

IC - (21169) - MODERNIZING QUEBEC'S PUBLIC SCHOOLS: THE CONTRIBUTION OF SCHOLA'S TRANSDISCIPLINARY RESEARCH AND ACTION PROGRAM

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Background and objectives

In Québec (Canada), public schools were built in majority in the wake of the baby boom. Most buildings having reached the end of their first life cycle, the government has announced investments of nearly \$14 billion over the next 10 years. This communication presents the transdisciplinary research and action program put forward by Schola, a consortium of researchers commissioned by the Ministry of Education, to produce decision support tools to guide the modernization of these buildings to better support education success.

Process and methods (for empirical research)

Providing guidance for the modernization of over 2,700 buildings is a complex problem, between generalized global objectives and the specificity of each school. It requires understanding the decision-making process of actors involved in school renovation, as well as to inventory trustworthy knowledge, namely the ones dominating in professional practice (aesthetic and technical), and the ones found in scholarly research and in the experiences of school users (scientific and ethical). The information must then organized in user-friendly interfaces. This process involved so far nearly 60 school boards, 1,000 school staff members, and 15 partner associations and federations.

Main results (or main arguments in the case of critical reviews)

Five types of decision-aid tools were designed: *referential and cognitive tools*, *diagnostic tools*, *programming tools*, *design tools*, and finally *specification tools*. Four types of actors were targeted: the Ministry of Education public servants, school board building managers, architects and designers in private practice, and school administrations. The ENA digital learning environment was selected to develop the Schola platform. The functioning of the platform and the tools designed for primary schools will be briefly presented.

Implications for research and practice/policy | Importance and originality of the contribution

Discussion of how this transdisciplinary process addresses sustainability, as well as new challenges for future research, will be discussed in conclusion.

Palavras-chave : transdisciplinarity, decision-making, design thinking, school architecture, building modernization