**Engaging students in designing experiential learning activities for transversal skill development**

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**Abstract**

The ability to work as part of a team is one of the most important skills in today’s job market. This has called for pedagogical designs to foster teamwork competency among university students. The purpose of this session is to have a dialogue about the use of experiential learning activities specifically designed to help students develop teamwork skills. Survey results show that student-designed experiential learning activities enable interactivity with peers in creation of an active, collaborative learning environment, which in turn increases team effectiveness. Implications for pedagogical design and delivery are discussed.

**Keywords:** team effectiveness, interactivity, pedagogy

**Introduction**

In an era of globalization, it is not uncommon for multinational companies to have their globally distributed employees collaborate on issues and challenges facing a company at the international level (Dulebohn & Hoch, 2017). Research also suggests that interpersonal skills relating to the ability to work in a team are desirable among employees (Graduate Management Admission Council, 2016; National Association of Colleges and Employers, 2016). As a result, there is an urgent call for more pedagogical designs and programs related to fostering students’ teamwork in higher education (Ritter et al., 2018). But it is challenging to teach transversal skills such as teamwork geared to industry needs. All this prompted to the initiative of having students design experiential learning activities. This experiential learning approach moves students away from passive learning towards more active learning whereby students engage in collaborative activities, peer learning and complex problem-based learning (Strayer, 2012; Van der Zwan & Afonso, 2019; Wurdinger & Carlson, 2010). It allows students to participate in team-based activities, and to develop their transversal skills by improving their ability to work in teams effectively.

Inspired by Kolb and Kolb’s (2005) Experiential Learning Theory, we intended to make space for postgraduate students to take control of and responsibility for their learning in an Organization and Management subject. By providing students with the material to gain a basic level of knowledge and understanding of four management functions, classroom time was then be used to deepen their learning and develop teamwork competency through a series of student-designed experiential learning activities. Within this context, the role of instructor shifts towards that of facilitator and coach by empowering students to take control of their own learning. The objectives of experiential learning activities are twofold: (1) to practise the four basic management functions of planning, organizing, leading and controlling; and (2) to learn and to exercise teamwork to diagnose and solve organizational issues.

Over a period of thirteen teaching weeks, on-going discussion and feedback between students and instructor served to facilitate the learning processes. Upon completion of the experiential learning activity, students were asked to evaluate their team effectiveness. Specifically, we examine whether the experiential learning activities would enable interactivity with peers, which in turn increases team effectiveness. This line of inquiry places an important role of students in co-creating the learning process through an experiential learning approach, and more importantly driving students to build up their teamwork competency through the iterative processes. Conference attendees could leverage our findings and reflect on their pedagogical design and delivery in higher education.

**Theoretical Foundation** / **Teaching Implications**

The learning process for acquiring competencies requires the ability to move through the experiencing, reflecting, thinking, and acting cycle (Kolb & Kolb, 2005). In a conventional instructional model, the subject lecturer facilitates content attainment through various means in a classroom setting, whereas students play an active role in the experiential learning process. Experiential learning approach is therefore considered the most appropriate modality through which students learn essential managerial competencies (Dean, Wright, & Forray, 2020).

Mediating role of interactivity with peers

Traditional instructional approach may hinder interactions in the classroom. Limited class time, fixed seating arrangements and students’ reservations about speaking out in class had been identified as barriers to high levels of interactivity (Draper & Brown, 2004; Liu et al., 2003). However, experiential learning approach has changed how students interact with one another and has provided new opportunities to enhance interactivity. One reason for this is when experiential learning requirements are made clear to students, team members do not have to waste time defining roles and clarifying project requirements. They can be more focused on tasks addressing the learning outcomes, consequently improving team effectiveness.

In a student-designed experiential learning activity, students are not only more motivated to learn, but also more attentive, participative and eager to exchange ideas with others. Interactivity with peers results from participation, discussion and collaboration. It improves the active processing of course contents and facilitates higher-order learning to broaden their conceptual understanding (Crouch & Mazur, 2001; Michaelson, Knight, & Fink, 2004). Students prefer learning from their peers because they speak in a similar language and, therefore, can explain the problems and solutions more effectively (Nicol & Boyle, 2003). Thus, we hypothesize:

Hypothesis 1: Experiential learning activity requirements are related to team effectiveness.

Hypothesis 1a: Interactivity with peers mediates the relationship between experiential learning activity requirements and team effectiveness.

**Session Description**

We will begin the session by introducing to attendees about the use of student-designed experiential learning activities in building up teamwork competency among students. We will briefly describe the sample, data collection method, and measures before highlighting the quantitative findings. Then we will involve participants in exploring how our findings relate to their experiences when teaching transversal skills.

Sample and data collection

During the first semester of academic year 2021/2022, the experiential learning approach was being adopted in an Organization and Management subject of a master’s degree in business management offered by a business school accredited by AACSB (The Association to Advance Collegiate Schools of Business) and EQUIS (EFMD Quality Improvement System). 140 postgraduate students enrolled in this subject. They worked as part of a team to develop an experiential learning activity that could engage their fellow classmates in a topic related to organization and/or management. They were divided into 20 teams of 7 members each. Ongoing discussions between students and subject lecturer continued during the processes, and feedback was given to students upon submission of the proposal.

At the semester end, we conducted a posttest only with experimental group design, through which students were invited to complete an online survey on the effectiveness of experiential learning approach as to whether interactivity with peers mediates the relationship between experiential learning activity requirements and team effectiveness. Their participation was voluntary and anonymous. Data collected were treated in strict confidence. 44 completed responses were received, representing a 31.4% response rate. In our sample, about 82 per cent were female. Most of them were aged 18-24 (81.8%). And more than 90 per cent were non-local (93.2%).

Measures

Dependent variable

Team effectiveness was assessed by a 7-item scale using the team effectiveness diagnostic tool on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) (London Leadership Academy, National Health Service, n. d.). Sample items include “Team problem solving results in effective solutions” and “Our team has mechanisms in place to monitor its result”. The Cronbach’s alpha value of this scale was .916.

Independent variable

Experiential learning activity requirements were assessed using a ten-item scale. We adapted the wording to have the requirements as the referent, tapping the extent of salience to which students perceived what they were required to design an experiential learning activity, and viewed these requirements in ways that aligned with their actions. This scale was measured from responses ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items include “The group work requires me to make decision(s);” “The group work requires me to collaborate in a team;” and “The group work requires me to find a better solution.” The Cronbach’s alpha value of this scale was 0.95.

Mediator

Interactivity with peers was measured by using a subset of four items from Liu (2003) and McMillan and Hwang (2002) on a five-point Likert scale (1=strongly disagree; 5=strongly agree). A sample item includes “The group work facilitates my interaction with peers.” The Cronbach’s alpha value of this scale was 0.923.

Control variable

We also collect data for control likely to provide alternative explanation for team effectiveness. Control variable includes team size (in terms of number of students in each team).

Results

Results showed that experiential learning activity requirements are related to team effectiveness (β = .69, p < .001). Hypothesis 1 was supported. Controlling for interactivity with peers, it showed that the effect of experiential learning activity requirements on team effectiveness became non-significant (*β* = .69, p < .001 -> *β* = .17, p > .05), meaning that interactivity with peers was a full mediator (Baron & Kenny, 1986). Hypothesis 1a was supported. After highlighting these findings, we will involve participants in exploring how our findings relate to their experiences when teaching transversal skills. While the remaining discussions will be largely dictated by the attendees’ experiences and interests, we provide some topics below that we are both prepared to discuss and address pertinent issues related to teaching transversal skills especially teamwork in higher education:

1. Timing of activity and assessment. When should be the best timing to administer the student-designed experiential learning activities and assessment respectively?
2. Appropriateness of student-designed experiential learning activity in addressing the learning outcomes. What activity is best suited for teaching teamwork competency?
3. Type of students in a team. How does teaching undergraduate versus postgraduate courses, and local versus international students, relate to the appropriateness of student-designed experiential learning activity in a team?
4. Role of instructors. What is the role of instructors throughout the teaching and learning processes (e.g., How to encourage students to interact with one another? How to better interact with students)?

Overall, we aim to provide empirical evidence from the students we have sampled, in combination with instructor experience, to develop fresh perspectives on how to use student-designed experiential learning activities. For this, attendees can better plan their pedagogical design and delivery for upcoming semesters by considering the use of student-designed experiential learning activities, empirical data, and the insights gained during this roundtable discussion. This session will contribute to effective teaching and learning in the field of management by promoting reflection and reassessment of the approaches we use to provoke learning. This line of inquiry places a central role of instructor(s) and students in the teaching and learning processes by setting the stage around which interactivity with peers is encouraged; and more importantly driving students to work collaboratively with one another throughout the learning process.

Although the current study provides initial support for experiential learning activity requirements that facilitate interactivity with peers (s) resulting in team effectiveness, future research could be extended to include observational data. Subject lecturers could monitor how students interact in a team. Also, evaluation data from employers and supervisors would bolster support for the transfer of teamwork competency to the workplace.

Session Timeline

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| Phase | Summary | Purpose | Duration |
| Opening | Session introduction  | Introduce the use of student-designed experiential learning activities | 15 minutes |
| Survey results on team effectiveness | Summary of empirical findings  | Share major findings in a roundtable discussion  | 15 minutes  |
| Closing | Experience sharing | Assist attendees in planning the use of student-designed experiential learning activity for upcoming semesters | 30 minutes |

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