

TOPIC: C - Integrated Approach in Design and Planning

Learning for a Sustainable Future through Play

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Abstract:

As we face the many problems caused by our unsustainable lifestyles, we have the responsibility to change our ways. Changing lifestyles of grown-ups is difficult; shaping attitudes towards sustainability of young children is much easier.

This paper describes a case study of designing a game for pre-school children to facilitate learning about sustainability through play. The aim was to design an appropriate medium for young children to understand the complex concept of sustainability. A user-centered approach was used throughout the design process to gain an understanding of children's world in order to design an appropriate medium.

"Our Town" was the result of this study. It is a co-operative board game containing messages about the "right" and "wrong" in the context of living and contributing to a sustainable community. The final design got positive feedback. The children enjoyed playing the game and also understood very well the messages in the game about sustainability.

"Our Town" is only a design proposal from an industrial designer's viewpoint. Most detailed design was left out due to the limited resources available to the study. In order to ensure that the game will be usable and pleasant for children, it should be developed further by a multidisciplinary team including sustainable development experts, early childhood educationists, psychologists, sociologists, graphic designers and industrial designers. Moreover, "Our Town" is an educational game. Therefore, a trade-off between education and entertainment had to be made and further effort will be needed towards development of balanced trade-off.

This study shows that sustainability is not too difficult a subject to teach children once you have the right tool. By understanding children's world, it is possible to design an appropriate medium for them to understand the complex concept of sustainability.

Keywords:

Sustainability, early childhood, pre-school, morality, behaviour modelling, operant conditioning, learning, play, game, user-centred design