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Okay, I was tempted to actually ask a question instead of answer immediately. Why focusing on STEM and why do we expect that STEM will be different or will be more affected by these online and remote assessment methodologies affecting learning than other areas. Because in fact I think that the greatest transformation probably will be in non-STEM areas. And I quite often mean the discussions that I've been having in the last months with colleagues in institutions, with students, with other dimensions. I tend to say that, to endorse the view that actually digitalization is a much bigger challenge for non-STEM areas because the interaction with technology and the attention to these transformations is of course much more visible in science and technology fields. So I think that you know, agronomy or medicine or law or business.

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The impact, not only professionally, but also because of these reformations in the professional exercise, but also in learning and what is relevant for learning and how do we learn, I think it will be probably more pressing in non-STEM areas. So, of course, STEM will be affected by this, but I would say that, especially because of the political responsibilities that I have nowadays, I tend to be much more concerned in terms of how can we encourage the changes in curriculum and in modes of teaching and learning and assessment in non-STEM areas. And I think the emphasis in the political and public discourse about STEM, I think, as one of the risks, is by forgetting or sort of underestimating the need of attention to those transformations.

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And I think, actually, we in the second stage of the Resilience and Recovery Program that we are doing in Portugal, actually, we are putting some money to promote the digitalization and the development of digital competencies in actually in non-STEM areas. In the first stage it was actually very much focused on STEM areas and now we're doing actually the other way around because not only in terms of initial training but in the retraining of professionals and I think that well the pandemic has clearly illustrated that digital transformations will be at least as important for non-STEM areas as they will be for STEM. I tend to see a lot of the digital technologies as complementary to what we do in person, teaching and learning. And again, I think the pandemic has also emphasized the importance and the relevance, which actually was already supported by prior evidence of some of the experiments with distance learning by showing that in many ways in-person learning is much more effective.

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And actually going back to what I said in a previous question, if we rethink more our education in the sense of a more developmental dimension of individuals, then this interaction not only with professors but also with peers will, I think, become even more important and then then if we do this in a remote and then way or through the technology technological platform so I'm I think that in many ways this will be a big challenge for non-STEM areas and for STEM areas actually these are probably some of the areas where the need to broaden competencies and skills will be more significant. The need to go beyond

disciplinary expertise will probably be even more significant because of the way technology is interacting with the dimensions of human behavior in society. As quite often we hear from people in the business sector, we don't want engineers that only know engineering.

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We want people that are able to work with people that are very different and that are very different in many ways, in terms of their disciplinary background, in terms of their culture, in terms of their work habits, in terms of their way of thinking and this integration will require that we broaden the curriculum and the skills we expect for science and technology fields. So I would say actually in some dimensions we'll probably see more emphasis on the digital dimension in non-STEM areas and a greater emphasis on non-digital dimensions or non-technological dimensions in science and technology. When I was mentioning about the student body being more diverse, of course one of the dimensions, especially in STEM fields, is also the dimension of gender. And although certainly in the case of Portugal we have seen a lot of these fields were at a very, very small presence of women.

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And in many, actually in some cases, because the possibility of them taking sort of professional career afterwards was not an option for many of them because they were legally prevented from doing this. And of course with democracy that has changed, but we know that social transformations take longer than these political changes. And yet we already have a significant high percentage of women in scientific fields in Portugal, although it's still a minority and it's still uneven regarding different areas. I think that this will continue to grow and some of the aspects that I've been emphasizing regarding the personal, the social, the civic dimensions of civic roles of an education degree will also play a role in this respect. Because if we want students to be more capable to cope with diversity, with diverse professional environments, with changing conditions, that will mean also interacting with a diverse student body.

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And one of the dimensions of diversity, of course, is gender. I think that's also an important dimension. And I think that that will have other, in some cases, tacit implications in the way we interact, in the way we, in the organizational culture of some fields and some schools. And we're seeing already signs of that transformation. And I think that that will also have an impact in the way we teach, we learn and we assess in science and technology. Probably the one where I think the changes are still less advanced is probably engineering or some field of engineering, like mechanical engineer, electronic engineer, civil engineer, because in other dimensions in our case, actually you see already a majority of women or almost a majority of women in some of these fields. So I think again this is uneven. It also depends about the social perceptions in the labour market because you could do the reverse exercise. You could also look at fields and professions where the presence of male students is really very, very small.

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And we could also discuss why that is, how much this is induced by social representations of

certain professions. And this could be everything related to child care, like you know, teachers, nursing and so on. So I think that my expectation is that the blurring of these gender boundaries will have also an impact in these dimensions.