

Model Canvas and Process for Educational Game Design in Outcome-Based Education

Authors : Ratima Damkham, Natasha Dejduong, Priyakorn Pusawiro

Abstract : This paper explored the solution in game design to help game designers in the educational game designing using digital educational game model canvas (DEGMC) and digital educational game form (DEGF) based on Outcome-based Education program. DEGMC and DEGF can help designers develop an overview of the game while designing and planning their own game. The way to clearly assess players' ability from learning outcomes and support their game learning design is by using the tools. Designers can balance educational content and entertainment in designing a game by using the strategies of the Business Model Canvas and design the gameplay and players' ability assessment from learning outcomes they need by referring to the Constructive Alignment. Furthermore, they can use their design plan in this research to write their Game Design Document (GDD). The success of the research was evaluated by four experts' perspectives in the education and computer field. From the experiments, the canvas and form helped the game designers model their game according to the learning outcomes and analysis of their own game elements. This method can be a path to research an educational game design in the future.

Keywords : constructive alignment, constructivist theory, educational game, outcome-based education

Conference Title : ICTPE 2021 : International Conference on Technology, Pedagogy and Education

Conference Location : Bangkok, Thailand

Conference Dates : February 04-05, 2021