



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكرو فيلم

بسم الله الرحمن الرحيم



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شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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التوثيق الإلكتروني والميكروفيلم

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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AIN SHAMS UNIVERSITY

FACULTY OF ENGINEERING

Architecture Engineering

A Framework for School Design Based on Participatory Approaches

A Thesis submitted in partial fulfillment of the requirements of the degree of
Doctor of Philosophy in Architectural Engineering
(Architecture Engineering)

by

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Statement

This thesis is submitted as a partial fulfilment of Doctor of Philosophy in Architectural Engineering, Faculty of Engineering, Ain shams University.

The author carried out the work included in this thesis, and no part of it has been submitted for a degree or a qualification at any other scientific entity.

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Thesis Summary

The aim of this research is to curate an operationalized participatory framework – based on participatory design theories - for architects, educators, teachers and community to use with students when engaging in an architectural co-design process of their school.

On an institutional level; this research aims at defining the regulatory path to governments' definition of participatory school design for new buildings and school's upgrade projects as well, and developing a common understanding of a harmonized national framework for participatory design regulations.

There is a lack of a comprehensive and precise common system/regulation for implementing, analyzing, surveying, assessing, monitoring, evaluation, and application of any co-design participatory strategy which addresses several key factors like: purpose, cost and benefits, privacy and confidentiality, selection, inclusion, exclusion, funding, review, revision, methodological proposal, informing, consent, dissemination, and impact of the participatory process on the involved parties and on the built educational environment within an urban jurisdiction and applicable on all educational buildings and structures; taking students/children as the main contributor to a building's architectural design process and overall space performance.

Educational facilities now serve a diversity of students from different backgrounds and different experiences due to the rapid inhabitants' - forced or chosen - movement between communities and countries trying to adapt to the rapid change in political, economic, war, and crises circumstances that they face. Motivated by the progress towards a highly efficient educational building performance; the idea of this PhD research proposal was inspired to propose a participatory design system.

PARTICIPATORY TAG™ is a system that will assure the control of the implementation participatory process in the architectural design of school buildings and after design phases (a complete school building cycle).

The researcher participated-in and curated participatory design upgrade workshops in different four primary schools in Cairo - Egypt over a fifteen day period for each school where students, architects and educators joined in a participatory framework of co-designing their school playground space.

This research adds to scholarly research by extending the architectural participatory design theoretical framework to the student level in a governmental school.

This research is also testing possible alternatives for the school architectural design top-down management approach and the achieved performance qualities of the bottom-up co-design participatory design approaches in the school buildings.

Keywords:

Participatory Design, Collective Co-design Framework, School Architecture, Meta-Analysis.

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