

THE DEVELOPMENT OF A TEACHING PACKAGE USING A PRACTICAL TEACHING METHOD IN BUSINESS FINANCE FOR STUDENTS OF THE FACULTY OF BUSINESS ADMINISTRATION, PITCHAYABUNDIT COLLEGE*

Kanyarat Hassaro¹

Pitchayabundit College, Nongbualamphu Province, Thailand.¹

Email : tui.h2511@gmail.com

ABSTRACT

This research paper presents the results of teaching package development using a practical teaching method in business finance. It was objectives 1) to developing a teaching package using a practical teaching method in business finance to be effective according to the 80/80 criterion, 2) to comparing the students' academic achievements before and after learning with a teaching package using a practical teaching method in business finance, and 3) to investigating the students' satisfaction with the learning with a teaching package using a practical teaching method in business finance. The target population consisted of 15 students. The research tools included teaching package using a practical teaching method in business finance, an academic achievement test, and a questionnaire. The statistics used in the data analysis were percentage, mean, standard deviation, and t-test for dependent samples.

The results indicated that the teaching package using a practical teaching method in business finance was effective at 81.275/87.647, which met the 80/80 criterion, the students's academic achievement after learning was statistically higher than before learning with a teaching package using a practical teaching method in business finance at the 0.05 level, and the students' satisfaction with the learning with a teaching package using a practical teaching method in business finance, both overall and every learning unit, was at a high level.

Keywords : 1. Teaching Package 2. Practical teaching method 3. Academic achievements 4. Students' satisfaction

1. Background and Problem Statement

The management of teaching and learning materials is an important part of the teaching components and acts as a medium that allows communication between the teachers and the learners to proceed effectively as well as an important tool that helps promote learning for learners to understand the contents more easily and quickly. There are many types of teaching materials, each of which has its own characteristics and features, including letters, pictures, sounds, equipment, techniques, and presentation methods, to suit a variety of learners. In addition to the knowledge and understanding of the types of teaching materials, the teachers also need to choose the materials that are appropriate for the learners and consistent with learning objectives in order for learners to learn effectively. At present, the education system has changed and developed rapidly. These changes affect the learning of the learners, especially teaching materials that focus on practical skills of learners in the core curriculum of basic education (Chawalit Kengthong, 2017). For a good teaching and learning management, the teachers must take into account a learner-centered teaching and learning management and use various techniques so that learners can gain knowledge and understanding of the contents as well as enjoy the classes, making them interested in truly learning and understanding the contents of the subjects being taught. When learners have gained knowledge and understanding, they will be able to apply the knowledge gained in their actual tasks and to create quality products for the benefit of society and the nation in the future (Yada Khuean Chai, 2011).

Higher education institutes can be regarded as a source of knowledge and sciences in many fields and an important mechanism in the development of the country with the important roles and responsibilities in graduate production, knowledge research, academic administration to society, and preservation of arts and cultures. As an intellectual asset of higher education institutions, the graduate production requires complex processes or tactics, and both institutions and students must be ready to help provide graduates with knowledge and intellectual, social, emotional, physical, and mental competences so that they will be truly useful to the development of the country (Pitchayabundit College, 2019).

Pitchayabundit College is one of the educational institutions responsible for producing graduates with good knowledge and competences. It offers the subject of business finance, which is a compulsory subject in all majors of the Faculty of Business Administration that is responsible for teaching and learning management. This subject is involved with fundamentals, goals, and importance of business finance

management and financial analysis techniques in terms of supply and allocation of money for use in operations, property management, and financial control planning (Pitchayabundit College, 2019). According to a study of the academic report in business finance for academic year 2020, 18 students had an average score of only 67.33 %, which was lower than the expected criterion (75%), possibly because they had different levels of education, i.e. secondary education at 55.56 percent and high vocational education at 44.44 percent (Pitchayabundit College, 2020), including many other reasons; for example, teachers may create relatively less motivation in their teaching and learning management, give too many assignments, and use uninteresting teaching methods with too much emphasis on theory.

One of approaches to solving problems of business finance students is to adjust from the traditional to innovative teaching and learning management, i.e. teaching package using a practical teaching method. This teaching package consists of materials, equipment, or methods that can help support and encourage learning in the contents of that subject continuously, resulting in greater academic achievement of learners after learning (Chaiyong Phromwong, 2013). In addition, a practice process is a learning that comes from real actions and is a direct experience that makes learners appreciate, learn, remember, and apply what they have learned to the same situations. This process consists of 5 steps: preparation, presentation, abstraction, generalization, and application (Bigge, M.L., 1964). The relevant information for decision making includes the supporting concept of the cognitive group supported by psychologists, i.e. Bruner, Kohler, and Ausubel, who believe that when humans have done anything, they will want success and want to know the results immediately. A teaching package can help promote and support the learning of the subject contents continuously.

According to the above-mentioned significance and problem, the researcher was interested in investigating how much higher the teaching package developed according to the above concept, when applied to business finance students, could make to their academic achievement in order to use the results of this research as a guideline for developing appropriate and effective teaching and learning management.

2. Research Objectives

2.1 To develop a teaching package using a practical teaching method in business finance to be effective according to the 80/80 criterion.

2.2 To compare the students' academic achievements before and after learning with a teaching package using a practical teaching method in business finance.

2.3 To investigate the students' satisfaction with the learning with a teaching package using a practical teaching method in business finance.

3. Research Benefits

3.1 A teaching package using a practical teaching method that was effective according to the 80/80 criterion was obtained.

3.2 The academic achievement of the students of the Faculty of Business Administration, Pitchayabundit College, was known.

3.3 The students' satisfaction with the learning with a teaching package using a practical teaching method was known.

4. Research Methodology

4.1 The target population in this study included 17 students of the Faculty of Business Administration, Pitchayabundit College, who enrolled in business finance in the first semester of academic year 2021, consisting of 8 students in the graduate accounting program and 9 students in the business administration program in management (Pitchayabundit College, 2021).

4.2 Research tools

4.2.1 Teaching package using a practical teaching method in business finance consisted of 6 learning units: The Nature of Financial Management, Financial Analysis, Cash and Marketable Securities management, Working Capital Management, Time Value of Money, and Capital, passed the Item-Objective Congruence (IOC) index from 5 experts, and received an IOC value of 1.00 for every learning unit. They were used to test with 30 non-sample students of the Faculty of Business Administration in the graduate accounting program and the business administration program in management, Pitchayabundit College, and revised as follows: 1) the examples of business profitability analysis and case studies of the present value of money in several equal installments were added into the learning units 2 and 5 and 2) the number of items of worksheets for every learning unit were adjusted to suit the time;

4.2.2 Academic achievement test in business finance consisted of 60 four-choice items, passed the Item-Objective Congruence (IOC) index from 5 experts, and was used to test with 30 non-sample students. All 60 items had an IOC value of 1.00, a difficulty value ranging from 0.40-0.70, a discriminating power value from 0.35-0.75, and an overall confidence value of 0.89; and

4.2.3 Student satisfaction questionnaire was a 5-point rating scale with 30 items, passed the Item-Objective Congruence (IOC) index from 5 experts, and was

used to test with 10 non-sample students. All 30 items had an IOC value of 1.00 and an overall confidence value of 0.91.

4.3 Research scheme was the one-group pretest-posttest design (Wanee Kemket, 2008) as follows:

$$E \quad O_1 \quad X \quad O_2$$

where E = Population,

O₁ = Pre-learning test,

X = Teaching with a teaching package using a practical teaching method in business finance, and

O₂ = Post-learning test.

4.4 Testing and data collection methods

4.4.1 Before learning

- 1) Target students were suggested about learning methods; and
- 2) An academic achievement test in business finance consisting of 60 four-choice items was taken.

4.4.2 Teaching was conducted for 15 weeks (45 periods).

- 1) Learning unit 1 The Nature of Financial Management was taught for 6 periods and tested using 10 four-choice items;
- 2) Learning unit 2 Financial Analysis was taught for 9 periods and tested using 10 four-choice items;
- 3) Learning unit 3 Cash and Marketable Securities Management was taught for 9 periods and tested using 10 four-choice items;
- 4) Learning unit 4 Working Capital Management was taught for 3 periods and tested using 10 four-choice items;
- 5) Learning unit 5 Time Value of Money was taught for 9 periods and tested using 10 four-choice items; and
- 6) Learning unit 6 Capital was taught for 9 periods and tested using 10 four-choice items.

Each learning unit was taught using a practical teaching method with 4 steps as follows:

- 1) Introduction to lessons was to suggest learning methods, to provide practices of case studies from real situations, and to give knowledge sheets to learners;
- 2) Practice was to practice students to do exercises and tests determined by teachers based on students' existing knowledge and case studies from real situations in order to get the correct answers;

3) Application was to allow learners to practice from knowledge sheets and worksheets determined by teachers and to do exercises with keys revealed together; and

4) Evaluation was to test knowledge of the subjects learned in each learning unit.

4.4.3 After learning

1) An academic achievement test in business finance consisting of 60 four-choice items for the target students was taken; and

2) The students' satisfaction with learning with a teaching package using a practical teaching method in business finance was inquired using a 5-point rating scale questionnaire consisting of 30 items.

4.5 Data analysis

4.5.1 The effectiveness of the teaching package using a practical teaching method in business finance was analyzed according to the E1/E2 formula and compared with the 80/80 criterion (Chaiyong Phromwong, 2013) as follows:

Average Mean

4.51-5.00 highest satisfied

3.51-4.50 High satisfied

2.51-3.50 moderate satisfied

1.51-2.50 low satisfied

1.00-1.50 lowest satisfied

4.5.2 The students' academic achievements before and after learning with a teaching package using a practical teaching method in business finance was comparatively analyzed using t-test for dependent samples (Boonchom Srisaard, 2017); and

4.5.3 The students' satisfaction with the learning with a teaching package using a practical teaching method in business finance was analyzed using mean and standard deviation, and the mean was then compared with the mean interpretation criteria of Boonchom Srisaard (2017).

5. Research Results

5.1 The results of the development of a teaching package using a practical teaching method in business finance to be effective according to the 80/80 criterion

Table 1 The results of the effectiveness determination of the teaching package using a practical teaching method in business finance.

N=17	Test results during units at/ (full score)						Total (60) (E1)	Test result after learning (60) (E2)
	unit1 (10)	unit 2 (10)	unit 3 (10)	unit 4 (10)	unit 5 (10)	unit6 (10)		
μ	9.176	7.647	7.588	9.000	7.882	7.471	48.765	52.588
σ	0.728	0.786	0.939	0.791	0.781	0.800	3.345	2.123
%	91.76	76.47	75.88	90.00	78.82	74.71	81.275	87.647

Table 1 shows the mean of the testing results during learning in all 6 learning units was 48.765 points (of 60 points) or 81.275 percent, while the mean of the testing results after learning was 52.588 points (of 60 points) or 87.647 percent. This means that the teaching package using a practical teaching method in business finance was effective at 81.275/87.647, which met the 80/80 criterion.

5.2 The results of the comparison of the students' academic achievements before and after learning with a teaching package using a practical teaching method in business finance

Table 2 The results of the comparison of the students' academic achievements before and after learning with a teaching package using a practical teaching method in business finance.

test	N	Full Score	μ	σ	t	df	p
Before Learn	17	60	23.940	2.436	44.667	16	0.000*
After Learn	17	60	52.588	2.123			

*p<0.05

Table 2 shows the probability (p) to get a t-value of 44.667 was 0.000, which was less than the specified level of statistical significance (0.05). This means that after learning with a teaching package using a practical teaching method in business finance, the students' academic achievements were statistically significantly higher than before learning at the 0.05 level.

5.3 The results of the investigation of the students' satisfaction with the learning with a teaching package using a practical teaching method in business finance

Table 3 The mean, standard deviation, and level of the students' satisfaction with the learning with a teaching package using a practical teaching method in business finance.

Assessment item	μ	σ	satisfaction level
1. Learning unit 1 The Nature of Financial Management	4.83	0.36	High
2. Learning unit 2 Financial Analysis	4.47	0.44	High
3. Learning unit 3 Cash and Marketable Securities Management	4.47	0.48	High
4. Learning unit 4 Working Capital Management	4.77	0.42	High
5. Learning unit 5 Time Value of Money	4.37	0.48	High
6. Learning unit 6 Capital	4.10	0.60	High
Total	4.47	0.40	High

Table 3 shows the overall students' satisfaction with the learning with a teaching package using a practical teaching method in business finance was at a high level ($\mu = 4.47$). When considering individually, every unit was at a high level ranging from the highest to lowest means as follows: Learning unit 1: The Nature of Financial Management ($\mu = 4.83$), followed by Learning unit 4: Working Capital Management ($\mu = 4.77$), Learning unit 2: Financial Analysis, Learning unit 3: Cash and Marketable Securities Management ($\mu = 4.47$), Learning unit 5: Time Value of Money ($\mu = 4.37$), and Learning unit 6: Capital ($\mu = 4.10$).

6. Research Discussion

6.1 The development of a teaching package using a practical teaching method in business finance was effective at 81.28/87.65, which met the specified 80/80 criterion. It was because the researcher developed this teaching package systematically by studying the related theories, including interpersonal difference theory, creative learning theory, Gaye's learning theory, learner-centered teaching and learning management, participatory learning principles, and teaching principles

based on learning process and psychology, and then testing its effectiveness. This was consistent with Thaweesak Worachak, Thaweesak Deemuenwai, and Thuwanonn Ponjon (2018) suggesting that the teaching package was effective at 80.83/84.30 (E_1)(E_2), which exceeded the 80/80 percent and the specified criterion. It was because the teaching package was developed based on working principles, practical observations, job analysis, and consideration of knowledge and skills that are part of the works. It was concluded that the result of teaching by using the developed teaching package increased learners' knowledge and understanding. In addition, this was consistent with Suphalak Thanaroj, Weerawan Kerdthongm, and Wandee Sue Mak (2019) indicating that the development of a teaching package in holistic nursing practice using virtual simulations was effective at 82.16/86.42, which met the targeted 80/80 criterion. It was because the teaching package was systematically developed by examining documents, textbooks, journals, and research papers related to the teaching package and laying out the structure of the teaching package consistent with the theories and linked to the teaching and learning management. Moreover, this was consistent with Thiradet Jirathanathat (2021) stating that the teaching package was systematically developed starting from the study of relevant documents, interpersonal difference theory, learner-centered teaching and learning management, mixed media principles, and teaching principles based on learning process and psychology and was therefore effective at 81.68/86.00, which met the 80/80 criterion. It was because the teaching package was systematically developed as mentioned above, tested, and continually improved. Furthermore, this was consistent with Thaweepon Ekmaneerot and Jiraphan Srisomphan (2021) suggesting that the development of teaching and learning materials in computer assembly with augmented reality technology was effective at 86.06/80.20, which was higher than the 80/80 criterion. It was because the use of teaching and learning materials with augmented reality technology helped learners to understand and created interactions where the samples could adjust the perspective of the materials to learn according to their own desired perspective, resulting in more understanding and eagerness to learn.

6.2 The students's academic achievement after learning was statistically significantly higher than before learning with a teaching package using a practical teaching method in business finance at the 0.05 level. It was because the teaching package from learning units 1 to 6 emphasized a practical teaching method with 4 steps: 1) introduction, 2) practice, 3) application, and 4) evaluation. The researcher developed knowledge after learning starting with examining relevant documents,

developing a teaching package, and testing and improving it continually. After applied to real students, their academic achievement after learning was statistically significantly higher than before learning at the 0.05 level. This was consistent with Suphalak Thanaroj et al. (2019) stating that the academic achievement of the experimental group after learning was significantly higher than before learning at the .001 level. In addition, this was consistent with Penpaka Manipetch et al. suggesting that, with the development of a science learning activity package using a five-step learning process, the testing score after learning was significantly higher than before learning at the 0.05 level. Moreover, this was consistent with Thiradet Jirathanathat (2021) stating that the academic achievement after learning was statistically significantly higher than before learning with a teaching package using a practical teaching method at the 0.05 level. Furthermore, this was consistent with Thaweepon Ekmaneerot and Jiraphan Srisomphan (2021) suggesting that the academic achievement after learning was statistically significantly higher than before learning with teaching and learning materials in computer assembly with augmented reality technology at the 0.05 level.

6.3 The students' satisfaction with the learning with a teaching package using a practical teaching method in business finance, both overall and every learning unit, was at a high level. It was because the students opined that the learning contents, activities, materials, evaluations, and durations in each learning unit provided them with more knowledge. This could be seen from the testing results during and after learning where all students met the criteria according to the regulations of Pitchayabundit College as expected. As a result, their satisfaction with the learning with a teaching package using a practical teaching method in business finance, both overall and every learning unit, was at a high level. This was consistent with Yada Khuean Chai (2011) stating that the satisfaction with learning using teaching and learning materials in object-oriented analysis and design was at a high level possibly because the format of these teaching and learning materials was convenient for learning and most suitable for students' learning. In addition, this was consistent with Thaweepon Ekmaneerot and Jiraphan Srisomphan (2021) suggesting that, with the development of teaching and learning materials in computer assembly with augmented reality technology, the students's satisfaction with these materials was at an important level. Moreover, this was consistent with Suphalak Thanaroj et al. (2019) stating that the satisfaction with a teaching package in holistic nursing practice using virtual simulations was at a high level possibly because teaching and learning activities could perform roles as defined in virtual situations, practice skills using real

tools, and include responses that address the needs for real holistic cares so that students develop their skills according to the specified objectives. Furthermore, this was consistent with Jarusawat P. (2020) suggesting that the students' satisfaction with learning about information knowledge was at a high level possibly because the learning activities emphasizing the participation of learners and the cooperation of teachers in an interdisciplinary way created opportunities to work with other students in their class. As a means of sharing, exchanging, learning, encouraging critical thinking, and conveying creative ideas to their full potential through participatory teaching and learning methods, the students could therefore develop essential skills of the 21st century.

7. Research Recommendations

7.1 Policy Recommendations

7.1.1 Teachers and advices to learners can solve problems they do not understand, enable them to work on the worksheets of each learning unit, and provide good reinforcement for them to be interested in the lessons; and

7.1.2 A teaching package developed based on teaching and learning principles and theories, such as interpersonal differences theory, learner-centered teaching and learning management, and teaching principles using learning process and psychology, allows teachers to convey highly abstract contents and experiences.

7.2 Implementation Suggestions

7.2.1 The implementation of this teaching package should examine the contents and practice process in detail and adapt them to suit the learners, and the learning duration should be flexible and appropriate with the readiness of the learners;

7.2.2 The case study information of each learning unit should be up-to-date and useful to the learners; and

7.2.3 Evaluating the learning outcomes of each learning unit should use the appropriate tools, methods, and criteria with an emphasis on developing learners' knowledge and understanding and on applicability in real situations.

7.3 The suggestion for the further research

7.3.1 Further research should be conducted on factors that make teaching and learning management effective for students of the Faculty of Business Administration, Pitchayabundit College;

7.3.2 Further research should be conducted on students' academic achievement towards the teaching behavior and learning process of the teachers; and

7.3.3 This research applied the teaching package using a practical teaching method to students of the Faculty of Business Administration, Pitchayabundit College, who studied business finance for the first time. Therefore, such teaching package should be researched with the next generation of students studying this subject and the results obtained shall be used to improve the teaching package to be more suitable.

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