

Sustainability | Individual communication

IC - (21136) - A HISTORICAL AND TYPOMORPHOLOGICAL PERSPECTIVE ON SCHOOL BUILDINGS IN QUEBEC: INSIGHTS INTO THE RELATIONSHIP BETWEEN USER HEALTH AND WELL-BEING AND BUILT FORM.

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Background and objectives

In Quebec (Canada), a large-scale renovation project of school buildings has been undertaken, the majority of which were built before 1980. In the hope that the spaces created would be better suited to the academic success, well-being and health of the users, the government commissioned researchers (Schola) to guide the renovation process based on scientific data. This Schola research identifies the main historical forces that have shaped the school building regarding the well-being and health of users.

Process and methods (for empirical research)

The motives of the architects or actors involved in the design of schools were highlighted through the analysis of 349 archival documents (legal texts, professional journals, school reforms). The discourses were cross-referenced with the typomorphological analysis of a sample of 308 schools.

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

It was found that school buildings in Quebec were originally built according to hygiene rules. These ensured healthy spaces, including natural ventilation and lighting. They ceased to apply after the educational reform (1964), and the adaptation of school architecture to new pedagogical ideals took precedence over design intentions. Thanks to artificial ventilation and lighting, classrooms could now be planned without windows. The reform also led to the construction of schools for up to 3,000 pupils, which made architects question the wisdom of the reform, as it forced them to build spaces that they considered inhumane and deleterious.

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

Quebec's school buildings have recently received bad press: mould has been discovered in some schools, and many others have allegedly had ventilation problems that make them unsafe for Covid-19. This research allows us to look at this legacy in a different light, as its history reveals that many of its older school buildings are better equipped than newer ones to deal with the challenges posed by the pandemic, provided that users learn to use them effectively and faithfully to how they were designed.

Palavras-chave : School renovation; Covid-19 pandemic; Health concerns