

Triple-based teaching approach: ‘student as manager’ model in business studies (evaluation and result)

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Abstract

The triple-based teaching approach is a student-center learning process that is implemented for undergraduate business studies. It is mixed with the game, problem, and challenge-based learning strategy that aims to prepare business students to manage unexpected and complex global or industrial issues in the 21st century. It encourages an active and reliable learning environment that requires students' creative input, collaboration, and industrial involvement. The action research method applied for this Triple-based teaching approach which implements the ‘Student as Manager’ model with a relevant task for undergraduate business students at Universiti Pendidikan Sultan Idris (UPSI). Therefore, for the pilot test the Strategic Management subject (PPB3073) A191 semester selected to implement this teaching approach. Overall result Course Learning Outcome (CLO) shows that 75.1 percent and this subject overall performance was 95.46 percent. This teaching approach beneficial for undergraduate students to getting know about industrial phenomena with 21st learning skills (collaborative, creative, critical thinking, and communication).

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1. Introduction

Recent years have seen a rise in the number of lecture methods at the tertiary level in teaching business courses to make students understand concepts, but learners become passive because it is one-way communication. The challenges with current methods are behind the growing relevance of teaching methods to make students understand the complexity of business from a practical point of view, where non-lecture methods are useful (Albaqami, 2016). Besides, students prefer students centered learning when compared to lecturer centered learning (Taub et al., 2020), especially, the subjects who need students to sit for long hours to listen and focus in the lecture hall. At the end of the lesson, students cannot achieve learning objectives as constructed by the lecturer. This scenario happens to most of the universities. Therefore, current lecturing methods must restructure which focuses on students' centered learning that involves autonomous learning and responsible for their learning, which requires specific performance (Taub et al., 2020; Yusof & Ghouri, 2013).

This issue was picked up extensively within the educational research community. The students' performance identifies as industry quality based on an employer's perception that does not appear in the education domain. Therefore, this paper implemented a triple-based teaching approach by consideration in quality business education programs in universities for undergraduates. The quality of which discussion is current students unable to fit their knowledge as industrial needs because of lacking industrial environment exposure during the study period (Lorange & Thomas, 2016). Therefore, this paper implemented a triple-based teaching approach by implementing the 'Student as Manager' model for business studies, which deals with business studies pedagogy in their learning environment. The triple-based teaching approach blended with the game (GBL), problem (PBL), and challenge-based learning (CBL), supports 21st learning skills for business students, which the industry needs to educate employees with quality business studies.

2. Literature review

2.1. Business studies

This heading reviews the methods in the literature that are the most immediately relevant to business studies. The modern business environment is a way of life, the industry needs business graduates with good personalities with professional ethics, good teamwork and leadership skills, good communication skills with excellent public relations problem solving, problem-solving, and analysis skills which are considered as a quality of graduates (Hossain et al., 2020). Therefore, business education should focus on linkages to undergraduates' students in the face of a dynamic business world rather than memorizing concepts and theories, which are related to 21st-century learning skills (collaborative, creative, critical thinking, and communication). To do this, the education system at the tertiary level needs to adopt more practical approaches to teaching (Jackson et al., 2011; Lorange & Thomas, 2016). The main explanation for the application of business studies is that corporate behavior influences the regular lives of all individuals employed, earning, and borrowing, raising, traveling, and playing. It increases employment, wages, and personal business prospects. It also has a huge impact on people's living conditions and quality of life and on the world, they work in and would be inherited by future generations (Hossain et al., 2020). In this sense, all students, whether employed in urban or rural areas, would face the business environment. They must also train students to conduct business with trust and performance. To confront the difficulties, graduates have to understand how businesses run, their position in industrial scenarios, their

development of resources, their need for talent, and their effect on their own lives (Monllor & Soto-Simeone, 2019).

In the present state of economic sustainability, the sector wants more analysts to evaluate the new industry scenario, opening up more work possibilities for graduates (Kirkpatrick, 2020). Consequently, a market analysis is known to have certain advantages. Business studies provide a solid base for those pursuing more study and training in such fields such as administration, international industry, marketing, accounting, knowledge, and communications, or undertakings. It also provides realistic skills for those who wish to transfer directly to work (Hossain et al., 2020). Work in the business sector includes the research, evaluation of concerns and issues, and creation of strategies for people, societies and organizations (Kirkpatrick, 2020). Business studies often offer a different perspective for students in many of the disciplines, including algebra, science and technology, languages, and social research, they learn at a lower level. It allows students to assess the importance of these issues in the corporate environment. It allows businesses, for example, to address their demands, obstacles, and issues and to create goods and services that increase company efficiency.

However, one of the most overlooked aspects of business faculty lecturers, during the lecturing process is blended teaching methods in their targeted business programs (Mohammad, 2015). This area should pay more attention than usual because business subject teaching methods are important in ensuring that students' investment - time and effort (and money) - in the business studies is appropriate and maximized (Albaqami, 2016). It will also help to recognize how learning from these business faculties' teaching strategies will transform a student's real-world experience (Benito Olalla & Merino, 2019). Therefore, some 21st-century business teaching methods are GBL, PBL, CBL, case study, role play, simulation, and business games, peer tutoring, workshop and conferences, industry visit, and others which focus more on student-centered learning (Consalvo & David, 2016). However, as discussed in the literature, the complicated scenario is in identifying more suitable teaching approaches for business studies for undergraduate students because lecturers found difficulties to construct teaching approaches for business subjects that aligned with 21st-century learning skills (collaborative, creative, critical thinking, and communication).

Game-based learning

This section discusses the literature in GBL. GBL has become more common in the education system which implements game elements as a motivational booster for students (Emblen-Perry, 2018). Also, these game base elements could be a traditional way or supported by electronic gadgets. Examples of traditional game-based activities are Monopoly, Card games, Guess Who, Scrabble, and others. Conversely, games that are supported by electronic devices such as smartphones, tablets, personal computers, play stations, and others (Troussas et al., 2020). Therefore, nowadays students prefer to be engaged with their mobile devices such as smartphones and tablets because these gadgets have intervened in their everyday life surpassing the use of personal computers (Lin et al., 2018). Besides that, some game-based online activities are Kahoot, Classcraft, Plickers, and other games that support information technologies. Some scholars declare that using game-based learning in their teaching activities has significant cognitive, affective, and motivational benefits (Lin et al., 2018). However, an enormous challenge for lecturers is how to transfer the contents of the subject towards game-based learning for students. Further, it needs to examine if the GBL approach achieves its learning objectives (Wang & Tahir, 2020). Hence, aligned with previous studies, exposing GBL motivates students to be engaged in the classroom especially when supported with technologies. Further, it also encourages students to stay focused on subject matters because if students focus less on the subject they will not complete in their GBL (Ismail & Mohammad,

2017). Besides, recent study papers indicate that GBL has a favorable influence on student success in contrast to conventional learning methods. Research has found that students who use the GBL are substantially higher than students who choose to use traditional learning methods (Basuki & Hidayati, 2019; Ismail & Mohammad, 2017; Lin et al., 2018; Wang & Tahir, 2020). It will encourage the learning of students, boost encouragement more, facilitate interest in learning, and provide effective input to them (Basuki & Hidayati, 2019). Therefore, this paper reports the results from the implementation of the triple-based teaching approach which focuses on GBL as one of the approaches. The Kahoot Online Game has imposed this free teaching method, a real-time game-based learning tool that with 30 million users worldwide has achieved widespread adoption. It enables lecturers to build game-based quizzes, surveys, and several other items in which participants engage. At the end of the Kahoot session, top respondents are identified for each question and the ultimate winner(s) will be seen. The champions will be listed on the screen after the game (Wang & Tahir, 2020). The best thing about Kahoot is that the readers can export and store the findings for future reference, including comprehensive research details.

Problem-based learning

An excellent overview of the research in the PBL approach is provided here. PBL approach is 21st-century teaching and learning environment which is a student-centered pedagogy (Silva et al., 2018). It is a form of education that challenges students to work together in communities to identify answers to specific industrial problems. These questions lead to the interest of students and start studying the subject (Okolie et al., 2020). PBL teaches students to think and utilize academic tools objectively and analytically. The core process for this approach is a focus on problem-solving with some decision making. Further, this approach develops business skills among students. Even though, this learning approach developed by medical education and further cross implemented to other educational fields, such as business studies (Eraña-Rojas et al., 2019). This learning approach involves three stages: 1st stage- identify the problems. 2nd stage- finding information related to issues, and final stage- discussion and recent knowledge gained. Therefore, for this learning approach, a task is given to students to solve the problem whereby the students need to form a small group and each member has an individual task as role play. To solve the problem, each member needs to co-operate and take responsibility.

A review of the literature undertaken found that students were encouraged to take responsibility for their group and organize and direct the learning process with the support of a tutor or instructor. Advocates of problem-based learning claim it can enhance content knowledge and foster the development of communication, problem-solving, and self-directed learning skill (O'Brien et al., 2019). However, as discussed in the literature, the PBL as students center learning which blended with other approaches such as CBL and GBL to support the 'Student as Manager' model for business studies.

Challenge-based learning

The CBL is a learning method for studying with a condition problem and also as a learning approach based on students (Tang & Chow, 2020). This teaching methodology in the 21st century is cooperative and realistic, enabling all to participate, interact, analyze, and express their thoughts with the world (Briguglio, 2007). CBL draws on experiential learning, depends strongly on the experience of a large tradition of progressive education, and incorporates much of the objectives of service education and strategic pedagogy. Innovative concepts from education, culture, technology, entertainment, leisure, and workplaces and culture shape the system.

A systematic review of peer-reviewed literature showed that CBL mixes with the three phases which identity as engagement, investigation, and act (Yoosomboon & Wannapiroon,

2015). In an engaging phase, students need to get prepared for the next phase. In the investigation phase, which is the second phase, it requires students to work in groups to identify the topics relevant to industrial issues that relate to the community. Further in the action stage, the group must brainstorm, analyze, and be able to give the best solution for an industrial problem. Students themselves need to start and discuss their ideas with their teammates and get support from the industrial experts. The lecturer's knowledge shared with students is less compared to industrial experts (Tang & Chow, 2020). However, in the current economic situation, the cost is one factor that needs to be considered when students engage in CBL with an industry expert. This is one of the non-beneficial for students because not all industrial experts will support students that engage with CBL. Therefore, it is an advantage to the university if they hire an industrial expert with higher qualifications to support CBL, who can share industry knowledge with business students.

3. Innovation methods

This triple-based challenge approach applied the action research method in education. There is a very extensive literature on action research in education. According to Hine (2013), the action research sequence holds significant value for improving practice within classrooms, schools, and communities. Therefore, this approach blended with GBL, PBL, and CBL methods for business studies applied along one semester on business studies (Strategic Management). For the GBL approach, the online Kahoot application was used, and while for the PBL approach lecturer give internal and external industrial cases for each group. Further, for a CBL approach, the tasks involve (investment, discipline, and pro-activeness) among their groups. At each class, students need to form a group of 9 to 10 students, and the lecturer will provide a brief list of a few types of business and each group needs to select one business type. Further, the students' group is required to form a firm by the selected nature of business and compare it with an existing firm (competitor analysis). At this point, all students will engage themselves in their firm as managers (role play). They can be human resource managers, operational managers, financial managers, and other relevant to managerial positions. This task exposes students to the working scenarios with roles and responsibilities as the manager, which aligned with course objectives. Also, the aim to form a firm with unfamiliar types of business is to share knowledge among students which they can get to know about the other business process. The business process which mentioned were, this firm (group) need to identify their competitor and analysis by referring with some analysis tools such as External Factor Evaluation Matrix (EFE), Internal Factor Evaluation Matrix (IFE), Competitive Profile Matrix (CPM), and Quantitative Strategic Planning Matrix (QSPM). After implementing this teaching approach by the respective lecturer, he /she can analyze students' performance via the final assessment result. Hence, from the triple base teaching approach and illustration of Student as Manager Model as in Figure 1.

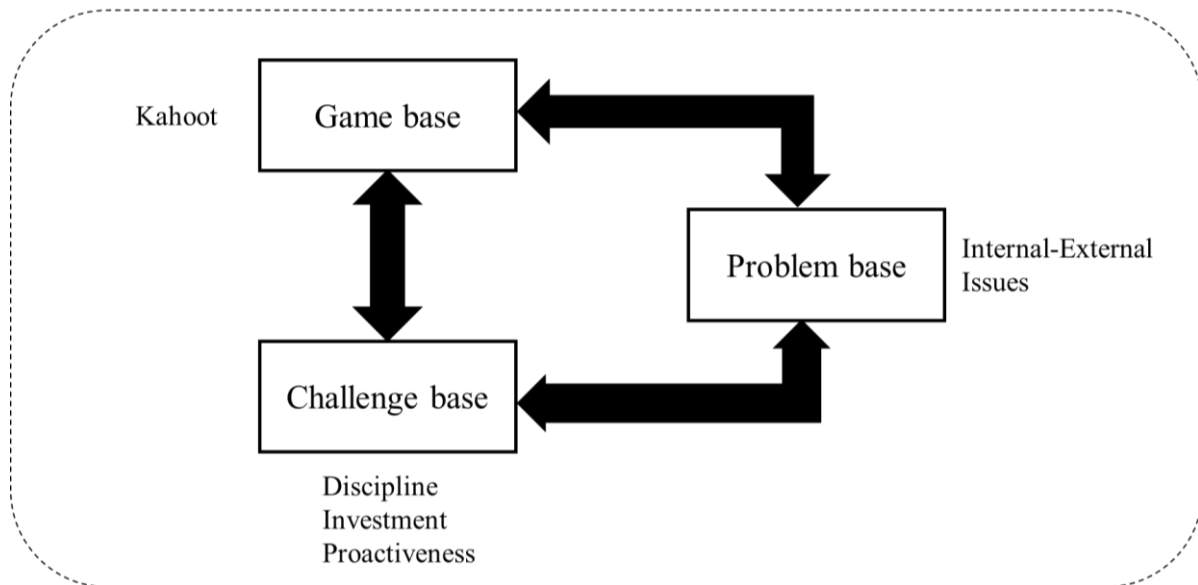
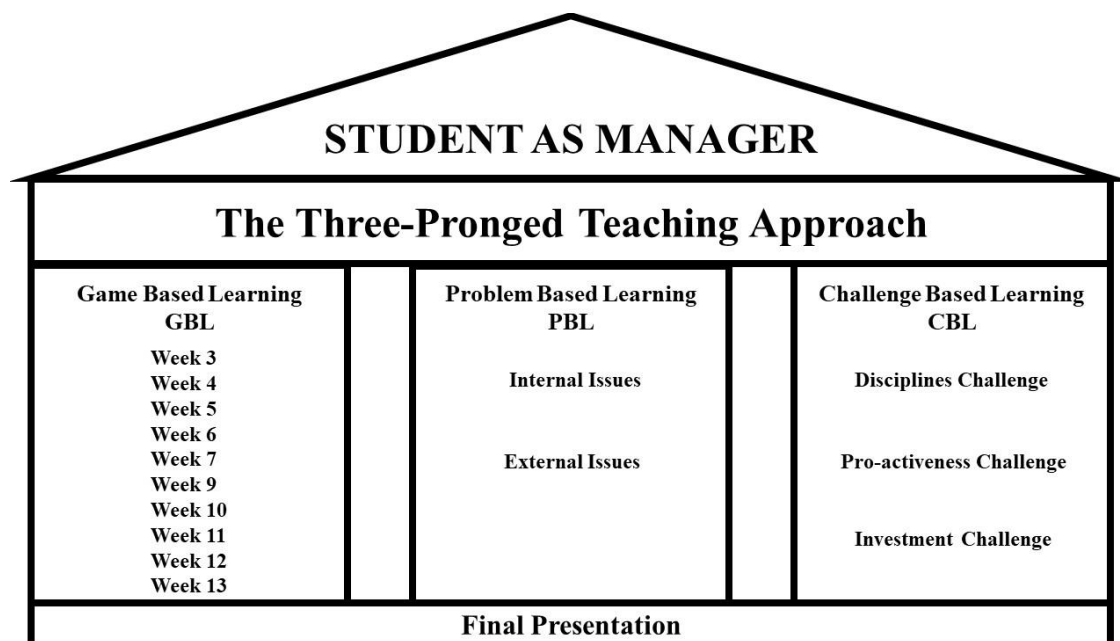


Figure 1. Student as manager model



Source: modified from Source: Fred R. David, "How Companies Define Their Mission," Long Range Planning 22, no. 1 (February 1989).

Figure 2. Teaching innovation model modified from source: Fred R. David, "How Companies Define Their Mission," Long Range Planning 22, no. 1 (February 1989)

Kahoot process

The Online Kahoot games application was chosen for GBL as a triple-based teaching approach. Therefore, to create a Kahoot game, the lecturer needs to login to the Kahoot website ([https:// getkahoot.com](https://getkahoot.com)). After choosing a Kahoot option, the lecturers create questions based on weekly covered topics using its available features. Finally, an automatically generated code was received. Then, by using a laptop or smartphone, students access the game by using the

Kahoot app or by browsing the website, *www.kahoot.it*. Then, students enter the code that appears on the screen and register their code names according to their firms (each firm has individual code). Once the Kahoot game starts, the students will gain points based on correct answers given and for speedy responses. Further, there are specific times for students. This session was conducted every week after each topic covered the previous week. So, students need to gather in their lecture hall or class for a Kahoot session. For each session, 20 questions were asked. The winners of each Kahoot announced at the end of the session and the winners' names were automatically displayed at the end of the game. These points compiled and declared as their profit gaining money. For example, in a firm (group A) having ten managers (students) and each manager assigned a fixed individual code (A1, A2, ..., A10) which was used as an enrollment name in Kahoot session. Besides, they also need to study the previous week's chapter before coming to class. Later, when the Kahoot session begins all managers need to log in and answer the questions. At the end of the Kahoot session, the winner of the week will be identified by referring to individual code. These points are converted to money, which they gain in that week. However, the profit was calculated based on the average gained by all managers' contributions in the Kahoot session. It means that all managers need to study to get a high profit. If only a manager was to gain much profit in the Kahoot session but others score very poorly, this contributes less profit to that firm. These profits are compiled, recorded, and exposed to students via the portal (MyGuru / Padlet). Therefore I can conclude that Kahoot was used as an additional tool for formative assessment during a feedback session. Kahoot online application is one tool for GBL, which increases students' understanding level of the subject content which finally leads to the achievement of the subject's objectives. Details for the challenge-based process can refer to figure 2.

Problem-based process

Another approach blended with triple-based teaching is a problem-based teaching approach. For this approach, each firm has given two tasks that involved external and internal issues that are relevant to current industrial phenomena (high rejection, material shortage, customer complaint, oil price drop, and others). These provided industrial issues were original and according to their types of business. Furthermore, in this problem-based teaching process, each department manager needs to give a solution with relevant justification to overcome the issues. This means all managers in the firm have their roles and responsibilities to solve the issues. Also, the relevant justifications needed to provide during the final presentation. The presentation session is twenty minutes whereby the firm managers need to come out with a good image (corporate video) of their proposal to attract the investor. For the presentation, a foreign lecturer acts as an investor for the firms. Further question-and-answer sessions were conducted between the investor (foreign lecturer) and the manager (student). So, by applying PLB in business studies, students can understand current issues in the real industrial phenomena and the strategy of actions undertaken to overcome the problems by referring to some analysis (CPM, IFE, QSPM). Details for the challenge-based process can refer to figure 2.

Challenge-based process

Another teaching approach blended with a triple base teaching approach is the CBL teaching approach. This process involves acting, engaging, and investigating. However, for the triple base teaching approach, some minor changes are carried out such as challenges by firm discipline, pro-activeness, and investment. Further, this teaching process involves every student who engages in their firm until the end of the semester. The challenges among the firms are divided into a few portions such as students' discipline, pro-activeness, and investment. Details for a challenge-based process can refer to figure 2.

4. Results

This section outlines the results of the triple-based teaching approach. This result consists of assignments, midterm exams, and final assessments. Therefore, at the end of the semester, the 2019/2020 (A191) session shows that the overall Course Learning Outcome (CLO) of Strategic Management subject students was 75.1 percent which is good performance (>70 percent), and overall subject performance (student evaluation on the subject and lecturer) was 96.45 percent. So, figure 5 shows detail of the result of three groups of Strategic Management subjects (PPB 3073). In addition, this course learning evaluation results score high (planning, learning, student participation, coursework, soft skills and course description) shows.

Furthermore, from the final results, it is clear that 30.77 percent of students get A, 1 student get C in their result, and no students fail in this subject. Therefore, this result is considered as robust evidence to support the triple-based teaching approach in 21st-century teaching pedagogies, which indirectly supports the 21st learning skills (collaborative, creative, critical thinking, and communication).

5. Discussion

The method presented in this business study is sufficiently general to apply to the triple base teaching approach. This teaching approach motivates, encourages, and focuses on students. Also, the GBL in the classroom engages and motivates students to learn through the empowerment of learners (Lin et al., 2018). GBL has a strong effect on the enthusiasm and contribution of students to learning in line with other research (Licorish et al., 2017; Lin et al., 2018; Wang & Tahir, 2020). It encourages the participation of students in studying substantially higher than those who tend to use conventional approaches. The students who requested to join the Kahoot talked in a GBL. Kahoot is one of the most common online student learning platforms. Kahoot made learning simple, engaging, and helped them understand their subjects better. Kahoot helps them to meet obstacles, to monitor them, to retain their tasks, to enhance their intrinsic curiosity, and to appreciate the session as valuable learning practice (Licorish et al., 2017). The GBL is more powerful and willing to build a motivating learning experience relative to the conventional solution. When inspired, students perform more. This research also indicates that students viewed GBL as an enjoyable learning experience by Kahoot. Students can devote more time to the course whether it is interesting, interesting, and pleasant. Students react positively to learning events that encourage them to connect and obtain immediate input from their lecturer and others (Lin et al., 2018).

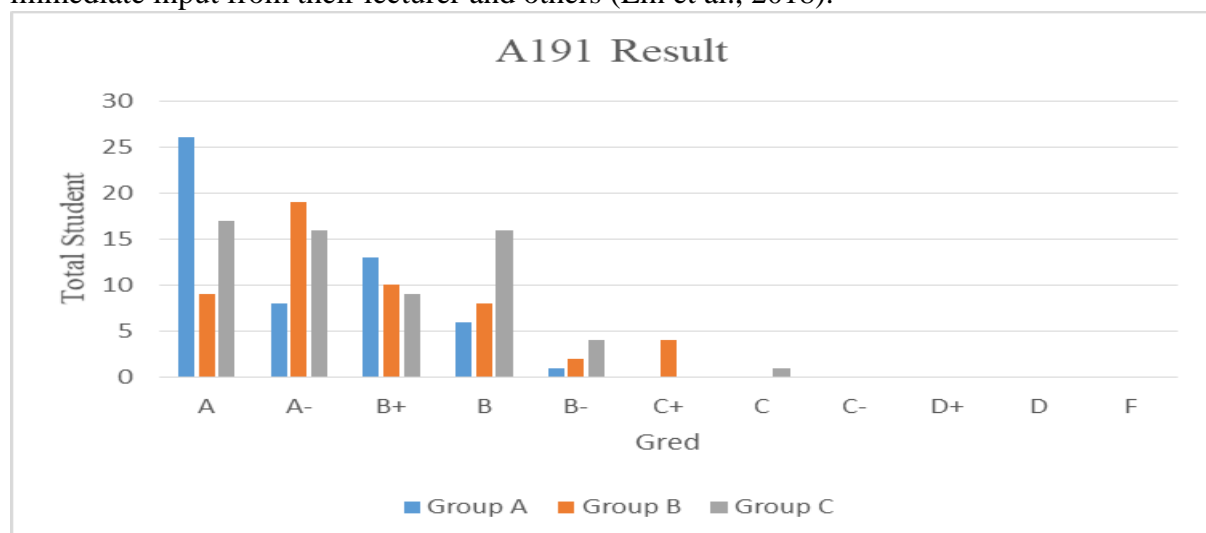


Figure 3. Final result (strategic management)

Table 1. Learning evaluating result part A: teaching quality (students evaluation result-A191)

Item	Planning	Score
1	Pro Forma of this course was explained at the beginning of teaching and learning sessions.	2.86
2	The learning materials listed in Pro Forma are relevant to the content of the course.	2.88
3	Soft Skill are listed in Pro Forma.	2.86
4	Learning materials are uploaded to MyGuru.	2.89
5	Learning sessions include the whole course content.	2.88
Scale:		4.80
Item	Learning	Score
1	A variety of learning methods are applied in teaching and learning sessions.	2.88
2	Teaching and learning sessions stimulate me to think critically and creatively.	2.89
3	Teaching and learning sessions help me understand my course content.	2.86
4	Teaching and learning sessions emphasize the relevance of the theory and its application in everyday life.	2.89
5	Teaching and learning sessions motivated me to study this course.	2.86
Scale:		4.80
Item	Student participation	Score
1	I was given a chance to ask during the teaching and learning session.	2.89
2	Lecturer asks specific questions to encourage my involvement.	2.91
3	I was given a chance to discuss it with my friends.	2.92
4	The activities planned in teaching and learning sessions encourage my participation.	2.89
5	I was allowed to give opinions during the teaching and learning sessions.	2.86
Scale:		4.83
Item	Coursework	Score
1	Assignments given are related to course content.	2.90
2	Assignments given are suitable for my learning time.	2.88
3	The assignment given helps me to relate the course content with the real world.	2.89
4	Assignments are monitored and responded by lecturers throughout the teaching and learning process.	2.87
5	Assignments are evaluated based on processes and results.	2.89
Scale:		4.88
Item	Soft skills	Score
1	The lecturer provides opportunities to play different roles in the teaching and learning process.	2.89
2	My lecturer reminds us of punctuality in class.	2.92
3	My lecturer allows communicating effectively.	2.90
4	My lecturer reminds us of healthy and responsible ways to socialize.	2.92
5	My lecturer encourages a problem-solving approach throughout teaching and learning process.	2.90
Scale:		4.85

Part B: course description

Item	Course description	Score
1	Course content corresponds to the credit hour.	2.84
2	The duration of the course corresponds to its credit hours.	2.87
3	The contents of this course are relevant to my program.	2.89
4	This course is very important for my program.	2.84
5	Overall, I am satisfied with this course.	2.91
Scale:		4.82

Another interesting result from the triple base approach to teaching was that GBL by Kahoot would bring students more oriented on studying and discussing different ways of learning. There is a visual stimulation aspect of which the students look at the problems, like pictures displayed on the primary screen. Concerning the viewer, Kahoot provides listeners with music embedded in games (Wang & Lieberoth, 2016). Kahoot often approaches

kinesthetic students via physical exercise, at least when picking their replies. The student's accomplishments can increase considerably if he or she teaches those utilizing techniques and tools that are in line with their patterns (Basuki & Hidayati, 2019). However, this GBL via Kahoot sessions deals with certain limitations such as internet connectivity. Students are required to login to Kahoot to fulfill the task. If internet connectivity is slow or not available. They would be unable to proceed with this task (Wang & Tahir, 2020).

Another learning method under the triple-based teaching approach is PBL. This learning approach is designed for collaboration among students which considers students centered learning (Zabit, 2010). Also, the PBL approach applies when students engage with internal and external industrial issues relevant to current industrial phenomena. Those internal issues which happen in industrial scenarios, such as operational cost down, manpower shortage, safety issues, internal auditing, skill development, and others happen inside the firms. The external issues are, such as customer audit, customer complaint, water disruption, oil price increasing, material price increase and others happen outside the firms. Besides, the reason for giving real industrial issues or problems is because this exposes students to familiarization and getting knowledge to overcome the situations (Tsai & Tang, 2017). Further, during the learning periods, students will identify, analyze, and will decide to overcome the problems. In this point of situation, students behave as a manager, who is responsible for decision making for industrial problems. Besides that, students will be exposed to the analyzing tools in business studies, which supports decision making from arriving problems. Apart from it. They will increase their confidence level when facing the problems because they involve themselves in finding the solution and learning methods, not dependent on reference books, which are considered as deep learning among students (Asyari et al., 2016).

This task is a benefit for students, lecturers, and universities. It is student-centered learning which students plan well to solve the issues. During a student's engagement in the learning method, students will enjoy and gain recent knowledge that is relevant to the subject and future industrial exposures. This encourages great understanding, and students achieve their learning objectives. Students' experience rate in industrial phenomena rate is high because they are engaged with real industrial issues and came along with a decision for problem-solving. In a previous study's findings, PBL is a skilled developer for lifelong learning. Further PBL benefits lecturers in a way to increase students' attendance because it promotes interdisciplinary news among students. Besides that, this method also affords more intrinsic rewards for students. Also, this learning approach is beneficial for universities in terms of solid, valuable teaching evidence which increases university reputation among stakeholders.

However, applying PBL has also some disadvantages among students, lecturers, and universities. For students who lack prior knowledge and learning experiences on this approach because of fewer exposures by the lecturer, the university academic councils need to find and hire a lecturer who is an expert in the industrial field with a higher academic qualification. Lacking industrial experts' guidance in PBL only leads to this approach fails. Failing in teaching methods will contribute to learning objectives unachievable by students and lecturers. Further, this teaching approach also needs more time consumption compared with traditional methods because students need more time to engage whether on or off class periods (Zabit, 2010).

Next, following with CBL, which represents the workforce of the 21st century. Students work in collaborative firms, using technology to address world-industry issues within their class community. The challenge for lecturers is to work with students to take multidisciplinary, standard-based content, relate it to what is happening in today's world, and turn it into an environment in which students make a difference in their business (Yang et al., 2018). To accomplish this aim, students must have the framework, encouragement, control points, and the right skills to function effectively, and they must have the flexibility to be self-directed,

imaginative, and motivated. While the lecturer engages in the CBL cycle, their behavior varies with the success of the students at their periods. Early on, as lecturers present CBL to students and encourage them, they take actions, exchange knowledge, guide expertise, and address questions about how the mechanism works and what students expect. In the medium stages, students plan and study their work, and they work with students, helping them through the rough places and keeping them on track (Tang & Chow, 2020). By the latter stages, the students become involved in their practices and have learned the requisite skills and expertise through effective assessments. Finally, the position of the managerial students when applying, reviewing, and reporting their ideas and findings can convert into. However, for these undergraduate students, the CBL approach innovated which challenges among their firms in the classroom and continuing until the end of the semester.

Overall, this triple based teaching offers a successful approach to undergraduate business studies. Further, this active learning is considered as students' 21st-century learning method in which they act, engage, and investigate (Tang & Chow, 2020). However, in triple base teaching approaches, some innovations imposed are discipline tasks, pro-activeness tasks, and investment tasks whereby students still need to act, engage, and investigate. The benefits of discipline tasks are to prepare students to obey industrial rules and regulations which they will face soon (Yang et al., 2018). So, during this task students act as a manager and must follow rules which are decided by the class lecturer. In industrial reality, as an employee he or she must always follow the rules the firm prepares which, if not they will face discipline, action, and impact on their performances. Besides that, another task involves investment among all firms (groups) in the form of a real egg. The reason for this task is to make all students understand how to manage and take care of the firm, which is not a simple job. It needs the involvement and contribution of each of every employee including firm managers. As a manager with a foremost priority for decision making, their cooperation is important to make sure the firm is successful in the industry. While students continue to engage in the tasks under the triple base teaching approach, they develop their skills which are highly needed in the industry. Therefore, with the blended task in the triple base teaching approach, 'Student as Manager' for business studies was introduced and implemented.

6. Conclusions and suggestion

The main conclusions of this triple based teaching approach are drawn together and presented in this section. This teaching approach blended with GBL, PBL, and CBL while implementing a 'Student as Manager' model, especially for business studies. Further, the introduced model needs to implement a full semester academic period because this model is structured for 14 weeks (1 semester). This developed model prepares students to face challenges in the industry such as manpower shortage, cost-saving, business analysis, and planning. At the end of the semester, while completing the 'Student as Manager' model task, they can develop their 21st-century learning skills (collaborative, creative, critical thinking, and communication).

Further study needed to uncover the detail of this phenomenon, because this model was introduced and implemented in the business study (Strategic Management) as a pilot test implementation. However, can apply to other business subjects as well by creating some innovation such as applying different online games and problem according to the subject tasks in triple base teaching approaches according to the subject needs. Also, this teaching approach and model can crossly implement in other courses such as engineering or medical.

References

- Albaqami, T. (2016). Effective methods of teaching business education. *International Journal of Scientific & Engineering Research*, 7(1), 1052–1055. Retrieved from <http://www.ijser.org>
- Basuki, Y., & Hidayati, Y. (2019). *Kahoot! or quizizz: the students' perspectives*. <https://doi.org/10.4108/eai.27-4-2019.2285331>
- Benito Olalla, C., & Merino, A. (2019). Competences for sustainability in undergraduate business studies: a content analysis of value-based course syllabi in Spanish universities. *International Journal of Management Education*, 17(2), 239–253. <https://doi.org/10.1016/j.ijme.2019.02.006>
- Briguglio, C. (2007). Educating the business graduate of the 21st century: communication for a globalized world. *International Journal of Teaching and Learning*, 19(1), 8–20. Retrieved from <http://www.isetl.org>
- Consalvo, A. L., & David, A. D. (2016). Writing on the walls: supporting 21st-century thinking in the material classroom. *Teaching and Teacher Education*, 60, 54–65. <https://doi.org/10.1016/j.tate.2016.08.005>
- David, F. R., & David, F. R. (2017). *Strategic management: a competitive advantage approach, concepts*. Pearson Higher Ed.
- Emblen-Perry, K. (2018). Enhancing student engagement in business sustainability through games. *International Journal of Sustainability in Higher Education*, 19(5), 858–876. <https://doi.org/10.1108/IJSHE-05-2017-0075>
- Eraña-Rojas, I. E., López Cabrera, M. V., Ríos Barrientos, E., & Membrillo-Hernández, J. (2019). A challenge based learning experience in forensic medicine. *Journal of Forensic and Legal Medicine*, 68(April). <https://doi.org/10.1016/j.jflm.2019.101873>
- Hine, G. S. C. (2013). The importance of action research in teacher education programs. In special issue: teaching and learning in higher education: Western Australia's TL Forum. *Issues in Educational Research*, 23(2), 151-163.
- Hossain, M. M., Alam, M., Alamgir, M., & Salat, A. (2020). Factors affecting business graduates' employability—empirical evidence using partial least squares (PLS). *Education and Training*. <https://doi.org/10.1108/ET-12-2018-0258>
- Ismail, M. A.-A., & Mohammad, J. A.-M. (2017). Kahoot: a promising tool for formative assessment in medical education. *Education in Medicine Journal*, 9(2), 19–26. <https://doi.org/10.21315/eimj2017.9.2.2>
- Jackson, M. J., Helms, M. M., & Ahmadi, M. (2011). Quality as a gap analysis of college students' expectations. *Quality Assurance in Education*, 19(4), 392–412. <https://doi.org/10.1108/09684881111170096>
- Kirkpatrick, N. (2020). Reality check: Helping students recognize, evaluate, and pursue realistic entry-level jobs in the business. *International Journal of Management Education*, 18(2), 100384. <https://doi.org/10.1016/j.ijme.2020.100384>
- Licorish, S. A., George, J. L., Owen, H. E., & Daniel, B. (2017). “Go Kahoot!” Enriching classroom engagement, motivation, and learning experience with games. *Proceedings of the 25th International Conference on Computers in Education, ICCE 2017 - Main Conference Proceedings*, 755–764.
- Lin, D. T. A., Ganapathy, M., & Kaur, M. (2018). Kahoot! It: gamification in higher education. *Pertanika Journal of Social Sciences and Humanities*, 26(1), 565–582.
- Lorange, P., & Thomas, H. (2016). Pedagogical advances in business models at business schools – in the age of networks. *Journal of Management Development*, 35(7), 889–900. <https://doi.org/10.1108/JMD-11-2014-0150>

- Mohammad, A. (2015). Experimental methods of teaching business studies: practical approaches beyond lecturing. *International Journal of Core Engineering & Management*, 1(12), 59-73.
- Monllor, J., & Soto-Simeone, A. (2019). The impact that exposure to digital fabrication technology has on student entrepreneurial intentions. *International Journal of Entrepreneurial Behaviour and Research*. <https://doi.org/10.1108/IJEBR-04-2019-0201>
- O'Brien, E., McCarthy, J., Hamburg, I., & Delaney, Y. (2019). Problem-based learning in the Irish SME workplace. *Journal of Workplace Learning*, 31(6), 391–407. <https://doi.org/10.1108/JWL-10-2018-0131>
- Okolie, U. C., Elom, E. N., Igwe, P. A., Binuomote, M. O., Nwajiuba, C. A., & Igu, N. C. N. (2020). Improving graduate outcomes : implementation of problem-based learning in TVET systems of Nigerian higher education. *Higher Education, Skills, and Work-Based Learning*. <https://doi.org/10.1108/HESWBL-12-2018-0140>
- Silva, A. B. Da, Bispo, A. C. K. de A., Rodriguez, D. G., & Vasquez, F. I. F. (2018). Problem-based learning: a proposal for structuring PBL and its implications for learning among students in an undergraduate management degree program. *Revista de Gestão*, 25(2), 160–177. <https://doi.org/10.1108/REG-03-2018-030>
- Tang, A. C. Y., & Chow, M. C. M. (2020). To evaluate the effect of challenge-based learning on the approaches to learning of Chinese nursing students: a quasi-experimental study. *Nurse Education Today*, 85(October 2018), 104293. <https://doi.org/10.1016/j.nedt.2019.104293>
- Taub, M., Sawyer, R., Smith, A., Rowe, J., Azevedo, R., & Lester, J. (2020). The agency effect: the impact of student agency on learning, emotions, and problem-solving behaviors in a game-based learning environment. *Computers and Education*, 147(December 2019), 103781. <https://doi.org/10.1016/j.compedu.2019.103781>
- Troussas, C., Krouska, A., & Sgouropoulou, C. (2020). Collaboration and fuzzy-modeled personalization for mobile game-based learning in higher education. *Computers and Education*, 144(February 2019), 103698. <https://doi.org/10.1016/j.compedu.2019.103698>
- Wang, A. I., & Tahir, R. (2020). The effect of using Kahoot! for learning – a literature review. *Computers and Education*, 149(May 2019), 103818. <https://doi.org/10.1016/j.compedu.2020.103818>
- Yoosomboon, S., & Wannapiroon, P. (2015). Development of a challenge based learning model via cloud technology and social media for enhancing information management skills. *Procedia - Social and Behavioral Sciences*, 174, 2102–2107. <https://doi.org/10.1016/j.sbspro.2015.02.008>
- Yusof, A. R. B. M., & Ghouri, A. M. (2013). Educational service quality and customer satisfaction index at public higher educational institutions. *Indian Journal of Commerce and Management Studies*, 4(1), 43-49. Retrieved from <http://scholarshub.net/index.php/ijcms/article/view/294/286>
- Zabit, M. N. M. (2010). Problem-based learning on students critical thinking skills in teaching business education in Malaysia: a literature review. *American Journal of Business Education (AJBE)*, 3(6), 19–32. <https://doi.org/10.19030/ajbe.v3i6.436>