



GENDER-BALANCE CHECKLIST

FOR STEM MOOC CREATORS

Purpose: The aim of this document is to support STEM (and not only STEM) MOOC instructional designers, content developers, graphic and video designers during the design and implementation phase of their work. How is it possible to also take into account gender balance while you are already caught up in the MOOC design and development? All professionals involved are all the time focused on a large number of important activities and quality requirements, so adding up to this TO-DO list is to be done with respect to the ongoing work. How to use the tool: FOSTWOM partners are offering these gender-balance checklists to have a rapid reminder of some key issues that might arise when a new STEM MOOC is to be designed and then produced.

One checklist is addressed in particular to the content expert, the other one to the visual designer. Instructional designers should use both, together, and keep under control the consistency between the two and look at ways to compensate in between the two perspectives any time something is not doable in one or the other.

General guiding principle: sensitive contexts require an overall approach that takes into account different perspectives. Some of the questions are not easy to be addressed because MOOC developers are not always in control of all issues. But: if you know which is the scenario you are dealing with, if you ask yourself the key questions, if you make your effort in working on the items that are under your control (according to your role), your MOOC will be more balanced in the end and everyone - including all participants - will benefit from this.

This is a draft version that is open to comments and suggestions from the public. Give us your feedback by leaving your suggestions directly in this whole document, so that we can improve and support STEM MOOCs designers and raise awareness around the gender-balance perspective.

FOSTWOM Team





CONTENT EXPERTS

| Category | Question | | Answer options | | under ontrol? | How to mitigate this? |
|----------|--|----------|----------------|----------|------------------|---|
| General | Are female content experts part of the teaching staff of this MOOC? | Yes • | No • | Yes • | No • | if you have a chance to involve women as role models, testimonials, case study representatives, please do so |
| | Do you reflect on yourself and your professional role in a gender conscious way? | Yes ● | No ● | Yes • | No • | Be open to reflect on yourself and your professional role in a gender conscious way. We suggest going through the list together with the other teachers or experts involved in designing the MOOC in order to begin thinking and reflecting on how these issues influence teaching and learning in your specific subject. (It's about learning new skills, it's not enough going through the checklist) Gender is an area that most people have opinions about, but fewer have solid knowledge. It is also in many cases about things that affect personal values, which force you to reflect on yourself and your identity. Becoming gender aware is often a slow process of knowledge and learning. Time is needed for dialogue and reflection based on the scientific knowledge that is available. Without an in-depth understanding of how gender is done in everyday practices, it is also close at hand that gender-blind and homosocial practices continue without being |



| | | | | | | problematized |
|---------|--|----------|---------|----------|---------|---|
| General | Do you reflect on how gender influences teaching and learning in your specific subject? | Yes • | No • | Yes • | No • | We suggest going through the checklist together with other teachers or experts involved in designing the MOOC in order to begin thinking and reflecting on how gender influences teaching and learning in your specific subject. (It's about learning new skills, it's not enough going through the checklist without reflection) |
| | Do you actively seek ways to be inclusive to both women and men in your approach to the design of this MOOC? | Yes • | No • | Yes • | No • | none |



| Language | Is the language you are using gender neutral? | Yes • | No • | Yes • | No • | try to write/check if the storyboard is balanced, otherwise suggest expressions that will change sentences to a more neutral form. Here you can find some suggestions from the Cambridge Dictionary |
|---------------------------------------|---|----------|---------|----------|---------|--|
| | Do you avoid using masculine forms/pronouns/nouns in a universal meaning? | Yes • | No • | Yes • | No • | Try to paraphrase in order to refer to a neutral person and not to men or women only. If there is no neutral form to use, try to write your contents referring to both male and female without stereotyping (he/she, him/her,). |
| | Do you avoid terms that may be belittling to one gender? | Yes • | No • | Yes • | No • | Example: address a female manager as "bossy" |
| | Are you using a gender neutral pronoun if available in the language of your MOOC? | Yes • | No • | Yes • | No • | in English the gender-neutral pronoun is they/them (also for singular). See APA guidelines, https://apastyle.apa.org/style-grammar-guidelines/bias-free-language/gender : "The language related to gender identity and sexual orientation has also evolved rapidly, and it is important to use the terms people use to describe themselves" |
| Content (texts, images, videos, etc.) | Are women and men equally represented in the examples? | Yes • | No • | Yes • | No • | Try to have the same number of women and men in the examples in your MOOC and give them equal positions or roles. You can also let women and men switch traditional positions or roles as a way to challenge stereotypes. |
| | Are you providing balanced examples which empower both men and women? | Yes • | No • | Yes • | No • | example: give the same "power role" to male and female in different examples within your MOOC |
| | Do the chosen examples represent the diversity of people/genders? | Yes • | No • | Yes • | No • | Try to have women and men equally represented in the examples in your MOOC. |



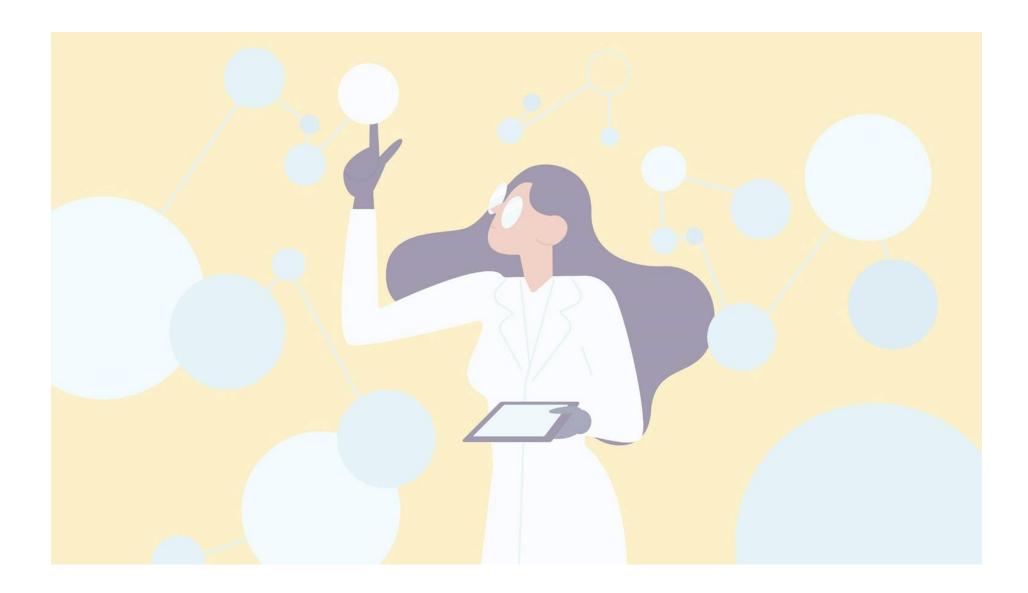
| | Is gender addressed as a power structure that affects the MOOC topic? | Yes • | No • | Yes • | No • | If possible, address how your specific subject has developed historically and what it looks like today within research, innovation, practice and usability from a gender perspective. |
|--------------|--|----------|---------|----------|---------|--|
| | Are women and men equally represented in the reference list? | Yes • | No • | Yes • | No • | Try to have as many women as men as authors of the course literature in your MOOC. (Choose course literature in your MOOC written by authors who represent the diversity of people and genders.) |
| | Are you avoiding irrelevant information around gender? | Yes • | No • | Yes • | No • | As an example, "the female researcher who discovered": "female", in this case, is totally irrelevant. |
| Storytelling | Are you referring to women in a subordinate position? | Yes • | No • | Yes • | No • | Hierarchies are one of the ways gender can be taken into account. Please be aware of the gendered hierarchies that you can create when you give examples. When referring only to men in management roles, for instance, you reinforce already existing gendered hierarchies |
| Storytelling | Are you selecting/creating balanced role models? | Yes • | No • | Yes • | No • | Be careful to not act as though women in power positions are something extraordinary and thus deserve a lot of extra attention. It's a balance, sometimes it is important to highlight progress and role models as well. It is situation dependent. As an example, pointing out that the university has appointed its first female university president is ok, but continuously mentioning that she is a woman becomes negative over time. |
| | Can you include in your MOOC design an interview, a story, a biography of a female who can be inspirational? | Yes • | No • | Yes • | No • | If any, having a real life experience (preferably told by the protagonist) is an effective way to empower both genders |





| Activities | Is gender awareness encouraged among students in collaborative learning activities? | Yes • | No ● | Yes • | No ● | Have students reflect on the gender balance in the group and on the roles taken and given in the group. Are they gendered? Who gets more or less attention? Who takes up more or less space? Are all included and is a gender-conscious language used? Suggest that they change roles from time to time and that they pay attention to the dynamics of the group from a gender perspective. Have all students agree on some basic rules. |
|------------|--|----------|---------|----------|---------|--|
| | Are you designing exercises and activities which include both male and female people in texts, images, examples? | Yes • | No ● | Yes • | No • | none |









VISUAL DESIGNERS

| Category | Question | | Answer options | | under ontrol? | How to mitigate this? |
|---------------|--|----------|----------------|----------|------------------|--|
| Content | Is the storyboard written taking into account a good balance between the need of using a non-sexist language (i.e. "s/he", "she or he", etc) and the need of avoiding repetitions so that the speech maintains a natural feel? | Yes • | No • | Yes • | No • | Try to write/check if the storyboard shows a balance, otherwise suggest expressions that will change sentences to a more neutral form. Here you can find some suggestions from the Cambridge Dictionary example: if you need for instance to use the keyword "headmaster", use "headteacher" instead |
| | Did you check if the text in the images is gender-balanced? | Yes • | No • | Yes • | No • | see above suggestion |
| | Did you check if the text in the videos is gender-balanced? | Yes • | No • | Yes • | No • | see above suggestion |
| Images/videos | Did you do an exploratory research of images (and/or a collection of the already existing ones) around the topic of the MOOC, in order to verify if there are gender-balanced images? | Yes • | No • | Yes • | No • | Search in existing repositories for images that are representative of the main target you are addressing from a gender balance perspective. Create your own image database with the ones you selected. Whenever possible (and if feasible), a good practice is to produce photo/video material yourself, especially if you struggle to find the images you need. This way you can have much more control on the output and even save time in the long run. |
| | Are the images depicting technical professions gender-balance? | Yes • | No • | Yes • | No • | For some STEM professions there is a lack of images representing women in technical roles, the ones more frequently covered by men. Either produce photos/videos yourself of women in these roles, or you create them with illustrations/graphic elements. |



| Images/videos | Are you designing the graphic elements in order to be gender-balanced (objects or contexts that can be biased)? | Yes • | No • | Yes • | No • | pay attention to your choices of objects, environments, general representation of the roles in order not to be stereotypes (example: girls playing with dolls and boys playing with cars; in this case the graphic elements - dolls and cars - need your eye on them) |
|---------------|---|----------|---------|----------|---------|--|
| | Are there sexualised images of women/girls or images that might induce a sexualised perspective? | Yes • | No • | Yes • | No • | you should completely avoid them |
| | Are females represented in subordinate roles from a hierarchical perspective? | Yes • | No • | Yes • | No • | even if the real context chosen by the content expert (for example, a case study) presents a hierarchy that sees women in subordinate roles, you can balance the final result by adding images, examples, graphics, etc that represent them in top roles in other parts of the MOOC. |
| | Are you using stereotyped colors/graphics referring to women/girls? | Yes • | No • | Yes • | No • | whichever color you choose is fine. Just pay attention, whenever possible, to balance stereotyped choices assigning colors to genders |
| | Are you choosing/selecting images of women balanced in terms of age, ethnicity and physicality? | Yes • | No • | Yes • | No • | Include diversity as much as possible |





[VERSION 3.0, 14 September 2021]