Antecedents Impacting on Achievement of Using Problem-Based Pedagogy for Student's Learning on Auditing Course

Arus Kongrungchok^{1*}, Thikamporn Thaweedech², Suwatjana Thammachot³

Abstract

In order to develop pedagogical technique for the effective achievement of student's learning on auditing course. The primary objective was to investigate the factors that accounting students in Suratthani Rajabhat University have always failed to learn on auditing course. Questionnaires (102 respondents) and semi-structured interviews (15 respondents) were used for collecting data from undergraduate accounting students. Statistical techniques, which are descriptive, Pearson correlation coefficient, and multiple regression analysis, were employed to analyze questionnaires. The content analysis was used for analyzing interview data by using a phenomenological research approach. The result of research revealed that insufficient skills, knowledge and experiences; insufficient practical training on auditing cases; insufficient IT learning equipments; inappropriate classroom environments; and inappropriate pedagogical methods have been importantly caused for the ineffective student's learning on auditing course, especially a lack of student's competencies in terms of the basic knowledge of the financial reporting standard and the suitable auditing knowledge, skills and experiences in parts of audit techniques, test of control, audit working papers, and audit reports. At the same time, accounting student's competencies, practical training on auditing cases, pedagogical methods, IT learning equipments, and classroom environments have positively had direct relationships and patently influenced the achievement of student's learning on auditing course at the significance level of 0.01. Many problems on student's learning on auditing course must have been solved for more effective schooling in the future when those have always been supported by related parties.

Keywords: Achievement; Problem-Based Pedagogy; Students' learning; Auditing Course.

Introduction

As the course of cooperative education, which is a course that students must spend their time to commingle with real situations of business and industrial sectors for obtaining their real skills and experiences including all of them must be assessed to mark the score, grade, and related recommendations, must be registered by general students in the last semester in

^{1*}Faculty of Management Science, Suratthani Rajabhat University

² Faculty of Business Administration and Service Industry, King Mongkut's University of Technology North Bangkok

³ Walailak Management School, Walailak University

universities, especially accounting students of Suratthani Rajabhat University. Unfortunately, there were 6 letters from accounting and auditing offices, where have always been used for training them, complained those accounting students as relating to the issues of accounting students' practical competency especially the students who failed to train in the auditing field. Some of them said that...

"...in a side of audit working ...Your students has totally lacked the strong knowledge and skills of accounting and auditing while their solving the facing problem and teamwork skills have needed to be very much improved. Furthermore, your student cannot understand the basic business environment as they should have it when they can pass class learning processes ...this is the big problem that your students cannot work on the auditing job ... (refer to CL.3 and CL.5 as received on 20 May 2017)"

What was it happening with those students for their learning processes in accounting program at Suratthani Rajabhat University especially in auditing course? Generally, auditing course has always been a crucial required subject embedded in Bachelor degree in accounting program for studying in all universities around the world as for the International Education Standard (IES) 2015 has explicitly governed for having the accounting student competency (knowledge, skills, and experiences) when graduated in Bachelor degree in accounting program specifically on the auditing course needed to explicitly have in terms of knowledge, skills, and experiences as well which has certainly been a part of and a crucial foundation for accounting students as the basic knowledge, skills and experiences relating to auditing as well as important to professionally work on auditing career. Hence, this course has unavoidably been needed to learn in their classroom including the crucial starting point of eventually changing to become an independent auditor (Arens et al., 2016; Grenier, Pomeroy, & Stem, 2015; Cosserat & Rodda, 2009). From those crucial complaints of entrepreneurs aforementioned leading to instructor's doubtfulness why accounting students in Suratthani Rajabhat University have failed and lacked of their competency for working on an auditing field. Althrough those instructors have much attempted to transfer their knowledge and experiences to their students through using a lot of pedagogical methods (DeFond & Zhang, 2014; Kuruppu, 2012; Holm & Steenholdt, 2000) inclulding each chapter of the auditing course has often been difficult for practical explanation at classroom (Well, 2015; LaShaw, Sago & Lambert, 2013; Uachanachit, 2004), this situation has always been done the best by those instructors, there have variously been many barriers between students and instructors with the learning processes for this course. Many scholars, who taught on auditing course, revealed that the learning failures on teaching the auditing course have often been occurred from the lacks of students' auditing competency (skills, knowledge and experiences), inappropriate classroom environments, teaching equipments and methods mismatching student learning and a lack of practical training on the auditing (Imbiri, 2015; Westermann, Earley & Bedard, 2015; Wong & Fong, 2014; Carter & Hogan, 2013; Wang et al., 2013; Black, 2012). These are the crucial causes of inefficient and ineffective student learning as well as a failure of instructor's schooling. In case of undergraduate accounting students at Suratthani Rajabhat University (SRU) have also been confronting various problems when their instructors were attampting to pass on all of the auditing knowledge and experiences to them, this situation has exactly caused to the failure of students' auditing competency development through using whether case-based or problem-based learning (Plumlee, Rixom & Rosman, 2015; Van Peursem et al., 2015; Well, 2015; Westermann, Earley & Bedard, 2015; Kuruppu, 2012; Lambert & Agoglia, 2011; Schwartz, Spires & Young, 2002). Therefore, the main objective of this research was to investigate factors impacting the achievement of student's learning on auditing course through using problem-based pedagogy. The results received have been expected to improve and develop more effective learning processes of instructors and students particularly on auditing course that can be actually practical.

Objectives

For seeking the effective accomplishment of student's learning processes on auditing course so that the primary objectives of this research are

- (1) to investigate factors relating to the achievement of accounting student's learning on auditing course through using problem-based pedagogy at Suratthani Rajabhat University; and
- (2) to ascertain factors influencing the achievement of accounting student's learning on auditing course through using problem-based pedagogy at Suratthani Rajabhat University.

Literature Review

The improvement of schooling has always been important to develop the appropriate learning process due to there has been the difference of course descriptions as well as the difficulty and ease of each discipline including the learning competency (basic knowledge, skills and experiences) of students and instructors (Lysaght, 2015; Kirschner & Van Merrienboer, 2013; Edstrom, 2008). This research was concerning with learning process of schooling on the auditing course in order to ascertain related factors influencing the achievement of learning process on the auditing course. From reveiwing many literatures, this research was being expounded the entired factors of study are student's competency, classroom environments, IT learning equipments, practical training on auditing cases, and pedagogical methods (Imbiri, 2015; Westermann, Earley & Bedard, 2015; Wong & Fong, 2014; Carter & Hogan, 2013; Wang et al., 2013; Black, 2012) as the details explained in below.

An auditing course has normally been a crucial required subject and also a major course in Bachelor degree in accounting program, including this course is a crucial professional knowledge for the accounting career particularly independent auditors (DeFond & Zhang, 2014). Thus, this career has always needed to provide with auditing competency (knowledge, skills and experiences) (Arens et al., 2016; Grenier, Pomeroy & Stem, 2015; Cosserat & Rodda, 2009). Whether those accounting students would like to become an auditor or not, the learning process of auditing course must be unavoidably betided in accounting program by the whole accounting students in all universities around the world. Therefore, the contents of auditing course have normally cosisted of both theory and practice as all parts are mixed both easy and difficult contents to implement on the actual auditing (Van Peursem et al., 2015; Well, 2015; Su et al., 2013; Lambert & Agoglia, 2011). As Arens, Elder, Beasley and Hogan (2016) agreed with Cosserat and Rodda (2009) relating to the basic scope of learning on the auditing course has generally consisted of four parts are: the fundamental of auditing; the principles of audit procedures; the auditing on transaction cycles; and the special audit topics and other assurance services (Arens et al., 2016; Cosserat & Rodda, 2009).

In case of teaching undergraduate accounting students at Suratthani Rajabhat University (SRU) of Thailand, the content of this course was only being consisted of the fundamental of auditing; the principles of audit procedures; and the auditing on transaction cycles. Moreover, the basic knowledge of auditing procedures, which has certainly been very important to apply these auditing procedures to the entire business transaction cycles (Grenier, Pomeroy & Stem, 2015; LaShaw, Sago & Lambert, 2013), has normally comprised of (1) audit responsibilities and objectives; (2) audit planning and analytical procedures; (3) overall audit strategy and audit program (audit techniques); (4) internal control and control risk assessment (test of control); (5) test of details (Substantive procedures); (6) audit evidences and sampling; (7) audit working paper; and (8) audit reports (Arens et al., 2016; Cosserat & Rodda, 2009). Unfortunately, the schooling procedures of this content between instructors and students at SRU were unsuccessful as considered from those students could not apply those procedures to audit business transaction cycles as assigned through the problems-based and/or case studies although those instructors, who have been Certified Public Accountants of Thailand or independent auditors well known as "CPA", were continually attempting to pass on their knowledge, skills and experiences concerning with this procedures to their students. Therefore, in order to effectively develop the accounting students' auditing competency and also capably learn the auditing procedures including effectively applying to audit business transaction cycles through the problems-based and/or case studies assigned. This research was executing to test accounting student's competencies in terms of understanding on the auditing course contents by concentrating on the content of auditing procedures as well as application of this content for practical auditing on problems-based and case studies through the aspects of knowledge, skills and experiences from learning in classroom.

As instructors and students have always felt classroom environments, where is like their home, have principally been a component of crucial learning environment and directly affected brain activity (Westermann, Earley & Bedard, 2015; Badua, Sharifi & Watkins, 2012). In order to make well-run classroom, classroom layout should be, safe and relaxing, made firstly, the readiness of schooling whether desks, working space, the attractiveness of classroom atmosphere, the storage of materials and supplies, appeal of related learning facilities and temperature, lighting, and noise level, all elements aforementioned have often impacted feelings, thoughts, and intangible impressions of different instructors and students (Imbiri, 2015; Carter & Hogan, 2013; Wang et al., 2013), and also reflecting instructor's teaching style and student's learning style in classroom (Mahama et al., 2016; Wong & Fong, 2014). At the same time, appropriate classroom environments would rapidly be able to develop a number of groups and individual inquiries to provide opportunities for solving problems and produce action projects, including the improvement of better student's learning behavior (Wong & Fong, 2014; Carter & Hogan, 2013; Black, 2012). As for IT equipments have been, as a part of learning classroom environment, an instrument used for learning the efficient improvement of auditing methods and procedures on business transaction cycles so that it has forever been fashionable as much supported by all university organizations (Mahama et al., 2016; Imbiri, 2015). Unfortunately, some public universities around the world have often supported less governmental budget until those IT equipments could not be employed to learn all the courses, this situation were hidden some agendas in terms of fraud and corruption on student's learning equipments (Westermann, Earley & Bedard, 2015; Carter & Hogan, 2013; Black, 2012).

According to practical training has always been important to learn the auditing course especially the difficulty of auditing procedures including the auditing on business transaction cycles and the special auditing topics and other assurance services (Plumlee, Rixom & Rosman, 2015; Lambert & Agoglia, 2011). That is why all the accountants particularly the independent auditors have needed to understand the related processes used and also lead to effectiveness of auditing works (Well, 2015; Kuruppu, 2012; Schwartz, Spires & Young, 2002). At the same time, skills and experiences would be betided from taking a long time with practical training (namely learning by doing) of all accountants and eventually becoming independent auditors or certified public accountants (CPAs) (Plumlee, Rixom & Rosman, 2015; Westermann, Earley & Bedard, 2015; Kuruppu, 2012). In a side of the auditing course has needed to be trained in terms of the application of auditing procedures due to complexity and difficulty of understanding for auditing

business transaction cycles (Westermann, Earley, & Bedard, 2015; Kuruppu, 2012; Lambert & Agoglia, 2011). With theory of learning and training model was being used for determining an instruction process of appropriate practical skills in the auditing procedures as four stages of the individuals learning have comprised of concrete experience, reflective observation, abstract conceptualization, and active experimentation (Mahama et al., 2016; Well, 2015; Su et al., 2013; Kuruppu, 2012). Hence, a learning method has been a part of the Learning Style Inventory (LSI) used for explaining an importance of learning process and passed on knowledge to obtain experiences while experiential learning has also been a part of training process to learn from direct experiences (Su et al., 2013; Kuruppu, 2012). Therefore, accounting students learning on the auditing procedures which must also be trained practically in order to apply those auditing procedures knowledge to the actual auditing on the business transaction cycles as problems-based and/or case studies-based.

Contemporary learning and teaching theory have mostly been consisted of theory of information processing, multiple intelligences, and constructivism (Plumlee, Rixom & Rosman, 2015; Su et al., 2013; Edstrom, 2008). As the process of human intelligence development has been expounded through the theory of information processing theory in terms of awareness of attention, perception and related strategies for obtaining skills, knowledge and experiences (Westermann, Earley, & Bedard, 2015; Imbiri, 2015; Kuruppu, 2012) as well as the theory of multiple intelligence has been used for elaborating the human intelligent level of various competences are: the intelligence of linguistic, logical-mathematical, visual-spatial, interpersonal, intrapersonal, musical, bodily kinesthetic, and naturalist, hence the human intelligence could also perceive all the things by their learning and doing together (Lysaght, 2015; Uachanachit, 2004; Schwartz, Spires & Young, 2002). For constructivism theory has been used for developing student learning process as knowledge and real situation that students received must be mixed to practically construct higher their competencies (knowledge, skills and experiences) by themselves (Carter & Hogan, 2013; Badua, Sharifi & Watkins, 2012; Holm & Steenholdt, 2000). Therefore, the whole theories have been usually used for designing the pedagogical methods (Wong & Fong, 2014; Kirschner & Van Merrienboer, 2013; Wang et al., 2013). In a case of the auditing course, the teaching methods have mostly been used for learning between instructors and students are: cooperative learning, learning center, integrated teaching, ask and question model, the use of community activity, project-based method, case study-based method, problem-based method, committee work method and discussion group (Plumlee, Rixom & Rosman, 2015; LaShaw, Sago & Lambert, 2013; Su et al., 2013). This research was examining on accounting student's attitudes to the related factors impacting learning on the auditing course for more effective learning process

of instructors and students that can actually be practical auditing on the whole business transaction cycles as problems-based.

Methodology

There were two stages to the research about an anonymous survey and interviews with accounting students, who used to already learn on the auditing course, in Bachelor degree of accounting program at Suratthani Rajabhat University of Thailand. A questionnaire survey, which was created and already checked reliability and validity before performing the actual data collection, the content validity of questionnaire were inspected via using the index of itemobjective congruence (IOC) received the overall value was equal to one by related three experts concerning with this research area while the reliability was also tested through try out with 40 other accounting students, who used to already learn on the auditing course as those selected students could be equivalent to the accounting students studied, by considering the value of Cronbach's coefficient alpha, that is almost near to one as reasonably believed and accepted to having the reliability of questionnaire, received the overall value was equal to 0.914, was used to investigate why accounting students failed to learn on the auditing course. 102 respondents were actually collected the data from 114 questionnaires sent. 15 respondents volunteered and were independently interviewed through one of the researchers with using a semi-structured interview. The objective of the interviews was to examine accounting student's attitudes concerning with student's competency, classroom environments, IT learning equipments, pedagogical methods and practical training on auditing cases. Questionnaire Data were coded and checked for accuracy by an independent researcher and then analyzed using SPSS both basic and inferential statistics in terms of descriptive, Pearson correlation coefficient at the significance level of 0.01 and multiple regression analysis while interview data were managed in terms of transcripts that were thematically analyzed through content analysis and further expounded using a phenomenological research approach to explain a situation as perceived by the individuals in that situation. This approach abstracts out the themes and key issues.

Results

As a result of this research discovered 102 accounting students responded the questionnaires sent and 15 accounting students independently volunteered to be interviewed. As the achievement of accounting student's learning process on the auditing course firstly impacted from the difficult levels of the auditing course contents as the results showed that overall of auditing course contents were the more difficulty level (4.12) to accounting student's learning process consisting of the principles of audit procedures (4.58), the auditing on business

transaction cycles (4.02), and the fundamental of auditing (3.76) respectively, especially the auditing procedures in auditing course were the much difficult levels to accounting students learning as there have been many details that comprised of (1) audit responsibilities and objectives; (2) audit planning and analytical procedures; (3) overall audit strategy and audit program (audit techniques); (4) internal control and control risk assessment (test of control); (5) test of details (Substantive procedures); (6) audit evidences and sampling; (7) audit working paper; and (8) audit reports.

From interviewing data, some accounting students discussed that...

"...all contents in each topic and chapter of the auditing course were much difficult to learn as my opinion including my friend also agreed with...my friends and I must be taking a long time in each chapter...especially the contents of auditing procedures in terms of audit strategy and audit program (audit techniques), internal control and control risk assessment (test of control), audit working paper, and audit reports...it was actually...the time of practical learning for us was not sufficient to study the auditing content combined from two courses to a course as both theory and practice... if it was possible, the auditing course contents should be changed to make it easy for further learning...(refer to..., IV003, IV005, IV006, IV009, so on)".

As accounting students were identifying that all of the auditing course contents were much difficult to learn particularly the auditing procedures in terms of audit techniques, test of control, audit working paper, and audit reports. The difficulty of the auditing course contents was also limited by the inappropriate learning time, this cause should be appropriately improved by reviewing a course description possibly. The effects of accounting student's knowledge as the more difficulty levels of the auditing course contents have always impacted students' competency to audit the business transaction cycles through using problms-based (see Table I).

The results (see Table I) of the competencies of accounting students with their learning on the auditing course for auditing on business transaction cycles through using problems-based and/or case studies explicitly revealed that the accounting student's competencies were overall less (2.01) which were affecting the ineffectiveness of auditing on business transaction cycles assumed through using practical problems-based and case studies due to much and more lacks of competencies in terms of experiences of auditing (1.32), practical skills abilities (1.38), the effective use of auditing procedures (1.56), problem solving decision (1.64), adaptive learning (2.13), understanding on business transaction cycles (2.35), and effective coordination in their teamwork (2.44), respectively, however accounting students only had the career basic knowledge in the moderate level (3.27).

Table I : The Accounting Student's Competencies with Learning for the Audting of Business Transaction Cycles through Using Problems-Based

The Accounting Student's Competencies	Mean	Standard	Levels of The	
for Auditing of Business Transaction Cycles	Mean	Deviation	Competency	
Career Basic Knowledge	3.27	0.6734	MODERATE	
Practical Skills Abilities	1.38	0.5437	LEAST	
Experiences of Auditing	1.32	0.7162	LEAST	
Problem Solving Decision	1.64	0.5876	LEAST	
Adaptive Learning	2.13	0.6875	LESS	
Effective Coordination in Their Teamwork	2.44	0.7415	LESS	
Understanding on Business Transaction	2.35	0.6396	LESS	
The effective Use of Auditing Procedures	1.56	0.7984	LEAST	
OVERALL	2.01		LESS	

Findings data from interviewing accounting students who were speaking about their competences...

"...with our learning on the auditing course leading to the application for auditing procedures on auditing the business transaction cycles through using problms-based whereas our competencies were not enough to work on those because of crucial lacks of practical skills and experiences of auditing...the important procedures used for auditing the business transaction cycles, which have had many processes and steps, ...those have been complex and difficult to implement auditing on those related cases...due to inability of our understanding and application including the insufficient practical skills...(refer to..., IV003, IV005, IV006, IV009, so on)".

The explanation of accounting students supported the quantitative results as the same outcomes. Furthermore, accounting students mostly lacked of the abilities of practical skills to audit the situations of business economic transaction from case studies assigned which resulted from a lack of suitable training experiences for applying auditing procedures to those although accounting students have had the moderate sufficiency of their knowledge. While accounting student's competencies have been a important factor to audit the business economic transaction assigned through problems-based and case studies, other factors have also been crucial consisting of classroom environments, IT equipments, pedagogical methods and practical training on auditing cases, as the results were demonstrated in Table II.

Table II: The Attitudes of Accounting Students to the Related Factors Impacting the Achievement of Their Learning on the Auditing Course for the Auditing of Business Economic Transactions

The Polated Factors Impacting Learning			Student's	
The Related Factors Impacting Learning	Mean	Standard	Opinion to	
on the Auditing Course for		Deviation	the Levels of	
the Auditing of Business Transactions			Importance	
Student's Competencies	4.76	0.4623	Strongly Agree	
Classroom Environments	4.11	0.7894	Agree	
IT Equipments	4.20	0.6271	Agree	
Pedagogical Methods	4.34	0.4639	Strongly Agree	
Practical Training on Auditing Cases	4.58	0.8757	Strongly Agree	
OVERALL	4.40		Strongly Agree	

As accounting student's opinion discovered that overall of related factors (4.40) have importantly impacted the achievement of their learning on the auditing course for auditing on business economic transaction assigned through problems-based and case studies. The much important factors of accounting student's opinion were student's competencies (4.76), practical training on auditing cases (4.58), and pedagogical methods (4.34) respectively as well as IT equipments (4.20) and classroom environments (4.11) were ranked the secondary importance. This situation might be considered both student's learning competencies including practical training on auditing cases and pedagogical methods of those instructors have always needed to be forever improved to support more effective learning processes, continually.

The findings of qualitative data from volunteer interviewees explained that...

"...my friends and I confronted the difficulty of learning the auditing course and then we much lacked of practical competences for auditing on the business transaction cycles whether knowledge, skills, or experiences...however we did not know how to solve and improve our competencies...we just only obtained knowledge from classroom and take a few time for practicing the auditing procedures through case studies and problems-based assigned from my instructor...we expected to improve our competencies through our instructor's teaching methods and practical training assigned from instructor in terms of the step by step... However, the appropriation of IT equipment and classroom environments should also be suitably maintained to create learning motivation which could lead to the effectiveness of our learning processes, especially IT equipmentl...(refer to..., IV003, IV005, IV006, IV009, so on)".

As accounting students were attempting to look for the solution to improve their competencies whether knowledge, skills or experiences, eventually the methods of pedagogy and practical training approach from the instructor must be used for improving their student's competencies such as using problem-based, case-based learning, projected-based learning, simulation of real situation. Furthermore, accounting students also thought that modern equipments and environments for learning have certainly had a similar importance because these could also attract a student's interesting to learn in classroom and then help an increase of learning effectiveness.

Table III: The Correlation Coefficient of the Related Factors Impacting on the Achievement of Their Learning on the Auditing Course for the Auditing of Business Economic Transactions

Variables Used for	The Values of Pearson	The Values of Significance
Examining Research hypothesis	Correlation Coefficient	(2 Tailed)
Student's Competencies (X ₁)	0.416	0.000*
IT Equipments (X ₂)	0.256	0.000*
Classroom Environments (X ₃)	0.204	0.000*
Pedagogical Methods (X ₄)	0.342	0.000*
Practical Training on Auditing Cases (X ₅)	0.382	0.000*

^{* =} The Level of Significance 0.01

Research hypothesis (see Table III) was examined through Pearson product moment correlation coefficient and discovered that student's competencies (X_1) , IT equipments (X_2) , classroom environments (X_3) , pedagogical methods (X_4) , and practical training on auditing cases (X_5) have exactly influenced and positively had direct relationships to the achievement of student's learning on auditing course (Y) for auditing on business economic transactions and cycles at the significance level of 0.01 as the equation of multiple regression analysis found and demonstrated as following about $Y = 13.76 + 0.32X_1 + 0.10X_2 + 0.07X_3 + 0.23X_4 + 0.28X_5$ (see Table IV), this equation (R-Square) can be used for reliably forecasting to the learning complishment on auditing course at 92.64%.

Table IV: The Multiple Regression Analysis of the Related Factors Impacting on the Achievement of Their Learning on the Auditing Course for the Auditing of Business Economic Transactions

Variables	F	R Square	Standardized Coefficients Beta	Unstandardized Coefficients		C:-
used for Examining				В	Standard Error	. Sig.
	42.29	0.9264				
(Constant)				13.76	0.326	0.000
Student's Competencies (X ₁)			0.301	0.32	0.221	0.000*
IT Equipments (X_2)			0.145	0.10	0.426	0.023*
Classroom Environments (X ₃)			0.023	0.07	0.518	0.038*
Pedagogical Methods (X ₄)			0.176	0.23	0.392	0.000*
Practical Training on Auditing Cases (X ₅)			0.242	0.28	0.342	0.000*

^{* =} The Level of Significance 0.05

Conclusion and Discussion

This research was to ascertain factors impacting the achievement of student's learning on auditing course for auditing on business economic transactions and cycles. As 102 accounting students responded back from 114 questionnaires sent. 15 respondents independently volunteered to be interviewed. The achievement of accounting student's learning on auditing course for auditing on business transactions and cycles was depended on the related factors as aforementioned. Firstly, the auditing procedures were the much difficulty levels of the auditing course contents in particular the contents of audit techniques, test of control, audit working paper, and audit reports. These contents left to the decrease of accounting student's competencies, especially the much lacks of competencies in terms of experiences of auditing, the abilities of practical skills, the effective use of auditing procedures, and problem solving decision. Finally, student's competencies, practical training on auditing cases, pedagogical methods, IT equipments, and classroom environments have exactly influenced and positively had direct relationships to the achievement of student's learning on auditing course for auditing on business economic transactions and cycles at significance level of 0.01. This situation should be considered both student's learning competencies including practical training for auditing on business economic transactions and cycles and pedagogical methods of those instructors have certainly needed to be forever improved to support more effective learning processes continually.

As the accounting student's learning on auditing course for leading to the achievement for auditing on business economic transactions and cycles was impacted from the related factors comprising of the difficulty of auditing course contents, the insufficiency of accounting student's competencies, the mismatch between pedagogical methods and learning on auditing courses, inappropriate classroom environments including old-fashioned IT equipments, and less practical training on auditing cases. All of the related factors have always concerned with the competencies of student's learning including their practical training on auditing case studies, instructor's pedagogical methods and classroom environments which needed to be appropriately matched and improved for having the effectiveness of student's learning processes (Grenier, Pomeroy & Stem, 2015; Plumlee, Rixom & Rosman, 2015; Van Peursem et al., 2015; Carter & Hogan, 2013; LaShaw, Sago & Lambert, 2013; Wang et al., 2013; Kuruppu, 2012). As the theory of constructivism has been able to be used for explaining and developing student's learning processes in order to obtain the more increases of skills, knowledge and experiences through learning and doing together by themselves. Therefore, the pedagogical methods have mostly been used for learning together between instructors and students through the mixed pedagogical methods namely integrated teaching, ask and question model, the use of community activities, project-based method, case-based method, problem-based method, committee work method and discussion group for schooling on auditing course (Westermann, Earley & Bedard, 2015; Su et al., 2013; Uachanachit, 2004; Schwartz, Spires & Young, 2002). For classroom environments including IT equipments should be supported to consistently improve and up-to-date by the related parties which could generate the student's interesting for more effective learning process (Plumlee, Rixom & Rosman, 2015; Carter & Hogan, 2013; Kuruppu, 2012) as well.

Recommendations

This study discovered the crucial factors aforementioned in order to achieve the learning process between accounting students and instructors for auditing course and then lead to the further implementation in the real audit working correctly and appropriately for auditing on business economic transactions. In order to accomplish those same goals, all of related factors have always needed to be cooperated among students, instructors and related parties such as management team of those universities and so on. Nevertheless, the results of this study might be applied to implement on general and specific courses in particular concerning with the other professional careers while those might differ for factors influencing on the different characteristic of those courses. Therefore, this situation need to additionally study on further associated research.

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