As Ozga (2008) reminds us, we are subject to numbers and numbered subjects. If everyone and everything is quantified, we need to assure to go beyond a mere analytics practice; nevertheless, the analytical technique is also important. Furthermore, the work we do with data needs to systematically incorporate an ethical assessment and a political stance. To stay only at the practical level of literacy implies that we are able only, as Freire (1970) argued, to ‘read the word’ but we would fall short to ‘read the world’, that is to be active subjects that are capable of changing history instead of being passive objects of history. In the world of data, algorithms, and immense computational power, it is problematic to be objects of history because, as Freire upholds, objects are known and acted upon, whereas subjects are those who know and act and change the world. Notwithstanding, acting upon data that are invisible, intangible and abstract flowing unnoticed in the background feeding algorithms powered by machines makes data literacy hard to teach. To promote such a complex ‘understanding of the world’, we consider educators to be particularly well suited as they will be teaching the next generation of professionals and researchers.

Curriculum Design

We urge HE educators to adopt a critical perspective to question the advancement and ethical implications of datafication and surveillance practices. How can these practices be interrogated, challenged and avoided were questions we debated. To achieve our aim our curriculum is grounded on critical pedagogy, data ethics principles, (data) feminism, agency, and principles of social (data) justice. This combination, we believe, will support educators professionally giving them up-to-date content and strategies to design learning activities that support their learners in developing a critical understanding of oppressive and often unethical data dynamics. In turn, we hope that pupils will examine and challenge power structures that perpetuate old intersectional oppressions. We believe that this combination will stimulate and motivate students to embrace and adopt a social data justice approach to issues related to privacy, consent, personal agency and data sovereignty, among others. Such an approach is relevant for more democratic participation in this datafied society.

We consider that the sensible use of OER, in combination with appropriate critical pedagogical methodologies, well-designed learning material and the diversity of learning activities, can provide a broader range of innovative pedagogical options to engage both educators and learners to become more active participants in educational processes and co-creators of content (OER) as members of a plural and inclusive knowledge society, in so doing we are building capacity of stakeholders to create, access, re-use, adapt and redistribute OER.

The international cooperation

This project was designed to widening the participation of HE educators in different regions of the world. Our four pilots were developed and implemented to assess whether the materials and curriculum designed and contextualised were meaningful and fit for purpose.
The first pilot was held in Tangaza University College, in Nairobi, with a group of educators from the Business School. In this pilot, we grounded the discussions in agricultural and land (open) data to support educators in using open data to help their students develop the technical skills and a critical gaze on issues of, for example, inexistent data about rural communities. We explored how the knowledge and skills gained could be used further in supporting local communities to make decisions about their data using a data sovereignty approach. This was touched upon very superficially given time restrictions, but we see great potential in exploring such ideas further.

The second pilot was held at the University Oberta de Catalunya. Through a series of three workshops that covered open data as OER, data analytics in HE and data justice, and talks given by experts in these different areas, participant educators explored the impact that datafication and the undiscriminated use of data-driven technologies can have in teaching and learning and society more broadly. These workshops served as the basis for educators to reflect for a period of two weeks and produce a didactical unit for their teaching.

The third pilot was held in Uruguay at the University of La Republica for HE educators from the Latin American region. This pilot was split into two phases: first, a two-week self-paced introductory course, to ensure that all participants gained an understanding of the basic concepts and standards of (open) data; second, five weeks with an utterly critical approach were issues around data justice, femicides, gender violence was problematised and discussed by experts in the field. In addition, we offered daily talks and/or hands-on workshops organised with leading experts in the field. In parallel, participants had access to the course content through the OER. Once this stage finished, students were given two weeks to complete the course work for which we prepared a toolbox with openly licensed tools. The final assignment is to define a problem with the relevant data and propose a solution that entails an ethical analysis of the data set selected or created by them.

The fourth pilot was held in the UK, as part of two different postgraduate programmes related to the digital economy. We tested the activities designed to understand if students could use the toolkit and content to learn about data ethics in the context of business studies.

Lessons learned

A prerequisite to achieve SDG 4 is sustained investment and educational actions by education stakeholders, in the creation, curation, updating, ensuring of inclusive and equitable access to, and effective use of high-quality educational materials and programmes of study. We believe this has been partially achieved through our project, but we acknowledge that more time could allow us to understand better and leverage global collaboration mechanisms and organizations. Capacity building in open practices and fostering community of practices is crucial for a sustainable transnational approach to develop and use OER with an open education ethos. Working in partnership is incredibly
challenging but it provides a rich soil for cross fertilisation of approaches, content, views and needs strengthening the much needed global solidarity.