

## TAU INDIVIDUAL RESEARCH PROJECT REPORT

***Project title: An experiential learning model for enhancing creativity***

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### INTRODUCTION AND BACKGROUND

As a TAU participant who lectures Management, I have realized that my students are exposed to various modules which could equip them with the necessary skills to plan for their own businesses and ultimately take steps to launch such businesses. Among the shortcomings in the way these students are taught was the lack of integration of the acquired knowledge emanating from a silo mentality in teaching. I decided to initiate a learning intervention in which my third year students who are studying Management III are taught an entrepreneurship module that focuses on the sources of business ideas and the components of the business plan so they could have an idea of what it takes to generate a business idea and what to consider in drawing a business plan. The name of my learning intervention was: *An experiential learning model for enhancing creativity*. This research project was aimed at designing, implementing and evaluating Small Group Project work as a learning intervention for enhancing creativity, entrepreneurial intention and the antecedents of entrepreneurial intention.

This project investigated whether the implementation of an experiential learning model would enhance creativity, perceived behavioural control and entrepreneurial self-efficacy of Management students, which are essential to engage in entrepreneurial behaviour. The content of my learning intervention involved an integration of the various disciplines that form part of students' diploma into an entrepreneurship project that was aimed at executing the entrepreneurial process. It is an experiential intervention in which students worked in groups after the relevant theory was taught to identify a need for a certain product/service in their own communities; identify the features products/services; design a product/service to satisfy that need; develop a marketing campaign for that product/service and a business plan for the business of

their own choice. The effectiveness of this intervention was intended to be assessed using students' final creative ideas, designs, marketing campaigns, and business plans. Furthermore, changes in students' perceptions of their own creativity, subjective norms, perceived behavioural control, attitude towards entrepreneurship, entrepreneurial self-efficacy and entrepreneurial intention were assessed.

## **AIMS OF THE STUDY AND THE LEARNING INTERVENTION**

Objectives of the study and the learning intervention were to:

- To develop and test an experiential learning model for enhancing creativity of final year management students.
- To increase students' self confidence in their ability to develop a business idea.
- To test whether the experiential learning model can alleviate students' fears in starting their own businesses by increasing their perceived behavioural control and entrepreneurial self-efficacy.
- To enable students to write business plans.

## **METHODOLOGY OF THE STUDY AND THE LEARNING INTERVENTION**

To achieve the objectives of this project and to find answers to the research questions, an experiential learning model for enhancing creativity (Figure 1) was proposed for this study drawing heavily on the teaching model framework for entrepreneurship education (Fayolle & Gailly, 2008), theory of planned behaviour (Ajzen, 1991, 2005, 2011), constructive alignment (Biggs & Tang, 2011), authentic alignment (Macht & Ball, 2016), constructivist theory (Schunk, 2012) and social learning theory (Bandura, 1971, 1977, 1986). The model as the foundation for this project is premised on the fact that experiential learning activities in entrepreneurship education programmes can enhance the creativity and entrepreneurial intention by impacting on the antecedents of entrepreneurial intention namely, attitude towards entrepreneurship, subjective norms, perceived behavioural control and entrepreneurial self-efficacy of students. These entrepreneurial learning activities should be directed at enabling students to discover, evaluate and exploit market opportunities (Niyonkuru, 2005; Shane & Venkataraman, 2000) and to make students aware of the importance of entrepreneurship as a career option (Fayolle & Gailly, 2008).

The study adopted a design-based research (DBR) method and followed the DBR principles indicated in Figure 1 (see addendum) Design-based research method is regarded as a new approach that is applicable to research in education which is guided primarily by the research problem and objectives with the aim of improving the theory and the educational context (Abdallah & Wegerif, 2014). The sample for this research project was 44 Management students and 23 Entrepreneurship students at the Tshwane University of Technology, Polokwane Campus, who were all in their final year of their diplomas in 2018. Management students were the experimental group whereas Entrepreneurship students served as the control group for assessing the effectiveness of the intervention. Data were collected using structured questionnaires and students' reflection reports. Questions for the structured questionnaire were adopted from Liñán and Chen (2009); Kickul and D'Intino (2005); Malebana (2012); McGee et al. (2009) and Biraglia and Kadile (2017). A structured questionnaire collected data that were used to assess the current levels of creativity, perceived behavioural control and entrepreneurial self-efficacy of the experimental and the control groups. Since entrepreneurship education is more likely to affect other antecedents of entrepreneurial intention, data were also collected on the attitudes towards entrepreneurship, subjective norms and entrepreneurial intention. Data collection took place after ethical clearance for the project was granted and all ethical principles were adhered to. Quantitative data analysis was conducted using SPSS Version 25. Both descriptive statistics, Chi-square test and Mann-Whitney *U* tests were used during the analysis.

## **OUTCOMES**

Mann-Whitney *U* tests were conducted for the differences in the mean rank values between the control group and the experimental group. Preliminary survey results before the implementation of the intervention showed that the experimental and control groups did not differ significantly in their mean rank values for creativity, perceived behavioural control, attitude towards entrepreneurship, entrepreneurial self-efficacy and entrepreneurial intention. The only significant differences between the groups were observed on subjective norms, which was not part of the study objectives (see Table 1 in the addendum). Given the little time that was remaining to implement the learning intervention in 2018, it was not possible to collect data using the questionnaire after the implementation of the intervention. However, the impact of the learning intervention on the experimental group was measured using self-reflective reports of the nine groups that were answering five questions regarding the intervention, as shown in Table 2 in the addendum. Self-reflective reports by students can be a valuable assessment tool to enable

lecturers to recognize the learning and critical thinking among the students (Wraae, Tigerstedt & Kratzer, 2018), which is novel to entrepreneurship education. Self-reflection provides students the opportunity to assess their own skills and competencies, and to make sense of their own learning. Self-reflective reports can also serve as a valuable feedback mechanism to inform improvements to be made in the learning intervention as required by DBR. This is even more crucial, especially in situations where suggestions from colleagues could not be received during the departmental seminar to inform the design and implementation of the learning intervention. Through self-reflective reports students are able to reflect on the process and the strategies they have used for their learning and even pinpoint strategies that worked, why they have worked or have not worked for them (Warhuus, Blenker & Elmholdt, 2018). This is particularly relevant when students are experimenting with the entrepreneurial process. Besides the limited time, the use of self-reflective reports to measure the impact of the learning intervention is justified by the fact that the experimental and control groups did not differ significantly in their mean rank values for the variables that were targeted for change to allow for meaningful comparison. Chi-square test was used to test the significance of the relationships between entrepreneurship education and variables in the proposed model (Figure 1 in the addendum). Mann-Whitney *U* test was used for differences between the mean rank values of the control group and the experimental group on the variables in the proposed model.

## **CURRENT STATUS OF THE PROJECT**

Due to the challenges experienced in 2018 and the lessons learnt from the groups' recommendations, the project was continued from the beginning of this year to allow the groups more time to apply and integrate their theoretical knowledge and for more enhanced group coordination. Survey data has already been collected prior to the implementation of the learning intervention from both the experimental and control groups. The experimental group which is divided into 11 groups is currently working on their group projects on an expanded scope of the syllabus. Data that will be collected during the second phase of the learning intervention in 2019 will contribute towards the achievement of the two research objectives relating to the test of the experiential learning model that could not be fully achieved due to the lack of post-implementation data. Going forward the teaching approach that was adopted in this learning intervention will be fully embedded in Management III to provide students with the opportunity to integrate and apply knowledge acquired from other subjects.