## CARNIVAL OF RESEARCH AND INNOVATION (CRI2021)



In conjunction with International Virtual Innovation & Invention Challenge (INTELLIGENT2021) & Creative Innovation Carnival

# TMCAS MODEL: REIMAGING AN IMPACTFUL VIRTUAL COLLABORATIVE PROJECT BASED LEARNING IN TEACHING ENTREPRENEURSHIP

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**Highlights:** TMCAS model of Virtual Collaborative Project-Based Learning is the collaboration of student-groups on projects across the places. In this environment, students develop their higher-order thinking skills while solving real-life problems; and lecturers increase their knowledge during mentormentee collaborations. Given that TMCAS model is an evolving teaching strategy for entrepreneurship subject. Modern online teaching tools are using to support this environment. This model involved 5 phases, which are Teaching, Mentoring, Coaching, Assessment And Showcase. Students are encouraging to enhance their innovative skill and entrepreneurship skill via conducting an innovation project. Students noted that the model can be used to build projects in groups collaboration without having to physically move from their place. This model allows students to teach and learn from one another; similarly, teachers act as both resource persons and learners while engaging in professional development. Constructive Learning Theory and Design thinking skills were implemented in this model.

**Key words:** project based learning, entrepreneurship, TMCAS, modelling teaching

### Introduction

The idea of infusing entrepreneurship into education has spurred much enthusiasm in the last few decades. A myriad of effects has been stated to result from this, such as economic growth, job creation and increased societal resilience, but also individual growth, increased school engagement and improved equality. Putting this idea into practice has however posed significant challenges alongside the stated positive effects. Lack of time and resources, teachers' fear of commercialism, impeding educational structures, assessment difficulties and lack of definitional clarity are some of the challenges practitioners have encountered when trying to infuse entrepreneurship into education. Narrow definition of entrepreneurship viewed as starting a business. Others mean that it is not at all about starting new organizations, but that it instead is about making students more creative, opportunity oriented, proactive and innovative, adhering to a wide definition of entrepreneurship relevant to all walks in life. Entrepreneurship education has traditionally focused on teaching individuals, but many initiatives are increasingly becoming more action-oriented, emphasizing learning by doing. Project based learning seems to be one of the powerful approaches in teaching entrepreneurship. Due to unprecedented events like movement control order (MCO) due to pandemic Covid 19, lecturers need to emphasize and enhance their teaching creativity in order to make sure all the students are still in good learning adaptation regardless of their multiple intelligences.

## Content

**Project-based learning (PBL)** is a student-centered pedagogy that involves a dynamic classroom approach in which it is believed that students acquire a deeper knowledge through active exploration of real-world challenges and problems. Students learn about a subject by working for an extended period of time to investigate and respond to a complex question, challenge, or problem. It is a style of active learning. Project Based Learning is a teaching method in which students gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge. The process that was involved is a design thinking process.

This TMCAS model implements a design thinking process that examines the effect of entrepreneurship skill sets on project performance via Virtual Collaborative Project-Based Learning which involves the collaboration of student-groups on projects across the places during Malaysia control Order (MCO). The virtual collaborative PBL is known as BIE (beginners Innovation exhibition and entrepreneurship) project. It is project-based which involves 5 meaningful phases representing the TMCAS model. This phase involved are Teaching, Mentoring, Coaching, Assessment And Showcase. Modern online teaching tools are used to support this environment such as google meet, personal website, youtube channel, fb live and telegram group. Tentatively, few activities and assessment is planned throughout the process of learning. Figure 1 shows the implementation of the design thinking process that was concluded in the TMCAS model.