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Initially, when we were discussing about digitalization, we believed that it would be a panaceum. It would be a solution for everything and all the problems that we know and we are aware of in higher education and in education in general will be fixed by digitalization. And right now, especially after the pandemic, we understand more and more that digitalization will be disrupting. Digitalization will change the way we learn and the way we teach, but it will not fundamentally alter the meaning of education and it is not a universally valuable solution if it's not implemented properly. So online learning and teaching and online assessment will for sure impact higher education and students both positively and it can be also negative. For example, in terms of accessibility, if we don't ensure the proper skills for students and teachers to use the digital tools, then we can actually hinder the participation of certain groups and especially the disadvantaged groups.

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In some cases, we see that women and gender-based typology is one of the ways to describe this kind of discrimination. Then we are also looking into how quality is effectively supported. In STEM especially, we see that the digitalization and the platforms, the tools that can be used directly support the quality of education because you may not see everything. Right now we are discussing about the metaverse and how you can use the metaverse in learning and teaching in STEM. For example, in the U.S. there are already some very interesting examples of trying to solve problems, technical problems, try to understand how machines are learning and how systems are putting place through AI tools and through metaverse. So this will be a way that digitalization will impact learning and teaching and assessment in STEM for sure. However, what we see now is that there is more critical in a way or a precocious approach in terms of digitalization because students believe that some values and some skills, especially the manual skills, the ones that are linked with apprenticeships and issues related to work-based learning, which is very important in STEM, cannot be and should not be replaced by only trying to feel the wood online.

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You can feel the wood online, you can look at it, but you cannot touch. And that touch may be in a way partially replaced by sensorial experiences in the metaverse, but it couldn't be fully replaced on the practical side. So this is why in 25 years, probably we would have understood this perfectly and we will be able to use the digital tools in a meaningful way. That means reaping the benefits of digitalization but understanding what it can and what it cannot replace. And especially in the assessment, we see that students do favor the flexibility given by online assessments and the possibility to be mobile, for example, but also we see that the security concerns for online assessment are not addressed as they should be.

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So instead of looking at ways to holistically assess the skills, the solution is to use very narrow proctoring solutions that actually diminish the holistic perspective of assessing the

real skills that a student has, and especially in STEM, this is very difficult and will be basically impacted by digitalization.