Innovative Multicultural Collaborative Learning: An Illustrative Case Study of Swiss and Indian Students

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Abstract. This research details a collaborative online international and experiential learning pedagogy that involved B-School students from India and Switzerland during the COVID-19 lockdown. For participants to understand each other's strengths and acceptable weaknesses and work together to solve business cases involving "Diversity and Inclusion", Belbin's Team Role Inventory was used as a diagnostic tool. The students' self-assessment scores on leading and interacting with multicultural teams significantly improved by the conclusion of the course. Theoretically, the experiment contributed to the literature on Authentic Online Learning firstly by showing that a 4E (i.e., engagement, exploration, explanation, and extension) based learning pedagogy enhances the perceived learning attainment of collaborative international online learners. Secondly, it contributed to Belbin's Balanced Group theory, as students' prior awareness of each other's strengths and weaknesses under Belbin's inventory helped them collaborate better and work as teams, regardless of whether the groups were balanced or unbalanced.

Keywords: Belbin's Team Role Inventory, multicultural collaborative learning, experiential learning.

1. Introduction

Learning is successful when the methodology considers the learners' multiple intelligence needs. An experiential learning pedagogy can include tools and methods that cater to the needs of students with various learning styles. According to Kolb and Kolb (2005), experiential learning is the fusion of two constructs: concrete experience and active conceptualization. Through active experimentation and reflective observation, *a concrete experience* is developed that allows students to apply the theories they have learned to solve real-world issues. In pedagogical strategies, the learners' prior and current situations are considered (Robinson & Taylor 2007). Thus, experiential learning pedagogy allows students to make wise choices in real-world situations (Ferguson 2011). According to James and Pollard (2011), learners receive academic, social, and emotional support that encourages their interest and participation in real-world circumstances (Kim & Hannafin 2011). These form the foundation for practical, experiential learning (Christmas 2014).

In the current study, the experiment with a learning strategy for a cross-cultural team of learners is described. The study's applications cut across disciplines. The shared can be replicated in any discipline, for a cross-cultural team of students learning on a virtual collaborative platform. The experiment was conducted on the premise that learners can cooperate effectively to accomplish individual and team goals, regardless of any obstacles, if a scientific approach is used to make them aware of their and their team member's strengths and weaknesses. Business students from Switzerland and India were the "targeted" students studying "at home" during the pandemic lockdown. According to the World Economic Forum (2021), seven abilities are necessary for lifelong employability: high EQ, good communication, good decision-making skills, integrity, drive, concentration, and equilibrium. Both the course material and teaching methods were aimed at helping students acquire these abilities. The activity was carried out online and facilitated by academic instructors from both institutions. Through a hands-on, student-centered, experiential learning approach, the goal was to build leadership skills for managing multicultural project teams. The students' team role competency was evaluated using Belbin's team role inventory, and the learners were made aware of one another's observed team role strengths and weaknesses.

Before recording the descriptive study, we obtained permission from each participant to use their comments as evidence if necessary. We assured the student participants that the recording and documentation of their experience would only be used for academic purposes and that their names would never, at any time, be disclosed, either directly or indirectly, in any publication or research. Before publishing this research work, we also received approval from the Academic Integrity Committees of both institutions. We did not come across any research that uses the distinctive qualities of each collaborative learning team member to

enhance the learning experience. We attempted to bridge this gap and extend the application of Belbin's Team Role Theory. The following section discusses some of the literature used by the instructors before deciding on the pedagogical strategy. A thorough explanation of the pedagogical effort then follows. We conclude by reflecting on our strategy after describing the exercise's merits and difficulties.

2. Literature Review

Authentic learning (Herrington *et al.* 2010) refers to a unique approach to experiential learning: (i) It encompasses learning in an authentic context, connecting learners to complex real-life situations. (ii) It engages in an authentic task with a problem-solving pedagogy; (iii) It provides access to experts who have the experience to solve complex problems; (iv) It indulges learners in multiple roles and responsibilities through action research, simulations, and projects; (v) It co-creates knowledge through collaborative teamwork between members of multiple disciplines and cultures; (vi) It aids in reflection, in which learners have the scope of reflecting with other co-learners, experts, and mentors; (vii) It presents acquired knowledge, experiences, and reflections in public forums; (viii) It conducts authentic assessment embedded in the course. In reality, authentic learning in a collaborative learning environment can be effective if it considers students' different learning preferences and allows learning teams to divide tasks by students' strengths. Concerning online collaborative learning, Somaratane (2016) discovered that learners have some advantages. Notably, online collaborative learning fosters the development of cross-cultural teams and enhances negotiation and communication skills. Overall experience can, however, be further improved by removing linguistic and temporal barriers. Online team-building exercises, international curricula, cases from global contexts, self-introductions to cross-cultural teams, and cross-cultural awareness and comprehension are some instructional strategies that support collaborative learning (Kumi-Yeboah 2018). Timonen and Ruokamo (2021) suggested coaching pedagogy through an online synchronous medium based on the 4E model (i.e., engagement, exploration, explanation, and extension) to care for the learners' abilities and competencies. Notably, the facilitator's role in collaborative online learning goes beyond simply creating the learning curriculum activities. It also includes involving learners in authentic, meaningful tasks, giving them appropriate learning control and task ownership, and considering their needs for different learning styles (Cornelius & Stevenson 2014). Articulating chances for socialization and multicultural understanding in learning approaches is essential. Hence, the first hypothesis we propose in our study is:

H1: A learning pedagogy based on the 4 E (engagement, exploration, explanation, and extension) model enhances the perceived learning attainment of multicultural online learners.

For an introductory course in business management, Ureba *et al.* (2022) used Belbin's Balanced Group Theory to test the proposition that a "balanced" team fosters more significant collaborative learning than an unbalanced team. The balanced team's students outperformed the unbalanced team regarding individual and group achievement, proving the hypothesis correct. A similar finding was noted, albeit in another instance, wherein the researchers used a fuzzy-based multi-agent model for group formation based on Belbin's typology for computer-based collaborative learning (Torres *et al.* 2017). In a different study, Meslec and Cursue (2015) assessed the collaborative learning performance of Belbin's balanced and non-balanced teams using the measurement of cognitive complexity, perceived performance, and objective performance. They discovered that balanced teams performed better in the early learning phase but that there were no significant differences in performances at a later stage of learning. Belbin's balanced and unbalanced software engineering teams were given a technical job in a different experiment. The outcomes demonstrated that Belbin's balanced team required more time to complete the job (Aguilar *et al.* 2019). According to Belbin's Team Role Inventory critics, the subconstructs of inventory have low internal consistency (Furnham *et al.* 1993). Belbin's team role diversity and team success have no relationship, according to another research by Batenburg *et al.* (2013). The team leader's leadership style is also not a reliable predictor of the team's effectiveness. There are therefore opposing perspectives on how Belbin's team position affects team learning and performance. Despite this, as certified Belbin Team Role Instructors, the current experiment's faculty instructors decided to use Belbin's theory in an attempt to create competent leaders for multicultural project teams.

H2: There are significant differences in learning attainment of Belbin's unbalanced and balanced multicultural teams of learners

3. The Pedagogical Initiative

The project was an online collaborative international learning program run by the Symbiosis Centre for Management and Human Resource Development (Symbiosis International University) (SCMHRD) in India and the University of Applied Sciences and Arts Western Switzerland HES-SO (through its two affiliated business schools, HEG-Sierre and HEG-Geneva). The faculty worked together with the Indian Regional Representative of Belbin Team Roles to develop the program in order to ensure a strong industry focus and application. The project was started as a component of the "Leading Multicultural Project Teams" course in the HEG Geneva undergraduate program in international