearly stated the types of connections you (seek to) establish with the participants/actors and others? What about the commitments, risks and benefits?
   b. Have you left room (literally and otherwise) for the possible evolution of relationships? This could be relations within the research team, individual transformations, etc.
6. **Memory**
   a. The feminist politics of knowledge building is also about resisting being forgotten. So, if people have always been forgotten, how can this be addressed?
   b. How can your project contribute to preserving memory and building archives for the community and participants in the research process?
7. **Care and safety**
   a. Does your research process show enough care for the person, information, data or collective?
   b. Do you look after those who are vulnerable?
   c. Do you ensure not to put anyone at risk and not to (re)produce harm?
   d. Do you follow rituals and practices of self-care and collective care?
   e. Do you, as an individual and as a team, set boundaries with regard to various other networks and relations?
   f. Care is feminized labour historically expected of women in particular, or of specific groups based on caste, class, race, ethnicity etc. Are you aware that care, too, can be exploitative and do you work against that?
   g. Do you have a mechanism for ensuring safety of the person, information, data or collective?

If research entails analysing data extracted from social networks and/or teaching activities involving these tools and platforms, we can also include the ethics-related ideas of the Digital Alchemists collective and the Center for Solutions to Online Violence (CSOV) (2016). It is also worthwhile bearing in mind the **data feminism** suggestions of D'Ignazio and Klein (2020), who apply the principles of intersectional feminism to data science-based research:

1. **Examine power.** Data feminism begins by analysing how power operates in the world: Data science for whom? Data science by whom? Data science with whose interests and goals in mind?
2. **Challenge power**. Data feminism commits to challenging unequal power structures and working toward justice. One of these methods involves collecting "counterdata" that official institutions are failing to monitor.
3. **Elevate emotion and embodiment.** Data feminism teaches us to value multiple forms of knowledge, including the knowledge that comes from people as living, feeling bodies.
4. **Rethink binaries and hierarchies**. Data feminism requires us to challenge the gender binary, along with other systems of counting and classification that perpetuate oppression. Counting is always complicated, and attending to context is essential when making decisions about what and who to count, and how to do so.
5. **Embrace pluralism**. The most complete knowledge comes from synthesizing multiple perspectives, with priority given to local, indigenous and experiential ways of knowing.
6. **Consider context**. Data are not neutral or objective. They are the products of unequal social relations, and this context is essential for conducting accurate, ethical analyses.
7. **Make labour visible**. The work of data science is the work of many hands; it must be made visible so that it can be recognized and valued.

Acknowledging how the framework of intersectionality arises from black feminism, these authors urge white academics to recommit to anti-racist work in their institutions, decolonize their own teaching and training, and engage authentically with impacted communities (D'Ignazio & Klein, 2020).

6.2 Some tips on supervising students using feminist pedagogy

Based on their own experience, feminist pedagogy pioneers Christine Jarvis and Miriam Zukas (1998) suggest reflecting on the differences and similarities between teaching, research and the supervision of (master's and doctoral) students. Here, we will be putting the emphasis on supervising students carrying out research work. Within such a context, according to Jarvis and Zukas (1998), although highlighting the value of **the experience** of both parties (supervisee and supervisor) is the bedrock of feminism, it should be clear that, initially, this

relationship is not built on reciprocity and that the two sets of experience should not be counted as equal. The supervisor must maintain a role of expertise and is responsible for ensuring that the supervisee meets institutional requirements to secure the qualification in question. The supervisee also expects the supervisor to know how to guide them through the research process, while providing structure and support that help them achieve the goals involved in obtaining the qualification. In any case, this gives rise to a gradual **transfer of power, control and knowledge** from the supervisor to the supervisee as the research process progresses. Thus, the implicit power relations in such a supervisory arrangement cannot be ignored or overcome. From a feminist perspective, the parties need to make them explicit and negotiate them, taking into account the numerous institutional restrictions.

For their part, Humble et al. (2006), without denying all the supervision-related tensions and contradictions running through this kind of relationship, propose a feminist model for mentoring based on four feminist pedagogy- and research-related principles: (a) self-disclosing experiences around research topics and institutional life from a gender perspective, revealing the **inseparability of the personal and the political**; (b) critically analysing power, constructing a **relationship that can be both hierarchical and collaborative**, without confusing the authority of knowledge with that of positions or abusing structural power; (c) teaching how to deal with **resistance to feminist perspectives** in the academic world; and (d) working together towards **social change** from multiple possible pathways. In short, the idea is to incorporate the principles of feminist pedagogy and research into the supervision relationship, on the basis of the ethic of care, ongoing reflection, dialogue and negotiation, without forgetting institutionally-set roles and the academic objectives of said relationship.

To conclude, although we have not identified specific experiences of **online supervision** from feminist perspectives, we can say that the goal would be to integrate the principles outlined above into good practices for online supervision. According to Kumar et al. (2020), this model for supervision in online environments faces eight challenges, for which a series of strategies and practices are proposed. Of these eight, those that stand out as specifically relevant for online supervision would be very similar to those identified for the same form of teaching: connecting, communicating, building a relationship and fighting against any isolation that students may experience. Although in completely face-to-face environments this process can arise more informally, online contexts call for more planning and structuring for both parties and greater leadership

from the supervisor, especially during the initial stages. Emphasis should also be given to more frequent use of open communication channels, not only for purely academic issues, but also for building the relationship, mutual trust and understanding. Be it institutionally and/or on the student's initiative, it would also be worth fostering contact dynamics with other students to promote a sense of community and help prevent any feeling of isolation. Tips and strategies for achieving these goals can be found in the preceding sections of this guide. Students could also be encouraged to take part in online mutual support forums, such as online study groups like PhDForum (https://www.thephdforum.com/), or to create new ones.

07. TEACHING RESOURCES

GLOSSARY

Accessibility

Digital accessibility guarantees that anyone, including those with a disability or special educational needs, can access content and/or use a technological tool, product or system. In a broader sense, accessible education or training is that which meets the educational demands of a wide range of individuals and groups, with different learning competencies and preferences.

Blended learning

Basically put, these are training/education situations that blend face-to-face and online environments. This can take concrete form in a number of ways, based on the organization, time and prioritization of the face-to-face or online components and, therefore, the type of student engagement that is enabled. At the same time, the online component may be on-site or remote; in other words, the online work may take place in the same setting in which face-to-face training/education is provided, or not. For example, mention could be made of face-to-face classes that are combined with some online activities, be these within or outside class hours. Or, there could be a specific period of time for face-to-face classes, which take advantage of a specific physical space, such as a laboratory, and a period of completely online sessions. Consideration could also be given to those online training/education models in which students must take part in a series of face-to-face activities programmed over the course of a given academic period. In its more limited version of using virtual environments, this form of learning can entail minimal adjustments to face-to-face teaching, be this occasionally by incorporating technology-mediated help to improve teaching and learning or by employing online platforms as learning management systems, permitting the digitalization of some tasks (structuring activities; storing, sequencing and distributing content; making submissions; carrying out simple exercises, etc.), while the majority of continuing education is provided on a face-to-face basis. This is generally – with minor variations – the formula most commonly used by most face-to-face universities in Catalonia.

Digital natives

In 2001, Mark Prensky came up with the term "digital natives" to describe those born in the age of digital technologies and the internet and who have therefore grown up using these tools and live connected to the 'net in their daily lives. "Digital immigrants", meanwhile, belong to previous generations growing up in environments dominated by the printed media and analogue technologies and who have discovered and have had to adapt to digital technologies in later life. According to Prensky, these two generations have different characteristics, habits and ways of processing information and understanding the world, enabling them differently for life and learning (Prensky, 2001).

Enquiry-based learning

This is an umbrella term used to identify a series of learning methods drawing on enquiry-based activities on the part of students, such as project-based, problem-based or case-based learning. Its standout feature is the global, integrative experience to which we were referring, of a cognitive, emotional and social nature, which occurs in students during the process of responding to a question, problem or situation from an interdisciplinary perspective, through a systematic process of information seeking, analysis, knowledge construction and the formulation of conclusions. Student autonomy in the work process, which may be individual or group-based, plays a significant role, although it also entails forms of guidance, support and advice from teaching staff, which may be of greater or lesser importance.

Equity consciousness

Equity consciousness is a quality or characteristic of people, groups or systems that acknowledges and addresses diversity. Equity consciousness is based on identifying historically oppressed and disadvantaged groups and aims to guarantee full access to educational opportunities for all individuals and groups.

E-learning

This term has tended to be used in the same sense as "online teaching" but, in general, it is more directly associated with the corporate training sector. Nevertheless, its meaning is somewhat vague, as it can also be used in a broader sense to encompass all educational experiences using technology as a support,

as suggested by Sangrà, Vlachopoulos, Cabrera and Bravo (2011): “a form of teaching and learning that can represent all or part of the educational model in which it is employed, which exploits electronic media and devices to facilitate access to, the evolution of and improvements in the quality of education and training”.

Flipped learning

This form of learning, which has become popular in recent years, is a form of blended learning in which part of the transmission and understanding of the content takes place online, generally in the form of video tutorials, while face-to-face time in the classroom is spent on discussion and performing enquiry-based activities that allows for more in-depth examination and properly articulating the content (QAA, 2020).

Hybrid learning

This expression (like that of "hyflex learning") is used to refer to "blended" formulas, which generally incorporate one key characteristic: the flexibility offered to students for switching between face-to-face and online learning environments. In other words, the possibility of configuring learning as they see fit, to meet their own needs and preferences, based on participation in a combination of face-to-face and/or online activities (QAA, 2020). This form of learning means that course design must take into account both face-to-face and online settings, or, put another way, learning pathways in face-to-face and online environments must be as transparent and fluid as possible. Some authors, such as Bates (2019), put the definition's emphasis on a complete redesign of the learning experience through taking optimal advantage of the potential of technology. So, according to Bates, the time spent on face-to-face interaction tends to be significantly reduced, to be limited to those learning opportunities solely provided by face-to-face settings, giving students flexible access to all the remainder.

Inclusive education

This type of education aims to ensure the presence, participation and the all-round development of all people in the education environment. It is based on the fundamental right of all people to fully participate in and contribute to all aspects of life and culture, without restriction or discrimination.

Learning design

A methodology allowing teaching staff and designers to take informed decisions regarding the design of learning experiences, drawing on pedagogic fundamentals to make effective use of the right technological tools. It can refer to the design of individual learning resources and activities or a complete curricular design. One core principle is helping to make the design process more explicit and compatible among teaching staff (Conole, 2013). It entails making decisions on fitting various components together to achieve the desired learning objectives, such as content, time, methodologies and the sequence of learning activities, resources and assessment, as well as the nature of the technology employed to provide learning support.

MOOC

Massive open online courses are free of charge and freely accessible to everyone. They aim to garner large-scale participation and provide open access to materials and activities, and may therefore use open educational resources as content.

Netiquette

A general term designating the set of norms designed to govern user behaviour in communicating on and participating in the 'net, an adaptation of the rules of face-to-face etiquette to online environments.

Online teaching or education

This is a distance education format in which training is provided exclusively and completely via the internet (synchronously, asynchronously or both) and is technologically and pedagogically tailored for a virtual environment. When using the terms online teaching and/or education, we are making direct reference to the teaching activity. Nevertheless, in student-centred pedagogic focuses, it would be more appropriate to emphasise analogous terms such as online learning, virtual learning or e-learning.

Open education

A movement whose philosophy it is to provide quality education for all, without restrictions, and which therefore seeks to eliminate barriers to make learning accessible and personalizable. It springs from a conception of the production and sharing of knowledge based on participation and collaboration. It aims to provide a wide range of forms of teaching and lifelong learning, flexibly, anytime and anywhere, using different channels and environments. To this end, it equips itself with open resources, tools and practices that are free from legal, economic or technical barriers, leveraging the digital environment to maximize exchange, sharing, networked learning and the joint construction of knowledge. It also incorporates new assessment and accreditation focuses for lifelong learning.

Open educational resources

These consist of any educational material, for teaching, learning or research, that is free of charge, in the public domain and freely accessible on the internet, or available under an open intellectual property licence granting permission for its use, reproduction, reuse, remixing and redistribution. They may be complete courses, course materials, content modules, textbooks, audio recordings or animations, exercises, projects, tests, software or any other tool, material or technique. To boost their accessibility and use, it is important that they be created using open and accessible technologies and made available in at least one reusable version (Sanjaya Mishra, 2017). In recent years, the focus has shifted from creating and providing access to open educational resources to building an open learning architecture that provides support for the use and production of such resources within open educational practices.

Seamless learning

This focuses on learning taken as a whole, an ongoing experience in the natural transition of learners through traditionally dichotomic categories (e.g. in-class and out-of-class; academic and non-academic; curricular and co-curricular) and therefore between formal and informal and environments and academic, social and professional learning experiences. Ubiquitous access to mobile, connected, personal and handheld devices makes ubiquitous learning possible and fosters continuity in the learning process, switching from one scenario to another easily and quickly, combining individual, small group or community learning, be this face-to-face or online.

Student- (or user-)generated content

This entails involving students in the development of learning objects that may be of value beyond course activities and become academic content, be this for subsequent or other courses, lower academic-level students or even as learning content for other contexts. It thus calls for offering activities that help create this kind of outcome, which are shareable and reusable by students. They could also be the results of co-creation processes in which students and teaching staff take part. One key aspect is to establish clear criteria for the treatment of intellectual property, which should (ideally) be covered by Creative Commons licences.

Synchronous and asynchronous

Communication in online environments may be synchronous or asynchronous. In the former case, exchanges occur in real time, i.e. participants coincide at the same point in time, whether or not they are located in different physical places. Asynchronous communication, on the other hand, takes place non-simultaneously, staggered over time. Examples of synchronous communication tools include chats and videoconferencing, while those most commonly used for asynchronous communication are email, forums, wikis and blogs.

Transactional distance

Defined as a psychological and communication space influenced by the medium and which has to be crossed, a space of potential misunderstanding, e.g. by interfering with positive dialogue or communication and learning design or by restricting students' autonomy (Moore, 1997). Since the early days of distance education, this distance has always been considered to have only negative effects on communication and learning, and so a range of technological and design solutions have been devised to bridge it. Nevertheless, it has also been shown that this transactional distance may help create a space for reflection and for disconnecting from unproductive power relationships. Under this view, it can foster the personalization of learning and the self-administration of one's own time and energy, but can also give rise to spaces of disruption.

Universal learning design

A form of learning design focused on meeting the needs of all students and their differing abilities, offering greater flexibility in accessing materials, participation and learning assessment and, therefore, eliminating barriers so that they all have

the same opportunities for success. With this aim in mind, it focuses on principles for learning, namely commitment or engagement, representation, action and expression, and aims to provide numerous ways of accessing or achieving each of them.

8. FURTHER READING

ANEJA, Anu (2016). "Blending in: reconciling feminist pedagogy and distance education across cultures", *Gender and Education*. https://doi.org/10.1080/09540253.2016.1237621

Arango Restrepo, María C. and Corona-Vargas, Esther (2016). *Guía para la igualdad de género en las políticas y prácticas de la formación docente*. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000260891

ASSOCIATION OF COLLEGE AND UNIVERSITY EDUCATORS (2020a). *Sample Netiquette Discussion Forum Guidelines.* https://acue.org/wp-content/uploads/2020/07/2B_Online_PG_Netiquette.pdf

ASSOCIATION OF COLLEGE AND UNIVERSITY EDUCATORS (2020b). *Using Inclusive Language @ UMSL.* https://blogs.umsl.edu/diversity/files/2020/06/InclusiveLanguage_Resource_Sheet_0001.jpg

ASSOCIATION FOR PROGRESSIVE COMMUNICATION-WOMEN'S RIGHTS PROGRAMME (2019). Feminist Internet Ethical Research Practices. https://genderit.org/resources/feminist-internet-ethical-research-practices

BATES, A. W. (Tony) (2019). *Teaching in a digital age: Guidelines for designing teaching and learning*. 2nd Edition. https://pressbooks.bccampus.ca/teachinginadigitalagev2/

BIGLIA, Barbara and JIMÉNEZ, Edurne (2012). "Los desafíos de la pedagogía cyberfeminista: un estudio de caso. Athenea Digital". *Revista de pensamiento e investigación social*, 12(3), 71-93. https://doi.org/10.1344/reire2016.9.2922

BIGLIA, Barbara and VERGÉS BOSCH, Núria (2016). "Cuestionando la perspectiva de género en la investigación". *Revista d'Innovació i Recerca en Innovació*, 9(2), 12-29. DOI:10.1344/reire2016.9.2922//

BILGIÇ, Hatice Gökçe; DOĞAN, Dílek and SEFEROĞLU, Süleyman Sadi (2016). "Digital Natives in Online Learning Environments: New Bottle Old Wine–The Design of Online Learning Environments for Today's Generation". In *Handbook of research on engaging digital natives in higher education Settings* (pp. 192-221). IGI Global.

BOIXADÓS, Mercè; Ollé, Eva and Gutiérrez, Maite (2017). "Tutoría en la UOC: Diseño y elaboración del plan de tutoría del grado de psicología". *REDU. Revista de Docencia Universitaria,* 15(1), 305-323. https://doi.org/10.4995/redu.2017.6080

Bowell, Tracy (2011). "Feminist Standpoint Theory". *Internet Encyclopedia of Philosophy. A Peer-Reviewed Academic Source*. http://www.iep.utm.edu/fem-stan/

Bruestle, Peter; Haubner, Dominik; Schinzel, Britta; Holthaus, Mathias; Remmele, Bernd; Schirmer, Dominique and Reips, Ulf-Dietrich (2009, March). "Doing e-learning/doing gender? Examining the relationship between students' gender concepts and e-learning technology". In 5th European Symposium on Gender and ICT Digital Cultures: Participation-Empowerment–Diversity (p. 5-7).

Cassián Yde, Nizaia (2019) "Feminismes i diversitat sexual". https://epce.blogs.uoc.edu/ca/feminismes-i-diversitat-sexual/

Chick, Nancy i Hassel, Holly (2009). ""Don't Hate Me Because I'm Virtual": Feminist Pedagogy in the Online Classroom". *Feminist Teacher*, 19(3), 195-215.

Collier, Amy (2020). "Inclusive Design and Design Justice: Strategies to Shape Our Classes and Communities". *Educause Review 55* (4). https://er.educause.edu/articles/2020/10/inclusive-design-and-design-justice-strategies-to-shape-our-classes-and-communities

Conole, Gráinne (2013). *Designing for learning in an open world*, New York, Springer.

Costanza-Chock, Sasha (2018). "Design Justice: Towards an Intersectional Feminist Framework for Design Theory and Practice", (June 3, 2018). *Proceedings of the Design Research Society* 2018, disponible a SSRN: https://ssrn.com/abstract=3189696

Constanza-Chock, Sasha (2020). "Introduction: #TravelingWhileTrans, Design Justice, and Escape from the Matrix of Domination". A *Design Justice* (1st ed.). Extret a https://design-justice.pubpub.org/pub/ap8rgw5e

Crabtree, Robbin D.; Sapp, David Alan and Licona, Adela C. (2009). "The Passion and the Praxis of Feminist Pedagogy: An NWSAJ Retrospective", a Crabtree, Robin; Sapp, David Alan; and Licona, Adela C. (eds.) (2009). *Feminist Pedagogy: Looking Back to Move Forward.* Baltimore: Johns Hopkins University Press.

Cripps, Jenna and Stermac, Lana (2018). "Cyber-sexual violence and negative emotional states among women in a Canadian university". *International journal of cyber criminology,* 12(1), 171-186.

Davidson, Zoë (2019). "There's more to being a scientist than just doing science. The Gist. The Glasgow Instight into Science and Technology". https://the-gist.org/2019/10/theres-more-to-being-a-scientist-than-just-doing-science/

Davis, Shannon N. and Hattery, Angela (2018). "Teaching Feminist Research Methods: A Comment and an Evaluation". *Journal of Feminist Scholarship 15 (Fall)*: 49-60. 10.23860/jfs.2018.15.05.

Dehler, Jessica and Gilbert, Anne-Françoise (2010). "Geschlechtergerechte Gestaltung der Hochschullehre", a Berendt, Brigitte; Voss, Hans-Peter and Johannes Wildt (ed.). *Neues Handbuch Hochschullehre: Lehren und Lernen effizient gestalten*, G 2.6, Stuttgart: Raabe, 19 S.

D'Ignazio, Catherine and Klein, Lauren F. (2020). "Seven intersectional feminist principles for equitable and actionable COVID-19 data". *Big Data i Society.* Vol. 7, n. 2. https://doi.org/10.1177/2053951720942544

Design Justice Network (2016). DesignJustice.org. Darrera consulta de 10/12/2017 a http://designjustice.org

Digital Alchemists and Center for Solutions to Online Violence (CSOV) (2016). "Research Ethics for Students i Teachers: Social Media in the Classroom Questions to Answer as You Prepare for Social Media Research". https://femtechnet.org/wp-content/uploads/2016/06/Research-Ethics-For-Students-Teachers_Social-Media-in-the-Classroom_DA-CSOV_2016-1.pdf

Donestech (2020). "Resultados de investigaciones feministas sobre violencias machistas online". https://www.donestech.net/noticia/donestech-webinar-resultados-de-investigaciones-feministas-sobre-violencias-machistas-online

ERAC [European Research Area and Innovation Committee] (2020). "Policy brief "Mobilising to eradicate gender-based violence and sexual harassment: A new impetus for gender equality in the European Research Area"". https://data.consilium.europa.eu/doc/document/ST-1206-2020-INIT/en/pdf

Faucher, Chantal; Jackson, Margaret and Cassidy, Wanda (2014). "Cyberbulling among University Students: Gendered Experiences, Impacts and Perspectives". *Education Research International*, vol. 2014, article ID 698545, 10 pàgs., 2014. https://doi.org/10.1155/2014/698545

FemTechNet (2013). "Transforming higher education with distributed open collaborative courses (DOCCs): Feminist pedagogies and networked learning". FemTechNet Commons, 30. https://femtechnet.org/about/white-paper/

FemTechNet Collective (2018). "FemTechNet: A Collective Statement on Teaching and Learning Race, Feminism, and Technology". *Frontiers: A Journal of Women Studies*, 39(1), 24-41. https://doi.org/10.5250/fronjwomestud.39.1.0024

Freie Universität Berlin (2018). "Toolbox Gender and Diversity in Teaching". https://www.genderdiversitylehre.fu-berlin.de/en/toolbox/index.html

Freie Universität Berlin (2017a). "Planning and Evaluating Methods". https://www.genderdiversitylehre.fu-berlin.de/en/toolbox/teaching-methods/planning-and-evaluating/index.html

Freie Universität Berlin (2017b). "Methodological Skills". htps://www.genderdiversitylehre.fu-berlin.de/en/toolbox/teaching-skills/skills/_inhalte/Skills-and-Competences-FAQ/methodological-skills.html

Freie Universität Berlin (2017c). "Gender and Diversity Skills for University Teachers" https://www.genderdiversitylehre.fu-berlin.de/en/toolbox/teaching-skills/skills-acquisition-cycle/index.html

Freie Universität Berlin (2017d). "Guidelines". https://www.genderdiversitylehre.fu-berlin.de/en/toolbox/kompetenzen/leitlinien/_inhalte/Guidelines-FAQ/index.html

Gajjala, Radhika; Behrmann, Erika M.; Birzescu, Anca; Corbett, Andrew and Bondor, Kayleigh F. (2017). "Epistemologies of doing: Engaging online learning through feminist pedagogy". *MOOCs and Their Afterlives: Experiments in Scale and Access in Higher Education*, 135.

Goel, Urmila and Stein, Alice (2012). "Más que una simple relación de poder: educación crítica para el poder y enfoques de la interseccionalidad". http://portal-intersektionalitaet.de/theoriebildung/ueberblickstexte/goelstein/

Grup d'Educació i Gènere (2020). "Perspectiva de gènere en l'educació. Marc conceptual". Universitat Autònoma de Barcelona. https://ddd.uab.cat/record/226865

Haraway, Donna (2010). "A Cyborg Manifesto"(1985). *Cultural Theory: An Anthology*, 454.

Harbin, Brielle (2020). "Teaching Beyond the Gender Binary in the University Classroom". Center for Teaching. Vanderbilt University. https://cft.vanderbilt.edu/guides-sub-pages/teaching-beyond-the-gender-binary-in-the-university-classroom/

Heide, Anouk van der; Arensbergen, Pleun van; Lansu, Monic and Bleijenbergh, Inge L. (2017). "Collected good practices in introducing gender in curricula". EGERA Project Deliverable number: D.4.4. Nijmegen: Radboud University. https://hdl.handle.net/2066/181606

Heikkinen, Mervi; Pihkala, Suvi and Sunnari, Vappu (2008). "Constructing a Pedagogical approach for an E-learning Programme on Gender and Sexual Violence". In *From Violence to Caring: gendered and sexualized violence as the challenge on the life-span. Conference proceedings.* (p. 203-215). University of Oulu. https://www.diva-portal.org/smash/get/diva2:1012718/FULLTEXT01.pdf

Henderson, Emily (2014). *Gender pedagogy: Teaching, learning and tracing gender in higher education*. Springer.

Hey, Barbara (2010). "Guidelines on gender fair curriculum development". University of Graz, Austria. https://www.wus-austria.org/files/docs/Publications/guidelines_gender_fair_curriculum_development.pdf

Hodges, Charles; Moore, Stephanie; Lockee, Barbara; Trust, Torrey and Bond, Aaron (2020). "The difference between emergency remote teaching and online learning". *Educause Review,* 27. https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning

Herman, Clem and Kirkup, Gill (2008). "Learners in transition: the use of ePortfolios for women returners to science, engineering and technology". *Innovations in Education and Teaching International,* 45(1), 67-76.

Herman, Clem and Kirkup, Gill (2017). "Combining feminist pedagogy and transactional distance to create gender-sensitive technology-enhanced learning". *Gender and Education*, 29(6) p. 781–795.

Hughes, Gwyneth (2007). "Diversity, identity and belonging in e-learning communities: Some theories and paradoxes". *Teaching in higher education*, 12(5-6), 709-720.

Hughes, Gwyneth (2010). "Queen Bees, Workers and Drones: Gender Performance in Virtual Learning Groups". In *Gender Issues in Learning and Working with Information Technology: Social Constructs and Cultural Contexts* (p. 244-254). IGI Global.

Humble, Áine M; Solomon, Catherine Richards; Allen, Katherine R., Blaisure, Karen R. and Johnson, Michael P. (2006). "Feminism and mentoring of graduate students". *Family relations*, 55(1), 2-15.

JARVIS, Christine and ZUKAS, Miriam (1998). "Feminist teaching, feminist research, feminist supervision: Feminist praxis in adult education". In *Proceedings of the 39th Annual Adult Education Research Conference* (p. 197-201). San Antonio: University of the Incarnate Word/Texas AiM University.

KIRKUP, Gill (2010). "Gendered Knowledge Production in Universities in a Web 2.0 World". A *Gender Issues in Learning and Working with Information Technology: Social Constructs and Cultural Contexts* (p. 231-243). IGI Global.

KIRKUP, Gill; SCHMITZ, Sigrid; KOTKAMP, Erna: ROMMES, Els and HILTUNEN, Aino Maija (2010). "Towards a feminist manifesto for e-Learning: Principles to inform practices". In *Gender Issues in Learning and Working with Information Technology: Social Constructs and Cultural Contexts* (p. 255-274). IGI Global.

KIRKUP, Gill and WHITELEGG, Elizabeth (2013). "The legacy and impact of Open University women's/gender studies: 30 years on". *Gender and Education*, 25:1, 6-22, DOI: 10.1080/09540253.2012.728569

KLEBESADEL, Helen and KEMPFERT, Tammy (2004). "Women's Studies, Student Learning, and Technology. How Online Teaching Can Complement Feminist Pedagogy". *Teaching With Thecnology Today*, 10 (5). http://www.uwsa.edu/ttt/articles/klebesadel.htm

KORTENDIEK, Beate (2011). "Supporting the Bologna process by gender mainstreaming: a model for the integration of gender studies in higher education curricula". A Laura Grünberg (ed.). *From Gender Studies to Gender IN Studies. Case Studies on Gender-Inclusive Curriculum in Higher Education.* Bucharest: CEPES UNESCO.

KOSEOGLU, Suzan; OZTURK, Tugba; UCAR, Hasan; KARAHAN, Engin and BOZKURT, Aras (2020). "30 Years of Gender Inequality and Implications on Curriculum Design in Open and Distance Learning". *Journal of Interactive Media in Education*, 2020(1).

KRAMARAE, Cheris (2001). "The Third Shift: Women Learning Online". American Association of University Women Educational Foundation, 1111 Sixteenth St. NW, Washington, DC 20036.

KUMAR, Swapna; KUMAR, Vijay and TAYLOR, Stan (2020). "A Guide to Online Supervision". UK Council for Graduate Education. https://supervision.ukcge.ac.uk/cms/wp-content/uploads/A-Guide-to-Online-Supervision-Kumar-Kumar-Taylor-UK-Council-for-Graduate-Education.pdf

Lamptey, Alice; Gaidzanwa, Rudo Barbra; Mulugeta, Ernebet; Samra, Sami; Shumba, Overson; Assie-Lumumba, N'Dri; Oliphant, John and Sunnari, Vappu (2015). "A Guide for Gender Equality in Teacher Education Policy and Practices". UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000231646.locale=es

Lai, Alice and Lu, Lilly (2009). "Integrating feminist pedagogy with online teaching: Facilitating critiques of patriarchal visual culture". *Visual Culture i Gender*, 4, 58-68.

Luxán, Marta and Azpiazu, Jokin (2016). "Metodologías de Investigación Feminista. Tema 4 Módulo del Metodologías de Investigación Feminista", del Máster en Igualdad de Mujeres y Hombres: Agentes de igualdad. https://www.ehu.eus/documents/1734204/6145705/Metodolog%C3%ADas+de+Investigaci%C3%B3n+Feminista.pdf/54172098-3058-1d47-df68-780965fa8f46?t=1513345070000

Luxán, Marta and Biglia, Barbara (2011). "Pedagogía ciberfeminista: entre utopías y realidades". *Revista Teoría de la Educación: educación y cultura en la sociedad de la información*, 12(2), 149-183. http://campus.usal.es/~revistas_trabajo/index.php/revistatesi/article/view/8277/8281

Mattern, Klaudia (2009). "Impulse zu Gender und Diversity im e-Learning: Praxisleitfaden zur Berücksichtigung von gender-und diversitygerechten Aspekten in Online-Bildungsangeboten". FH-Campus Wien. https://www.fh-campuswien.ac.at/fileadmin/redakteure/FH_Campus_Wien/Gender_and_Diversity/Dokumente/e-Learning_Web.pdf

McKerlich, Ross; Riis, Marianne; Anderson, Terry, and Eastman, Brad (2011). "Student perceptions of teaching presence, social presence, and cognitive presence in a virtual world". *Journal of Online Learning and Teaching*, 7(3), 324-336. https://jolt.merlot.org/vol7no3/mckerlich_0911.pdf

Messmer, Ruth and Schmit, Sigrid (2007). "Bridging disciplines: Gender studies and computer science in an e-Learning course". A Zorn, Isabel; Maass, Susanne; Rommes, Els; Schirmer, Carola and Schelhowe, Heidi (eds.). *Gender Designs IT. Construction and deconstruction of Information Society Technology* (pp.135-147). Wiesbaden: VS-Verlag

Mena, María; Sáez, Ángela; Leal, Aurora, and Pujal, Margot (2019). "Aportaciones de las pedagogías de género a la calidad de la docencia universitaria". *Educar*, 55(2), 579-596.

MIMBRERO, Concepción; PALLARÈS, Susana and Cantera, Leonor M. (2017). "Competencias de igualdad de género: capacitación para la equidad entre mujeres y hombres en las organizaciones". *Athenea Digital*, 17(2), 265-286. http://dx.doi.org/10.5565/rev/athenea.1609

MONTES-RODRÍGUEZ, Ramón; HERRADA-VALVERDE, Rosario-Isabel and MARTÍNEZ-RODRÍGUEZ, Juan Bautista. (2019). "Mujeres en un MOOC. Brecha, Vulnerabilidad y Marcas de Género. Reflexiones desde un estudio de caso cualitativo". *Revista Mediterránea de Comunicación*, 10 (1) 27 -39.

MOORE, Michael G. (1997). "Theory of transactional distance". A KEEGAN, Desmond (ed.) (2005). *Theoretical Principles of Distance Education* (p. 22-38). London: Routledge.

MORA, Enrico and PUJAL, Margot (2014). "El cuidado y la provisión en el proyecto docente universitario. Un ejemplo: la asignatura. Las clases sociales y la estratificación del grado de Sociología". En III Jornada de Innovación en Género: Docencia e Investigación (p. 105-126). Vigo: Unidad de Igualdad. Universidad de Vigo.

MORGAN, Hanna and HOUGHTON, Ann-Marie (2011). "Inclusive curriculum design in higher education. Considerations for effective practice across and within subject areas". The Higher Education Academy. https://www.heacademy.ac.uk/sites/default/files/resources/introduction_and_overview.pdf

NACIONES UNIDAS (2015). Cf, O. D. D. S. Transformar nuestro mundo: la Agenda 2030 para el Desarrollo Sostenible. Resolución aprobada por la Asamblea General de la ONU el 25 de septiembre de 2015: https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1iLang=S

PATTERSON, Natasha (2009). "Distance Education: A Perspective from Women's Studies". *Thirdspace: A Journal of Feminist Theory i Culture* 9 (1): 1–16

PRENKSY, Marc (2001). "Digital natives, digital immigrants". *On the horizon*, *9*(5), 1-6. https://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf

PUY, Ana; PÉREZ, María Pascual, and FORSON, Abigail (2015). *Manuals with guidelines on the integration of sex and gender analysis into research contents, recommendations for curricula development and indicator*. Deliverable 3.11. Gender-NET. https://eige.europa.eu/sites/default/files/d3.11_manuals_with_guidelines_on_the_integration_of_sex_and_gender_analysis_into_research.pdf

QAA (2020). "Guidance. Building a taxonomy for digital learning". The Quality Assurance Agency for Higher Education. UK. https://www.qaa.ac.uk/docs/qaa/guidance/building-a-taxonomy-for-digital-learning.pdf

REDMOND, Petrea; ABAWI, Lindy-Anne; BROWN, Alice; HENDERSON, Robyn, and HEFFERNAN, Jones (2018). "An online engagement framework for higher education". *Online learning*, 22(1), 183-204.

REMMELE, Bernd, and HOLTHAUS, Matthias (2013). "De-gendering in the use of e-learning". *The International Review of Research in Open and Distributed Learning*, 14(3), 27-42.

RENSFELDT, Annika Bergviken, and RIOMAR, Sandra (2010). "Gendered distance education spaces:"Keeping women in place"?". In *Gender issues in learning and working with information technology: Social constructs and cultural contexts* (p. 192-208). IGI Global.

RINGROSE, Jessica (2018). "Digital feminist pedagogy and post-truth misogyny". *Teaching in Higher Education*, 23(5), 647-656.

RODRÍGUEZ MILANÉS, Cecilia and DENOYELLES, Aimee (2014). "Designing Critically: Feminist Pedagogy for Digital/Real Life". Hybrid Pedagogy: https://hybridpedagogy.org/designing-critically-feminist-pedagogy-digital-real-life/

ROGOWSKA-STANGRET, Monika (2018). "Situated Knowledges". *New Matterialism. How matter comes to matter.* https://newmaterialism.eu/almanac/s/situated-knowledges.html

ROSENKRANZ-FALLEGGER, Edith (2009). "Gender-Kompetenz: Eine theoretische und begriffliche Eingrenzung". A LIEBIG, Brigitte; ROSENKRANZ-FALLEGGER, Edith and Ursula MEYERHOFER (ed.). *Handbuch Gender-Kompetenz. Ein Praxisleitfaden für (Fach-)Hochschulen*, Zürich: vdf, 29-48.

SANGRÀ, Albert; VLACHOPOULOS, Dimitrios; CABRERA, Nati and BRAVO, Sílvia (2011). "Hacia una definición inclusiva del e-learning". Barcelona: eLearn Center. UOC. http://openaccess.uoc.edu/webapps/o2/bitstream/10609/10541/6/inf_ed_cast.pdf

SANJAYA, Mishra (2017). "Open educational resources: removing barriers from within". *Distance Education,* 38:3, 369-380, DOI: 10.1080/01587919.2017.1369350

SATOR, Andrea and WILLIAMS, Heather (2020). "Removing Barriers to Online Learning though a teaching and learning lens". ABLE Research. BCcampus Diversity, Equity,

and Inclusion. https://bccampus.ca/wp-content/uploads/2020/06/Report_Removing-Barriers-to-Online-Learning-Through-a-Teaching-and-Learning-Lens.pdf

Schmitz, Sigrid; Mebmer, Ruth and Schinzel, Britta (2006). "Gender and diversity in e-learning". A Trauth, Eileen M. (ed.). *Encyclopedia of Gender and Information Technology*. Hershey, PA: Idea Group, S. 385-391.

Social Sciences Feminist Network Research Interest Group (2017). "The burden of invisible work in academia: Social inequalities and time use in five university departments". *Humboldt Journal of Social Relations*, 39, 228-245. https://digitalcommons.humboldt.edu/hjsr/vol1/iss39/21/

Sørensen, Knut Holtan; Faulkner, Wendy and Rommes, Els (2013). "Technologies of Inclusion. Gender in the Information Society". Tapir Academic Press, 2011. *Nordic Journal of Science and Technology Studies*, vol. 1 n. 1, 46-47.

Taylor, James C. (2001). "Fifth generation distance education". *Instructional Science and Technology*, 4(1), 1-14.

Torras Virgili, Eulalia (2015). *Aproximació conceptual a l'ensenyament i aprenentatge en línia*. Barcelona: FUOC.

Trbovc, Jovana Mihajlovic and Hofman, Ana (2015). "Toolkit for integrating gender-sensitive approach into research and teaching". https://eige.europa.eu/sites/default/files/garcia_toolkit_gender_research_teaching.pdf

UNESCO (2018). Educación para los Objetivos del Desarrollo Sostenible. Objetivos de aprendizaje. Educación 2030. Sector de Educación. Paris: UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000252423

Unidad de Mujeres y Ciencia (UMYC) Ministerio de Ciencia e Innovación (2020). *Resultados del cuestionario sobre el impacto del confinamiento en el personal investigador.* https://www.ciencia.gob.es/stfls/MICINN/Ministerio/FICHEROS/Resultados_cuestionario_impacto_confinamiento_personal_investigador_UMyC.pdf

University of Iceland. "Equality in Teaching. Checklist" https://english.hi.is/sites/default/files/sveinng/equality_in_teaching_checklist.pdf

UOC (2018). "Diagnosi de la igualtat de gènere a la Universitat Oberta de Catalunya". https://www.uoc.edu/portal/_resources/CA/documents/la_universitat/igualtat/diagnosi-genere-2018-ca.pdf

VERGÉS BOSCH, Núria (2019). "Gènere i TIC: avancem en la CiberFeministització?". *Idees: Revista de temes contemporanis*, (47), 7.

VERGÉS BOSCH, Núria (2013). "Teorías Feministas de la Tecnología. Evolución y principales debates".

VERGÉS, Núria; BIGLIA, Barbara and ALMEDA, Elisabet (2020). "Metodologías feministas con tecnologías para la gestión de la información en la enseñanza universitaria". *Revista Linhas*. Florianópolis, v. 21, (45), p. 165-182,

VIVAKARAN, Mangala Vadivu and MARAIMALAI, Neelamalar (2017). "Feminist pedagogy and social media: A study on their integration and effectiveness in training budding women entrepreneurs". *Gender and Education*, 29(7), 869-889.

VON PRÜMMER, Christine (2004). "Gender issues and learning online". *Learner support in open, distance and online learning environment*s, 179.

WRAY, Mike (2013). *Developing an inclusive culture in higher education: final report*. York: Higher Education Academy.

XARXA VIVES D'UNIVERSITATS. Grup de Treball de Qualitat Lingüística (2019). *Criteris multilingües per a la redacció de textos igualitaris*. Xarxa Vives d'Universitats. http://hdl.handle.net/10251/118893

YUVAL-DAVIS, Nira (2012). "Dialogical Epistemology—An Intersectional Resistance to the "Oppression Olympics"". Patricia Hill Collins Symposium. *Gender i Society*, 26, (1) 46-54.

This guide about online teaching with a gender perspective is based on the concern that a more than possible transition to more digital university teaching models could be a barrier to the great efforts that have been made to incorporate the gender perspective in university teaching in recent years.

While there is clearly a digital and technological gender bias, distance education also has great inclusive and emancipatory potential for women and other socially discriminated groups. This guide offers proposals, examples of good practices, teaching resources and consultation tools to incorporate the gender perspective in a time of profound change.

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