GeoCubix: Learning by Play

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SUMMARY

Training in this modern era is challenged by the consistent need for innovative learning methodology and by the short attention span of the learner, both in school and at work. To address such phenomenon, GeoCAM and a specialized group of surveyors introduced game play during training sessions. Through this ideology, "Geocubix" was created in 2019.

Geocubix is a board game that has playful and educational aspect. The game in fact, encourages both trainer and trainee to actively participate. It can also be used for school orientation or for professional development courses. From one single game board, it can be adapted to several game scenarios according to the target player's/trainee's capacity and needs.

The world of Geocubix is set in a complex where residential, commercial, and developing areas are present. Such setting allows interaction between private and common areas, while the existence of commercial activities and offices can highlight the important social skills typical of a surveyor when relating with other key professionals – lawyers, real estate agents, building administrators, and business consultants.

The game's storyline revolves with the players working in a team, and their target is to found the best possible solution to manage the condominium's asset and budgets in order to pay off an "existing" bank loan. In this kind of gameplay, participants are called to showcase their team-building, problem solving and time management skills.

This paper intends to demonstrate how Geocubix can be a potential instrument in helping students and colleagues alike in improving their cognitive and logic capacities with gaming as the primary inspiration. Moreover, this paper will illustrate how other learning techniques can be integrated in

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FIG Working Week 2023 Protecting Our World, Conquering New Frontiers Orlando, Florida, USA, 28 May–1 June 2023 Geocubix, and how this game came to fruition with the use of the 8 core drivers of gamification and behavioral design described in Yu-kai Chou's Octalysis Framework.

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