The Implementation Degree Effect of Contextual Learning on Accounting Subjects in Senior High School toward Students' Learning Outcomes in Terms of Students' Learning Approach

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Abstract: This research was aimed to find out: (1) the implementation degree effect of contextual learning on accounting subjects toward students' learning outcomes; 2) the implementation degree effect of contextual learning on accounting subjects toward students' learning outcomes in terms of students' learning approach. This was descriptive-exploratory research. The research was conducted from February to July 2016. The research population were senior high school students of social program of class XII that have studied accounting learning materials in the academic year 2015/2016 in the Special Region of Yogyakarta. The sampling technique was cluster sampling. The sample of this research was 16 schools with the total number of respondents were 954 students. Questionnaire was employed as the data collection technique. The data analysis technique was based on regression by Chow's test. The results of this study showed that: 1) there is a significant effect of the implementation degree of contextual learning on accounting subjects toward students' learning outcomes; 2) students who applied deep approach learning significantly reinforced the implementation degree of contextual learning on accounting subjects toward their learning outcomes, while the students who applied surface approach learning did not significantly reinforce the implementation degree of contextual learning in accounting subjects toward their learning outcomes.

Keywords: contextual learning, accounting subjects, learning outcome, learning approach

Facts showed that even though there were dynamic developments of business, yet accounting learning had not much changed (Albrech and Sack, 2000; Sangster et al., 2007). The current accounting learning practices in many countries are still conventional (Duff and McKinstry, 2007), passive, (Bonner, 1999; Boyce et al., 2001), narrow procedural (Dempsey and Stegmann, 2001), less in equipping learners with a set of required competences (Mohamed and Lanshine, 2003), and one-way knowledge transferring (William, 1993; Saunders and Christopher, 2003).

Those accounting learning conditions urged accounting experts to propose method reformation in accounting learning, from conventional method to more developing-learners method (Rankin et al., 2003; Harnett et al., 2004). Conventional accounting learning only described the rules and standards that were considered as best practices in real world (Warsono, 2010). Conventional learning practices caused learners were not able to develop their real required competences in accounting practices, such as critical thinking (Saudagaran, 1996; Springer and Borthick, 2004). Due to this state, Bricker and Etter (2008) suggested active learning strategies in accounting learning.

Active learning is a pedagogical approach involving learners in the process of acquiring knowledge (Brickner and Etter, 2008). Learners' active learning involvement will contribute to their: interests in learning materials, increments of intrinsic motivation, increments of

understanding as an effect of learners' refusal decrement toward learning materials, lifelong desires and competences development, communication improvement, better intrapersonal relationships, problem solving, critical analysis, and high-level thinking abilities. Active was learning method development also encourages learners to be more motivated to develop their deeper and broader knowledge (Warsono, 2010).

Ideas of active learning was in line with Warsono's research findings (2010) on allegedly factors of accounting learning problems at schools, such as: 1) quite wide variation in teachers' accounting knowledge; 2) learning methods that still need to have reliability and validity test; 3) lack of teachers' perception of students' abilities; and 4) students' perception of important accounting meaning which is more than a mere recording. These ideas were also in line with Suwardjono (2003) views on accounting learners' lack understanding on the first introductory stage that was caused by: firstly, accounting learning process in classroom tended to discuss "how" and be less emphasis on aspect "why"; secondly, accounting was often narrowly delineated as mere documentation process instead of information manipulation process in order to solve real problems in particular environment and to achieve certain goals.

To conduct effectively active learning, it is definitely related to teachers' function in conducting learning activities. Many teachers recently tend to choose easier ways to organize learning in classroom instead of improving effectiveness of learning process which involves students as learners. Generally, teachers' reluctance to change and their lack of willingness to try new learning technique have often been causes of inactive, less innovative, ineffective, and less fun learning process for students. Therefore, Anies Baswedan, ex Minister of Education and Culture, Republic of Indonesia, really expected teachers to apply relevant-to-life learning so that there was pleasant learning environment in order to improve students' imagination abilities to creatively think. (http://lipsus.kompas.com/kemdikbud/read/ 2015/04/08/07300021/Mendikbud.Guru.Jangan.Tertutup.saat.Memberi.Pelajaran.). In other words, accounting learning at schools is contextually planned and implemented, and designed in fun ways.

Contextual teaching and learning – CTL is a teaching and learning concept that helps teachers to correlate subject's contents to real-world situations and to motivate students to make connections of knowledge and its implementations for their lives as a member of family, a citizen, and a worker (Blanchard, 2001; Berns and Erickson, 2001). In order to organize proper contextual learning, teachers are required to be able to design the learning by connecting several forms of learning experiences for constructing expected outcomes (Hull's dan Sounders, 1996). In Indonesia, such learning became one of conceptual foundations to implement Curriculum 2013 (Mulyasa, 2013).

Theories and themes of CTL, such as knowledge-based constructivism, are linked with learning goals, student learning (Berns and Erickson, 2001) and student achievement (Berns and Erickson, 2001; Lynch, 2000). Lots of research conducted in Indonesia gave empiric proofs of it. Nonetheless, some research showed that one of factors that have yet been considered by researchers is students' learning approach paradigm. Learning approach paradigm is a framework to understand how students learn (Ramburuth and Mladenovic, 2004: Tight, 2003) and why a student learns better than other students (Marton and Booth, 1997). This approach is very important to understand learning from students' perspective (Biggs, 2003; Marton and Booth, 1997; Prosser and Trigwell, 1999; Ramsden, 2003; Richardson, 2000). According to Biggs (2001), students' learning approach consists of surface, deep, and achieving approach.

Students' learning approach is an integral part in education system model of Presage-Process-Product (3P) (Biggs, 1987; 1993). In education system model, factors of students, teaching contexts, approach of learning tasks, and learning outcomes are all interacting and forming a dynamic system. Interactions of presage factors, such as teachers' teaching contexts

and students' learning approach will eventually determine learning outcomes (Biggs et al., 2001).

The research was aimed to find out the implementation degree effect of contextual learning on accounting subject toward learning outcomes in terms of students' learning approach. The research was survey on class XII senior high school students of social program who had got accounting learning in academic year 2015/2016 in Special Region of Yogyakarta Province.

LITERATURE REVIEW

Contextual Teaching and Learning

Contextual Teaching and Learning – CTL is an educational process in which students discover meaningful relationship between abstract ideas and practical implementation in real world and internalize the concepts by discoveries, reinforcements and connections (Hull's and Sounders, 1996). CTL aims to facilitate students seek meanings on their academic materials by correlating academic subjects with their daily-life contexts, namely individual, social, and cultural life (Johnson, 2002).

According to Johnson (2002), there are eight main components of contextual learning: (1) making meaningful connections; (2) doing meaningful works; (3) creating self-managed learning; (4) teamwork; (5) thinking critically and creatively; (6) helping individuals to grow and develop. Students maintain to know, care, give high hopes, motivate, and reinforce themselves to grow and develop; (7) achieving high standards; and (8) applying authentic appraisal.

Contextual learning will help teacher to link between materials being taught and students' real-world situations and to encourage students to also make connections between their knowledge and its implementation in real life as a family member, a citizen, and a worker (Blanchard, 2001; Berns and Erickson, 2001). Therefore, contextual learning requires teachers to be able to design the learning by connecting several forms of learning experiences for constructing expected outcomes (Hull's & Sounders, 1996). Teachers have to apply more learning strategies to assist students achieve the goals instead of only giving them information. Besides, teachers are supposed to be able to manage the class a team so that students will work hand-in-hand to discover new knowledge and skills instead of only accepting what teachers said.

Learning Approach

At first, students' learning approach was the most cited study in psychology (Marton and Saljo, 1976; Walberg & Haertel, 1992). Yet practically, the implementation of this approach extended into the fields of teaching and learning in higher education as well as being influential concepts for those two fields (Ramsden, 2003). Students' perception of their learning tasks was influenced by learning contexts (teaching, curriculum, and learning) and personal factors, such as learning orientations and experiences prior to education. Then, students' perception will determine suitable learning approach. Dynamic and fickle learning approach was depending on how students comprehend their learning tasks (Lucas dan Mladenovic, 2004; Ramsden, 1987).

Biggs et al. (2001) pictured out teaching and learning models as a system including: presage, process, and product (Figure 1). Presage takes factors that encourage students' involvement in learning process. These factors are knowledge, skills, and students' preferred

learning approach. Meanwhile, teaching contexts include the nature of contents being taught, teaching and assessing methods, teaching environment, and institutional procedures. They are interacting and determining students' learning approach which results to also determine students' learning outcomes. For instance, a student who prefers a certain learning approach will adjust its teaching contexts, materials being taught and expected learning achievements (Biggs et al., 2001).

In the 1970s, research of learning approach was design qualitatively by using interview method at University of Gothenburg in Sweden (Byrne et al, 2009). At that time, the research was aimed to investigate how students did their task, i.e. reading an academic article and being assessed based on their understanding of its article contents. (Marton, 1975; Marton and Saljo, 1976). From that research, it was identified that there was difference of students' understanding after implementing two different approaches in learning: firstly, students showed high understanding or commonly known as deep approach and secondly, students showed lower understanding or commonly known as surface approach. In the next research, Ramsden (1979) added one more learning approach adopted by his students, strategic approach. Biggs (1987) mentioned the term of strategic approach as achieving approach. In its development, all three deep, surface, and strategic approaches had been confirmed by studies in various disciplines as well as in different countries (Byrne et al., 2009).

A deep approach to learning is marked by individuals' commitment to learn and be interested in subjects being learned. Students who adopted this approach have characteristics of doing learning activities by comprehending the materials; playing interactions of proposed arguments, connecting knowledge with experiences, and evaluating to what degree conclusions are considered right based on presented proofs (Biggs, 2003; Prosser and Trigwell, 1999; Ramsden, 2003). Deep learning enables better results in terms of retention, transfer, integration, implementation on acquired knowledge, and high learning outcomes (Byrne et al., 2009; Ramsden, 2003; Watkins and Hattie, 1981). Conversely, a surface approach to learning is marked by individual less involvement in the learning process and learning methods that tend to be recitation on certain tasks and materials. This learning approach will direct to misunderstanding toward important concepts and bad learning outcomes (Booth, et al., 1999; Ramsden, 2003; Watkins and Hattie, 1981).

Meanwhile, students who adopted strategic approach to learning generally focus on high learning achievements. In other words, strategic approach showed the way students manage temporal and special contexts of their tasks (Biggs, 1987). Students' interest in learning content is supported by assessment requirements and they think the ways to achieve it. Students are competing and motivated to gather information on how assessment is done by their teachers (Duff, 2004). Strategic learning strategy, therefore, will maximize students' opportunity to succeed academically (Entwistle and Ramsden, 1983; Watkins, 2000). This description reflected that students' learning approach is very sensitive toward contexts of where learning process takes place. However, on the other side it gives educators opportunity to improve students' learning quality (Prosser dan Trigwell, 1999).

Biggs et al. (2001) developed students' learning model as involvement motive in learning tasks and strategies in order to realize their intentions and motives of learning (Biggs, 1987). Study process questionnaire – SPQ was used as measurement instrument. For that instrument, Biggs et al. (2001) revised two factors of learning approach, namely deep approach and surface approach which later is called R-SPQ-2F. The revision specifically was aimed to provide more suitable instrument for teacher to evaluate students learning approach and simplify the existing evaluation instrument. Based on research findings, Biggs et al (2001) showed that revised instrument's reliability can be seen by its Cronbach's alpha value that can be accepted and

confirmatory factor of analysis result indicates a relatively good fit of two designated factors. Either deep or surface approach is well-identified for sub-scales of motive and strategy.

Students' Learning Outcomes

Learning outcomes are assessment results of learning process and results. Learning outcomes can be identified by students' performance and affective achievements (Biggs 1993; Marton and Booth 1997). In regard to performance achievements, Ramsden (2003) described three main objectives of education: to teach students to analyze ideas or issues critically, to develop students' intellectual or thinking skills, and to teach students to comprehend principles or generalizations. According to Ramsden (2003), content assessment refers to what students are learning and curriculum. Performance achievement can be measured objectively and subjectively. Meanwhile, affective learning outcome is defined as feelings to be involved, values, motives, and intellectual development (O'Neil & Child, 1984). This measurement is definitely subjective and reflective, even though factors of satisfaction, enthusiasm, anxiety reduction, and qualitative measurement can be relatively revealed. Generally, the challenge of such measurement is students' perceptions; what considered "perfect" by one student can be considered differently by other students.

Theoretical Framework

Conceptual learning, as conceptual foundation of Curriculum 2013, is aimed to assist teachers to link between materials being taught and students' real-world situation and encourage them to make connection between their own knowledge and its implementation in their lives as a family member, a citizen, and a worker (Blanchard, 2001; Berns and Erickson, 2001). In contextual learning, teachers are supposed to be able to design learning environment by combining several forms of experiences in order to achieve the expected outcomes (Hull's & Sounders, 1996). Contextual learning, therefore, will assist students to seek meaning of academic material being taught and daily-life contexts including individual, social, and cultural life contexts (Johnson, 2002). Students can also use high-level thinking critically and creatively to analyze, create synthesis, solve problems, make decisions, and employ existing proofs and logic.

The implementation of contextual learning degree allegedly determines students' degree of achievement. Therefore, the degree of achievements will be different from one student to another due to variation degree of their learning involvement (Ramburuth and Mladenovic, 2004; Tight, 2003). Each student has their own characteristics which affect their approach to learning. Biggs (1987) classified students' learning approaches, namely surface, deep, and achieving approach. Yet Biggs et al. (2001) had revised those three approaches into two approaches: deep and surface approaches. These two approaches are seen to be able to identify motive subscale and students' learning strategies. The revision was expected to be able to provide suitable instruments for teachers to evaluate students' learning approaches and simplify existing evaluation instruments.

Abraham's finding (2006) showed that there was significant correlation between deep approach to learning and learning outcomes. However, the correlation between surface approach to learning and learning outcomes was negative. This finding was consistent to Watkins' (2000) and Entwistle and Ramsden's (1983) findings showing that students adopted deep approach to acquire better outcomes, yet students who adopted surface approach got lesser. Nevertheless, those findings are different from Watkins and Hattie (1981)'s findings that figured low correlation between deep approach and learning outcomes. It was assumed due to

students' own learning strategies and was perceived as correct strategies to meet assessment requirements. This encourages educators to examine the conformity between assessment strategies and learning objectives. Based on explanation above, this study formulated below hypotheses:

Ha_1 : There are some effects of contextual learning implementation on Accounting subject at Senior High School toward students' learning outcomes in terms of students' learning approach.

Ha_2 : There are some different effects of contextual learning implementation on Accounting subject at Senior High School toward students' learning outcomes in terms of students' learning approach. The degree effect of contextual learning implementation on accounting subject toward learning outcomes with deep approach is higher than using surface approach.

RESEARCH METHODS

Research Design

It was descriptive-exploratory research and designed using quantitative approach. Researcher intended to describe the factors that dealt with students' learning outcomes: the implementation degree of contextual learning on accounting subject in Senior High School and students' learning approach. The research was conducted on February to July 2016 in several Senior High Schools that had applied Curriculum 2013 for accounting subject in Special Province of Yogyakarta.

Population and Research Sampling

The research populations were senior high school students class XII of social program who had studied accounting learning materials in the academic year 2015/2016 based on Curriculum 2013 in the Special Region of Yogyakarta. Sampling technique was cluster sampling that was done by dividing population into some groups or clusters. Some clusters then were randomly chosen (Hartono, 2013). There were 16 schools with 954 students.

Research Variables and Its Measurement

Learning outcomes in this research referred to performance achievement in terms of students' affective performance to complete their learning process. In this study, learning outcome was based on an instrument developed by DeRoche's (2004). It consisted of 20 questions. For each question, there were 5 options in the form of Likert's scale. The implementation degree of contextual learning was emphasized on how often learning materials were correlated with students' real life in accounting learning implementation at senior high schools. The dimensions of contextual learning included the concepts of: relating, experiencing, applying, cooperating, self-regulating, and authentic assessing, and reaching high standard (Johnson, 2002; Sounders, 1999; ATEEC Fellows, 2000; Dikdasmen, 2003; Komalasari, 2011). Those seven dimensions in this research were developed into 33 indicators. Each indicator represented one question which consisted of 5 options in Likert's scale. Students' learning approach is a framework to comprehend how students learned and why one student to another student was different. The measurement of learning approach variable in this research referred to *The Revised Two Factor Study Process Questionnaire: R-SPQ-2F* which was developed by

Biggs et al (2001). This instrument had 20 questions of students' learning motives and students' common ways in learning. Each question had 5 options in Likert's scale.

Validity test result for variables of contextual learning implementation degree on accounting subjects, learning outcome, and students' learning approach showed that the values of *Corrected Item-Total Correlation* for each question was above 0.334 (theoretic r value on n = 35 and significance level 5%. Hence, it could be concluded that all questions for those three variables were valid. Meanwhile, reliability test result showed that Cronbach Alpha value for the contextual learning implementation degree on accounting subjects = 0.896, learning outcome = 0.899, and students' learning approach = 0.758. Therefore, it could be concluded that the instruments for those three variables were reliable (Nunnaly, 1978 quoted in Gozhali, 2001).

Data Gathering Technique

Data gathering technique used in this study was survey/self-administered survey for variables of contextual learning implementation degree on accounting subjects, learning outcome, and students' learning approach. Survey is primary data gathering method by giving questions to respondents (Hartono, 2013). Survey was conducted by giving written questionnaires directly to students who were research's respondents.

Data Analysis Technique

Descriptive statistic was used to describe the research data gathered from survey (questionnaires). The description of this research data was done based on Benchmark Reference Guideline *(Pedoman Acuan Patokan – PAP)* type II and complemented with the calculation of central tendency. Normality testing of data distribution was done using *One-Sample Kolmogorov-Smirnov Test* before hypotheses testing. Hypotheses is testing was done based on regression formulation by Chow (Gujarati, 1995), as follows:

$$Y_1 = \alpha_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 (X_1 X_2) + u_1$$

Note:
Y = learning outcome variable; α_o = constant; X_1 = contextual learning implementation degree on accounting subjects in senior high schools variable; X_2 = students' learning approach; $X_1 X_2$ = interaction value between contextual learning implementation degree on accounting subjects in senior high schools variable and students' learning approach variable; $\beta_1/\beta_2/\beta_3$ = regression coefficient; u_1 = confounding regression.

To test significance level of regression coefficient from variables interaction $X_1 X_2$ toward Y_1, comparing significance value of regression coefficient (β_3) and significance level (α) 0.05 was done. Research hypotheses would be accepted if significance value of regression coefficient (β_3) was lower than significance level (α) = 0.05.

RESEARCH FINDINGS AND DISCUSSIONS

Research Findings

Research respondents consisted of 954 students: 323 of them (33.86%) were male students and 631 of them (66.14%) were female students; 900 of them (94.34%) were from public schools and 54 of them (5.66%) were from private schools. Yet, by considering respondents' school areas: 224 respondents (23.48%) were from Bantul Regency; 213

respondents (22.33%) were from Sleman Regency; 156 respondents (16.35%) were from Kulonprogo Regency; 163 respondents (17.09%) were from Yogyakarta City; and 198 respondents (20.75%) were from Gunungkidul Regency. Learning outcome was generally categorized as Good (average of 77.19 from a range of theoretical interval 20-100). Students' learning approach was generally categorized as Fair (average of 64.80 from a range of theoretical interval 20-100). Meanwhile, contextual learning implementation degree was generally categorized as Good (average of 122.98 from a range of theoretical interval 33-165).

Before hypotheses testing, researcher tested normality of data distribution for variables of contextual learning implementation degree on accounting learning, learning approach and learning outcome. Normality testing based on *One-Sample Kolmogorov-Smirnov Test* showed that the value of *Asymp. Sig. (2-tailed)* = 0.207 (see Table 1). The value was bigger than α value = 0.05. It meant that normality of data distribution for those three variables was normal.

Table 1. Normality testing of data distribution

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		954
Normal Parameters[a,,b]	Mean	.0000000
	Std. Deviation	7.82766622
Most Extreme Differences	Absolute	.034
	Positive	.034
	Negative	-.027
Kolmogorov-Smirnov Z		1.065
Asymp. Sig. (2-tailed)		.207

a. Test distribution is Normal.
b. Calculated from data.

First testing result showed that there were some effects of contextual learning implementation degree on accounting subject toward students' learning outcomes seen by the value of *Adjusted R Square* (R^2) was 0.281 (see Table 2). It meant that variation 28.1% of learning outcome variable was explained by contextual learning implementation degree on accounting subject variable. The rest of it, 71.9%, was explained by other variables than contextual learning implementation degree on accounting subject variable. Anova (*F test*) result showed that its value was 224.815 with *sig.* value = 0.000. Noting that the significance value was smaller than α value = 0.05, then regression model could be used to predict learning outcome. Contextual learning implementation degree on accounting subject variable had parameter coefficient value 0.461 with *sig.* value = 0,000 or smaller than α value = 0.05. Therefore, it was concluded that there was significant effect of contextual learning implementation degree on accounting subject toward students' learning outcome.

Table 2. Testing result on the effect of contextual learning implementation degree on accounting subject toward students' learning outcome

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,537[a]	,288	,281	8,095

a. Predictors: (Constant), Contextual learning

b. Dependent Variable: Learning outcome

ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14732,526	1	14732,526	224,815	,000[b]
	Residual	62386,262	952	65,532		
	Total	77118,788	953			

a. Dependent Variable: Learning outcome
b. Predictors: (Constant), Contextual learning

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	45,079	2,157		20,895	,000
	Contextual_learning	,461	,017	,437	14,994	,000

a. Dependent Variable: Learning outcome

First testing result of the second hypothesis: the effect of contextual learning implementation degree on accounting subject toward students' learning outcome with students' deep approach moderating variable showed that the value of *Adjusted R Square* (R^2) was 0.510 (see Table 3). It meant that variation 51% of learning outcome variable was explained by contextual learning implementation degree on accounting subject variable and deep approach variable. The rest of it, 49%, was explained by other variables than contextual learning implementation degree on accounting subject variable, deep approach variable as well as the interaction of both variables.

Table 3. Testing result on the effect of contextual learning implementation degree on accounting subject toward students' learning outcome with students' deep approach moderating variable

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,715[a]	,511	,510	7,72207

a. Predictors: (Constant), X1.X2, Contextual learning, Deep approach

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20469,928	3	6823,309	104,427	,000[b]
	Residual	56648,860	950	59,630		
	Total	77118,788	953			

a. Dependent Variable: Learning outcome
b. Predictors: (Constant), X1.X2, Contextual learning, Deep approach

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	55,644	13,495		4,123	,000

	Contextual_learning	,313	,112	,322	3,117	,023
	Deep_approach	,327	,399	,313	4,068	,006
	X1.X2	,305	,003	,302	3,586	,033

a. Dependent Variable: Learning_outcome

Anova (*F test*) result showed that its value was 104.427 with *sig.*value = 0.000. Noting that the significance value was smaller than α value = 0.05, then regression model could be used to predict learning outcome variable or it can be said that contextual learning implementation degree on accounting subject variable, students' deep approach variable, and interaction of both variables simultaneously influenced learning outcome variable. Interaction of contextual learning implementation degree on accounting subject variable and students' deep approach variable was 0.305 with *sig.*value = 0.033 or smaller than α value = 0.05. Therefore, the variable interaction of contextual learning implementation degree on accounting subject variable and students' deep approach variable was significant. It could be concluded that students' deep approach variable was moderating variable. Students' deep approach variable strengthened the effect of contextual learning implementation degree on accounting subject toward learning outcome.

Second testing result of the second hypothesis: the effect of contextual learning implementation degree on accounting subject toward students' learning outcome with students' surface approach moderating variable showed that the value of *Adjusted R Square* (R^2) was 0.286 (see Table 4). It meant that variation 28.6% of learning outcome variable was explained by contextual learning implementation degree on accounting subject variable and surface approach variable. The rest of it, 71.4%, was explained by other variables than contextual learning implementation degree on accounting subject variable, surface approach variable as well as the interaction of both variables.

Table 4. Testing result on the effect of contextual learning implementation degree on accounting subject toward students' learning outcome with students' surface approach moderating variable

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,538[a]	,289	,286	8,10055

a. Predictors: (Constant), X1.X2, Contextual learning, Surface approach

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	14780,749	3	4926,916	75,084	,000[b]
	Residual	62338,039	950	65,619		
	Total	77118,788	953			

a. Dependent Variable: Learning outcome

b. Predictors: (Constant), X1.X2, Contextual learning, Surface approach

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	45,682	14,732		3,101	,002
	Contextual_learning	,244	,118	,409	2,078	,038

Surface_approach	-,011	,498	-,006	-,023	,982
x1x2	,000	,004	,042	,122	,903

a. Dependent Variable: Learning outcome

Anova (*F test*) result showed that its value was 75.084 with *sig.*value = 0.000. Noting that the significance value was smaller than α value = 0.05, then regression model could be used to predict learning outcome variable or it can be said that contextual learning implementation degree on accounting subject variable, students' surface approach variable, and interaction of both variables simultaneously influenced learning outcome variable. Interaction of contextual learning implementation degree on accounting subject variable and students' surface approach variable was 0.000 with *sig.*value = 0.093 or smaller than α value = 0.05. Therefore, the variable interaction of contextual learning implementation degree on accounting subject variable and students' surface approach variable was not significant. It could be concluded that students' surface approach variable was not moderating variable. Students' surface approach variable did not strengthen the effect of contextual learning implementation degree on accounting subject toward learning outcome.

DISCUSSIONS

Testing result of the first hypothesis showed that there was significant effect of contextual learning implementation degree on accounting subject toward students' learning outcome (*sig*. value = 0,000 < α = 0,05). The value of *Adjusted R Square* (R^2) was 0.281 which meant variation 28.1% of learning outcome variable was explained by contextual learning implementation degree on accounting subject variable. The rest of it, 71.9%, was explained by other variables than contextual learning implementation degree on accounting subject variable. The implementation degree of contextual learning on accounting subject at academic year 2015/2016 and learning outcome as found in this research was categorized as Good. Good implementation degree of contextual learning indicated that teachers made efforts to correlate learning materials with students' real life in accounting learning process at senior high schools. In this context, teachers were sought contextual learning in accounting learning by paying more attention to concepts of relating, experiencing, applying, cooperating, self-regulating, authentic assessment, and reaching high standard (Johnson, 2002; Sounders, 1999; ATEEC Fellows, 2000; Dikdasmen, 2003; Komalasari, 2011). That learning conditions would eventually have good effect on students' learning outcome. This finding was in line with Ramburuth and Mladenovic's view (2004) and Tight's (2003) who stated that learning outcome was relied on students' involvement in learning.

Contextual learning was meant to assist teacher in correlating the taught materials with students' real life and to encourage students to create correlation between their own knowledge with its implementations in real life as a family member, a citizen, and a worker (Blanchard, 2001; Berns and Erickson, 2001). Therefore, contextual learning urged teachers to be able to design a learning environment as a combination of some experiential forms in order to achieve the expected result (Hull's and Sounders, 1996). Contextual learning helped students to make meaning of academic materials given by connecting academic subject to daily life contexts, such as individual contexts, social and cultural contexts (Johnson, 2002). Students could engage higher way of thinking critically and creatively to analyze, create synthesis, solve problems, make decisions, and make use of existing proofs and logic.

Testing result of the second hypothesis (first and second for the second hypothesis) showed that there was different effect of contextual learning implementation degree on accounting subject toward students' learning outcome in terms of students' learning approach. Deep approach strengthened contextual learning implementation degree on accounting subject

toward students' learning outcome. It was seen by the value of *Adjusted R Square* (R^2) that was previously 0.281 to be 0.510 with the coefficient interaction value of contextual learning implementation degree on accounting subject toward students' learning outcome with deep approach was 0.305 and *sig.* value = 0.033. On the other hand, surface approach did not support the degree effect of contextual learning implementation degree on accounting subject toward students' learning outcome. It was seen by its coefficient interaction value of contextual learning implementation degree on accounting subject toward students' learning outcome with surface approach was 0.000 and *sig.* value = 0.903.

A deep approach to learning was signified by individual commitment to study and individual interest in subject studied. Students who adopted this approach would be characterized by doing learning activities, comprehending materials, interacting critically with the proposed arguments, connecting knowledge with experiences, and evaluating to what extent conclusions was seen correct based on proofs (Biggs, 2003; Prosser and Trigwell, 1999; Ramsden, 2003). Deep approach enabled better results in terms of retention, transfer, integration, implementation of received knowledge, and high-quality learning outcome (Byrne et al., 2009; Ramsden, 2003; Watkins and Hattie, 1981). Deep approach, therefore, improved students' learning outcomes. Meanwhile, students who adopted surface approach got worse scores. Based on this research finding, teachers are supposed to see the conformity between assessment strategies and learning objectives

The research results were in line with Abraham's findings (2006) revealing that there was significant relationship between deep learning approaches and learning outcome. Yet, in reverse, surface learning approach had negative correlation. The research results were also consistent to Entwistle and Ramsden's findings (1983) and Watkins' (2000) revealing that surface approach had significant negative correlation with academic achievements. However, this research result was different from Watkins and Hattie's findings (1981) that showed no significant correlation between deep approach and learning outcome since students had their own learning strategies that were perceived as appropriate strategies to meet assessment requirements.

CONCLUSIONS

The research results showed that there was significant effect of contextual learning implementation degree on accounting subject toward students' learning outcome and there was different effect of contextual learning implementation degree on accounting subject toward students' learning outcome in terms of students' learning approach. In line with these research results, it is suggested: 1) teachers need to continuously practice and improve contextual learning implementation on accounting subject since it can improve students' learning outcome. To be true, schools need to facilitate teachers by giving trainings, workshops, etc. so that teachers are able to implement better contextual learning on the subject taught; 2) teachers need to encourage students to implement deep approach on their own learning. In teaching and learning process, teachers need to continuously grow students' individual commitment to learn and grow interest in taught subjects, to critically interact with the proposed arguments, to relate knowledge with experiences, and to evaluate to what extent the conclusions are seen correct based on proofs. Therefore, teachers are supposed to always see the conformity between assessment strategies and learning objectives. By doing so, learning is expected to be more meaningful for students in order to develop and improve their knowledge, attitudes, and behavior.

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