Social and Educational AI for Diversity: Research on Democratic Values to Develop Artificial Intelligence Tools to Guarantee Access for all to Educational Tools and Public Services

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Abstract : Responsible Research and Innovation have to accomplish one fundamental aim: everybody has to participate in the benefits of innovation, but also innovation has to be democratic; that is to say, everybody may have the possibility to participate in the decisions in the innovation process. Particularly, a democratic and inclusive model of social participation and innovation includes persons with disabilities and people at risk of discrimination. Innovations on Artificial Intelligence for social development have to accomplish the same dual goal: improving equality for accessing fields of public interest like education, training and public services, as well as improving civic and democratic participation in the process of developing such innovations for all. This research aims to develop innovations, policies and policy recommendations to apply and disseminate such artificial intelligence and social model for making educational and administrative processes more accessible. First, designing a citizen participation process to engage citizens in the designing and use of artificial intelligence tools for public services. This will result in improving trust in democratic institutions contributing to enhancing the transparency, effectiveness, accountability and legitimacy of public policy-making and allowing people to participate in the development of ethical standards for the use of such technologies. Second, improving educational tools for lifelong learning with AI models to improve accountability and educational data management. Dissemination, education and social participation will be integrated, measured and evaluated in innovative educational processes to make accessible all the educational technologies and content developed on AI about responsible and social innovation. A particular case will be presented regarding access for all to educational tools and public services. This accessibility requires cognitive adaptability because, many times, legal or administrative language is very complex. Not only for people with cognitive disabilities but also for old people or citizens at risk of educational or social discrimination. Artificial Intelligence natural language processing technologies can provide tools to translate legal, administrative, or educational texts to a more simple language that can be accessible to everybody. Despite technological advances in language processing and machine learning, this becomes a huge project if we really want to respect ethical and legal consequences because that kinds of consequences can only be achieved with civil and democratic engagement in two realms: 1) to democratically select texts that need and can be translated and 2) to involved citizens, experts and nonexperts, to produce and validate real examples of legal texts with cognitive adaptations to feed artificial intelligence algorithms for learning how to translate those texts to a more simple and accessible language, adapted to any kind of population.

Keywords : responsible research and innovation, AI social innovations, cognitive accessibility, public participation
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