Co-creating Community Wellbeing with the Sandbox Model: Facilitating Empathic Engagements

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Abstract
And what if we could mobilize the skills of designers, health professionals and urban planners while engaging citizens from all backgrounds in transforming their ideas into tangible health promoting products, services and systems? These are the twin charges we have embraced in developing the Imagine Health Sandbox, a toolkit and model for community co-creation and wellness promotion. This abstract will cover the central concepts proposed in the Sandbox Model.

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H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous

Introduction
What if we could re-design our approach to health to focus on human wellbeing rather than illness and seize opportunities for influencing communities by leveraging the spaces where people live, work and play rather than simply focusing on treatment-oriented institutions?

In this abstract we introduce our proposed Sandbox Model, which involves a portable, collaborative design studio that can be erected in the context of any community that needs it. The Sandbox becomes an experimental space where community stakeholders can come together to find, frame, prototype, test, and implement small-scale health interventions appropriate for their local context.

Background

Health exists within a complex system [7], and thus methods to influence it must account for this complexity if they are to be successful at producing sustainable changes. Complex systems are also susceptible to path dependencies, which are deep-seated, resilient structures created early in a systems' development. These path dependencies are so pervasive, yet invisible to those in the system that they are often not questioned. Single events can have system-wide effects that persist for a long time [10]. The modern hospital and the structure of the profession of medicine are two examples of these dependencies with system-wide effects. These path dependencies are responsible for a healthcare system anchored to sickness treatment rather than health promotion and the pervasive model of the body being seen as a machine that is "either running well or in need of repair" [1]. The shift from population health to health requires a respect for the social, economic, environmental and biological determinants of health. It recognizes that health is produced in communities and that the best options for promoting it is through designs that are rooted in people, places, and organizations that reside there [2].

An empathetic approach supports problem engagement by encouraging deep questioning of fundamental assumptions about the nature and expression of the issue from the various perspectives of those who are impacted [8,5]. For health, this can mean looking at issues from the point of view of a citizen, a patient, a health care provider, a policymaker, or some other form of intermediary. Public discourse on health issues are commonly framed in terms of deficits and conditions, less about the social determinants of health, strengths or conditions where health is produced and nurtured [4].

By producing ways of thinking about complexity and health, we enhance overall capability to anticipate challenges and respond to changing conditions [3]. By introducing design, we provide a vehicle in which to make those changes real and sustainable by building on the design philosophy of Victor Papanek [9] who advocated for a socially responsive design movement that linked ecology to society [9]. Design thinking provides a means of bridging the two by creating an empathic space in which to view the problem, propose and explore alternatives, and develop working prototypes of possible solutions [6].

Developing the Model

Drawing inspiration from Ivan Illich, Liz Sanders [11] and colleagues we sought to create a toolkit for conviviality that could be used to build empathy among diverse stakeholders, create dialogue on health issues within the context of communities, and serve as the research foundation for exploring these issues in a manner that could generate real, tangible products and services for communities. To achieve this connection,

participatory design techniques were used to generate ideas regarding the methods and tools we might need.

Part of our initial model development involved the exploration of the sandbox metaphor through a tangible workshop (Figure 1.) with team members developing ideas and expressing these through a real sandbox with generative materials. The team gradually built up a tangible representations of such concepts as openness, dignity, community, portability, pop-up, sustaining(able), shared values, and knowledge transfer. We then explored some specific aspects of the model, for example, exploring metaphors such as the circus tent, ice-cream van, mobile library, and the bicycle to further develop the portable and embedded aspects of the health initiative.

From blank canvas to tangible concepts.

Figure 1. Sandbox participatory workshop.

The Sandbox

The resulting model and toolkit provide a novel approach to design that works in communities, led by community members to generate innovations for health and wellbeing that are grounded in a social-ecological framework that fits the specific context of each setting. The model involves:

1. **Community-driven innovation:** The opportunities, large and small, are elicited from the community, recognizing the need to ground all proposed ideas in the local conditions and involve a diverse group of community stakeholders.

2. **Shared responsibility, shared value:** All parties are responsible for the products and process of the design. Everyone participating is expected to derive value from that participation and potentially its outcomes, even if such outcomes are directed beyond a specific individual or group.

3. **Systems thinking:** Encouraging all participants to explore the interchange between people and systems to ensure interventions are shifting health outcomes in sustainable ways.

4. **Portability:** The design studio itself has a transient existence in that it is part of the community for limited time- after which it moves on to another community; however, the ideas, solutions and relationships formed will be long-lasting, resonating and evolving.

5. **Sustainability:** The products and services must be sustained beyond The Sandbox, otherwise it is just another fun exercise. Hope must be realized in the longevity of the outputs.

6. **Service learning OR Embodied learning:** Design and health professionals are working alongside trainees in real time to encourage a culture of service and learning through doing. Citizens co-learn and co-teach with all other members of the team. Everyone has something to learn and to share with others.

7. **Open collaboration:** Participants should be willing to formally and informally share ideas with others in community and build on each others ideas, in order to provoke new thoughts and continued idea refinement.

8. **Action orientation**: While dialogue is valued, within the sandbox, participants 'build to think' and are encouraged to quickly prototype or out their ideas so that they can be rapidly refined and iterated collaboratively.

9. **Design thinking:** The central tenets of a design thinking approach such as discovery, ideation, experimentation and prototyping, and implementation / revision are all followed.

Summary

The Sandbox offers an innovative approach to building empathy while co-creating community interventions that support health promotion and wellbeing. This workshop offers an opportunity for interested individuals to learn about and engage in this cutting-edge model before its official debut in community spaces throughout Toronto.

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