A LIVING LAB TO COUNTERACT INEQUALITIES IN EDUCATION:
FIRST STEPS EXPERIENCED BY PARTICIPANTS

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Abstract

A gap exists between socioeconomic groups in terms of their ability to use ICT tools for learning purposes (OECD, 2015). The recent pandemic has contributed to exacerbate inequalities among students (Collin & Brotcorne, 2019). Nevertheless, digital technologies could also contribute to work against inequalities (Giroux & al., 2022). Digital inequalities refer to differences in access, often associated with the digital divide, either in access to the internet and hardware (Van Deursen & Van Dijk, 2019), digital skills or competencies (Peña-López, 2010), as well as uses (Kelly, 2008). Digital inequalities can be addressed as a complex problem (Van Dijk & Hacker, 2003) which is part of an authentic situation mobilizing different resources in a task of indeterminate duration, non-routine, imperfectly predictable and not decomposable into additive elements (Spiro & DeSchryver, 2009).

To address the digital divide, a social innovation laboratory was set up in Quebec (Canada). Bringing together about thirty educational actors from academia, government, business, as well as potential users of the solutions to be developed (Miller & al, 2016), an innovation cell and a steering committee were set up. Education actors could benefit from exploring more inclusive and innovative approaches to adapt to changing contexts (Deslandes-Martineau & al., 2020). Therefore, the project aims to foster the adaptation of educational and pedagogical practices to especially address the diversity of needs related to social and digital inequalities. The objective of the project aims at supporting the creation of solutions that are desirable, because they are co-created by people who will use them; feasible, since they have been prototyped, and viable, having been tested and validated in the field, in order to promote the adaptation of educational practices in a context where needs are diverse. The co-creation sessions of the cells were documented and analyzed in an iterative way by the multidisciplinary research team. The research method applied is action research based on an interpretive stance: it makes the synthesis between the strong ideas and the strategic or theoretical context in which they are embedded.

We present the preliminary results of the Living Lab approach deployed for solution development in the first year of the project (Gwendal, 2021): needs exploration, co-creation, prototyping, testing, deployment, and solution diffusion. The first stages of the research and development activity are presented to answer the questions: how are the foundations of a living lab to counteract inequalities in education set up, and how are the first steps experienced by the participants? In conclusion, Adjustments for the second year of the project, where a second cell will be set up, will be presented.

Keywords: Living lab, education, inequalities, numeric, co-creation.