

## The Impact of Integrating Active Learning in the Accounting Course on Motivation, Engagement, and Personal Relevance to Non-Accounting Students

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**Abstract** - Accounting for non-accounting students is vital in developing future decision-makers. However, the student's perception of learning accounting and the educator's structure of teaching accounting is found to be crucial in the motivation and learning engagement of the students. The study raises three critical issues: First, Motivation has influenced the perception of the relevance of the subject in meeting the needs of the students. Secondly, Engagement of students to learning accounting is affected by the approaches to learning that motivate students. Thirdly, learning accounting may influence the expectation of value in the student's personal and social identity. Thus, this paper critically analyzes the effect of Integrating Active Learning in the Accounting course on the motivation, engagement and personal relevance of non-accounting students. One hundred thirty-nine Business Economics students participated in the study. The examination explored on Sequential-Explanatory Mixed Method Design. Quantitative findings are generated by Partial Least Square (PLS-SEM). A text analysis validated the result of the quantitative findings. The findings of the study indicate that integrating Active Learning in Accounting course directs motivation and personal relevance to learning engagement. However, validation of the significant statements of the students suggests a significant positive effect of Active Learning on Behavioral and Cognitive Engagement but negatively affect the Emotional Engagement of the student. There are two notable contributions of the study: One is to initiate innovative teaching strategies to increase the relevance of accounting to non-accounting students, and two, future researchers may replicate the method used.

**Keywords** - accounting education, active learning, learning engagement, motivation, personal relevance

### I. INTRODUCTION

There seems to be advocacy to empower well-rounded students by developing knowledge that will converge students to the challenges of the real world. The study shows that students who entered the workplace do not have sufficient understanding of the accounting procedures and financial structures of the company (Kutluk, 2012). The higher education system is developing curriculum to embrace changes to produce competitive students (Red'ko, L.; Yuzhakova & Yanushevskaya, M., 2015; Leal-Rodriguez, A.; Albert-Moran, G., 2018). It has been noted by AECC (1982) that, business students are future decision makers. Thus, the knowledge and understanding of accounting may contribute to a sound and prudent judgments. Accounting subjects for the non-accounting program are added to the curriculum to enhance student's learning experience of the content and application of accounting knowledge. One of the issues that were raised by the students is the academic learning, specifically, lecture and discussion, and assessment. These factors of teaching accounting demotivate the student from engaging in accounting. Duff and Mladenovic, (2015), observe the same saying that these are among the things educators have overlooked in teaching accounting. The authors find that focusing on giving information, traditional assessment of multiple choices and problems solving provides an in-depth understanding of the subject. The process of teaching accounting to non-accounting students is where

mismatched of perception in teaching and learning takes place as noted by Hassall and Joyce (2011). The need for a reformed learning approach has been stated already by previous researchers (Beattie, Collins, and McInnes, 1997, as cited by Duff 2015). Scholars have suggested the leveling up from the traditional learning into a well-rounded learning experience beyond the teacher-student environment. Previous literature claimed that the conventional learning strategy had not increased the motivation and learning engagement of students over time (Rovers, Clarebout, Savelberg, & Merrienboer, 2018; Duff, 2015; Jackling, 2005). The challenge between institution's objectives and student's objective led to engagement and disengagement of students. According to Dellaportas & Hassall, (2012), the effectivity of learning accounting is compromised with the "content-based" approaches that withdraw students from exposing to the actual business environment. In business school, accounting subjects continue to use content-based approach. Previous literature has noted that the traditional accounting approach is mechanical (Dellaportas & Hassall, 2012). According to the author, teaching accounting is based on rules and regulations. Problem-solving and computations equipped students with analytical skills. Several authors noted that the full concentration of accounting practice had disconnected them from understanding what is happening in the business environment (cited by Dellaportas & Hassall

2012 from Adler et al., 2004; Blundell & Booth, 1988; Kelly, Davey, & Haigh, 1999; Williams, 1993). However, development in the literature shows an effective transition from the traditional teaching method to active learning. Kolesnikova, (2016) noted that combining traditional teaching and active learning has become helpful in the learning process of the students. The body of literature provides a bulk study on the motivation and engagement factors of the student, despite these, there is not much investigation conducted on the effect of integrating active learning in the course on the motivation and engagement of non-accounting students. The study is an attempt to predict the impact of broadening learning strategies in teaching accounting to non-accounting students. This study critically attempts to analyze the differing perspective of the non-accounting students on the impact of Active Learning on their motivation and learning engagement and how it persuades student's relevance of the subject. The study conducted two statistical procedures: firstly, the quantitative approach where the descriptive and inferential analysis was explored using SPSS and WarpPLS, secondly, is the qualitative approach where text analysis validated the result of the quantitative findings. The study contributes to the literature in three ways: first, by clarifying the effect of the integration of active learning in teaching accounting to non-accounting students. Second, the paper introduced a learning strategy that will enhance engagement of non-accounting students to learning accounting. Moreover, thirdly, the mixed method research design may be new in an educational research study and may initiate replication for future research. The study may challenge institutions and educators to develop strategies that will enhance engagement and long-term learning of the students.

#### Review of Related Literature

**Integrating Active Learning to Traditional Learning.** The study on integrating Active Learning and Traditional Learning was drawn from the experiment of Kolesnikova, (2016) together with other scholars, who exhibited a study that shows the effectiveness of learning when the conventional teaching is combined with active learning (Charlton, 2006; Yoder & Hocevar, 2005; Hunt, Haidet, Coverdale, & Richards, 2003; De Caprariis, Barman, & Magee 2001; Perkins and Saris, 2001; Morgan et al., 2000). These scholars have signified the importance of active learning such as experience and collaboration being blended with the traditional lectures and assessments. Active learning is described as the utilization of different learning approaches to enhance students' active participation that may result to an increased motivation, improved attitude and student achievement (Astin, 1997; Fayombo, 2012). The authors further explain that the use of active learning expands students to a more learning opportunities. With the active learning, the students are no longer contained in the traditional classroom activities. Some scholars claim that the effectivity of education is when basic knowledge is associated with experiences and associations where

accounting theories can be applied. Manwaringa et al., (2017) noted that the objective of integrating active learning is to enhance the engagement of the students. Learning accounting should not be contained in problem-solving and analytical thinking, but it should also equip students with communication skills to expand learning into self-expression (Saravanamuthu, 2015). The Active learning in this study is the integration of three different approaches to the learning process, namely: academics, peer collaboration and professional accounting practice. The academic learning implements lectures, recitation, problem solving and assessments. Scholars found academic knowledge as the necessary foundation of motivation and engagement. According to Martin, et al., (2017), the learning and memorization strategies acquired in the classroom defines the behavior that leads to the motivation and engagement of the students. The notion implies that when there are active participation and involvement in the school, the energy and the emotions of the students drive them to deeper engagement. Peer collaboration provides mentoring experiences for students themselves. According to Cate (2017) and Hermann-Werner et al (2017), peer teaching or peer collaboration is a process where one student teaches another student. The author explained that it is more of sharing with one another what they have learned. It further adds that the process of peer collaboration helps student share their challenges with someone without reservations. While peer collaboration may be helpful to students who are experiencing difficulties with the lesson, Cate, (2017), noted that it could not replace the traditional process of teacher-students learning approach. Further, Professional accounting application is essential in expanding the knowledge of the students. One of the critical factors of professional practice is to transmit the current knowledge into "future professional context." (Rovers, Clarebout, Savelberg & Merrienboer (2018). The workplace actualized the application process of learning. In effect, according to Kutluk et al., (2012), there seems to be a need to expose students to global issues, technology, and business ethics. The professional application of analyzing the financial statement will provide students with the opportunity to experience how generating financial decisions utilize the financial information.

**Motivation.** The definition of motivation was drawn upon the theory of Self-determination. The Self-Determination Theory (Deci & Ryan, 2012), rationalizes the needs and expectations of the person that defines the intrinsic and extrinsic motivation. Intrinsic motivation, according to scholars, is geared towards underlying satisfaction or the fulfillment of expectations, while, extrinsic motivation is an outward representation of satisfaction, like, achievements, awards or recognition (Martin et al., 2017; Deci & Ryan, 2012). In distinguishing Motivation from Learning Engagement, Martin et al., (2017) explain that motivation is more of an inner drive for something, while, engagement is the manifestation of the motivation that is noticeable. The dimensions of motivation are autonomy, competence, and relatedness. The previous study found that students experienced a high

level of motivation when there is a high level of autonomy and competence. However, motivation declines when the students are denied autonomy and ability to compete (Martin et al., 2017; Martin, 2016; Ryan, & Deci, 2010). The students can pursue or ignore Motivation. The awareness of motivation is the issue raised by scholars which influences disengagement of students. Ben-Eliyahu, Mooreb, Dorph, Schunn (2018) noted that the openness of students to learning, the certainty of academic performance and expectations of support are the aspects of positive motivation. Further, Duff and Mladenovic, (2015) added that learning accounting might increase motivation when students realize the relevance of the subject to their personal and social identity. In contrast, motivation in learning accounting declines when techniques and procedures bombarded students, and they see no certainty in their well-being. Cazan (2015) added that negative emotions are affecting motivation takes place when students are experiencing burn-outs. The study will critically analyze how motivation is influenced by the perception of the relevance of the subject in meeting the needs of the student. In view of this, it can be argued that:

**H1:** The integration of Active Learning in Accounting Course increases the motivation of non-accounting students in learning accounting.

**Learning Engagement.** Motivation and engagement are concomitant with each other. Engagement is the outward manifestation of motivation, while motivation is the drive within, engagement is merely putting the drive into action Martin, Ginns & Papworth (2017). Learning engagement is determined by the behavior, emotion and cognitive aspects that bring students into active participation in the activities. The "effort, attention and persistence" of students characterized the behavioral engagement manifested in their attendance and outward performance in the classroom (Manwaringa et al., 2017; Skinner et al., 2008). Emotional engagement is the "affective reactions" of the students that lead him into behavioral engagement, and cognitive engagement is the student's determination at doing something (Manwaringa et al., 2017; Blumenfeld et al., 2004). How the students feel and think of the subject manifests in the behavioral and emotional engagement (Martin, Ginns & Papworth, 2017; Cleary & Zimmerman, 2012). The authors emphasized that the involvement of the student is influenced by how he feels about doing it that out of that feeling manifests his determination, performance, and participation in the classroom. However, there is this notion that engagement and disengagement of the students may occur at the same time. Earlier reports show that learning engagement is heightened when a student agreed to new ideas and opportunities to expand learning (Ben-Eliyahu et al., 2018). However, students reject to engage when there are confusion and misapprehension of the subject (Ben-Eliyahu, Mooreb, Dorph & schunn, 2018; Ben-Eliyahu & Linnenbrink-Garcia, 2011; Linnenbrink, 2007; Pekrun et al., 2002, 2009). The study shall critically analyze if the learning approaches affect

the motivation to engage in learning accounting. In view of this, it can be argued that:

**H2:** The integration of Active Learning in Accounting Course significantly influences the engagement of the non-accounting students.

**H3:** A higher level of motivation leads to a higher level of engagement of non-accounting students.

**Personal Relevance.** Drawn from Expectancy-Value theory, Bandura (1994), suggested that "a given course of behavior will produce certain outcomes and the value of those outcomes" may lead to personal relevance. Personal Relevance is defined as the person's perception that he can do better and by doing such, he can perform better. Personal relevance is an inner feeling where students determine the value of what they are doing which drives them into doing it Manwaringa, Larsenb, Grahamb, Henrieb & Halverson (2017). The critical factor in personal relevance is the willingness to do because of what it will do to the person. As noted by Bandura (1994), self-efficacy as a perceived relevance may direct a person to motivation and engagement as a result of the desired accomplishment. Personal relevance may lead to motivation and engagement if there is the salient importance of the activity. However, failure to recognize the significance of what the student is doing may also result in disengagement. Duff and Mladenovic, 2015, asserted that the contrasting effect of engagement and detachment is evident in the study of accounting. Among the factors that cause a student to detach apprehension of the subject, difficulty of the subject, and the learning methods of teaching accounting. The study will critically assess if learning accounting influences the expectation of value in the student's personal relevance. In view of this, it can be argued that:

**H4:** The integration of Active Learning in Accounting Course significantly influences the student's perceived personal relevance.

**H5:** A higher level of perceived personal relevance leads to a higher level of motivation.

**H6:** A higher level of personal relevance leads to a higher level of engagement.

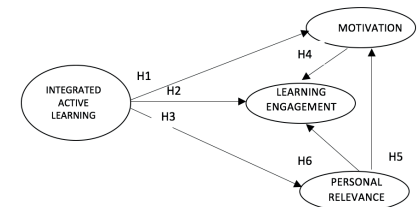


Figure 1. The Hypothesized Model of Integrated Active Learning (IAL) and Traditional Learning

Figure 1 demonstrates the perceived effect of IAL on the motivation, learning engagement and personal relevance of the non-accounting students.

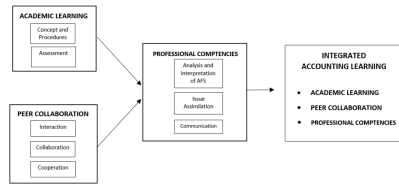


Figure 2. The process of integrating Active Learning to Traditional Learning

Figure 2 demonstrated an expanded approach to teaching accounting to non-accounting students. This approach combines classroom environment, peer collaboration and foundational practice with the objective of generating well-rounded learning expected in the workplace. The traditional learning approach is primarily focused in a classroom environment. There are three approaches performed in this strategy: First approach is the Academic Learning where classroom activities and lectures, class participation, quizzes, seat works and major examinations are assessed accordingly. The objective of this approach is to provide the students with the basic accounting knowledge, teach the process and techniques, and enhance critical thinking through problem-solving. The second approach is the peer collaboration; there are three students in the group. The groups worked together as a team during seat works, assignments and competencies application. The objective of this approach is to help the student interact among themselves, to develop social, communication skills and leadership skills, to collaborate findings with other groups and to initiate cooperation and participation. These two approaches are the preparation for the third approach. The third approach is the professional accounting application. Groups are assigned a particular company to one industry per section. The groups shall interpret and analyze the Audited Financial Statement of top 100 companies in the Philippines. The objective is to examine the financial performance of the company within the 5-year period. Three analysis were performed: Trend Analysis using vertical and horizontal analysis, Ratio analysis which measures the liquidity, solvency, efficiency, and profitability of the company and Industry Analysis where the industry performance compares the result of the analysis. As each section is assigned one industry, the groups within the section collaborate with other groups to compare the company's financial performance with the competitors and with the industry in general. Then the groups researched on a specific issue or issues that affect the financial performance of the firm. The group will assimilate topics relating to the firm's financial performance. Before the end of the term, the students presented in the class the financial statement analysis, discussed the issues and made recommendations. At the end of the term, students submit the written report. The objective of this approach allows the student to experience what the professionals do in the actual workplace. The activity aimed to develop

communication skills through oral and written presentation, creativity, by presenting the analysis in graphical illustrations, critical thinking by analyzing the audited financial statements and most especially, to experience working in a team. The performance is assessed using a rubrics.

## II. RESEARCH METHOD

**Research Design.** The study explored on Sequential-Explanatory mixed method design where examination conducted is dominantly quantitative in approach. However, the qualitative results validated the quantitative findings. In the quantitative approach, predictive research design utilizes the correlational and causal statistics. The objective of the quantitative research approach is to match the purpose and the procedures of the study. On purpose, the study will analyze the effect of integrating three strategies on the motivation, engagement and personal relevance of the non-accounting students. In the study, the integration of Active Learning in the accounting course is the combined approaches indicated by the academic learning, peer collaboration and professional practice of the subject. The procedures include preparation of survey instruments, interaction with students and participation of the students in the study. The investigation expects to measure how Active Learning affects the motivation, engagement and personal relevance of the students. The three factors indicators are: Motivation indicated by autonomy, relatedness, and competency; Learning Engagement is described by the behavioral, emotional and cognitive aspects, and Personal relevance which measures the student's expectancy value of the learning to the student's personal and social identity. Partial Least Square of Structural Equation Model (PLS-SEM) provides the path coefficient which describes the effect of one construct with the other constructs. On descriptive analysis, significant differences are statistically measured by ANOVA, and inferential statistics on path coefficients and effect sizes are analyzed using WarpPLS. On qualitative findings, text analysis validated the result with two significant questions: (1) what motivates the engagement of non-accounting students to accounting learning?; and (2) what factors demotivates students from engaging in accounting learning? The findings provided by the text analysis shows areas that contribute to the engagement and disengagement of students to accounting learning.

**Samples and Instruments.** Out of the one hundred fifty-three students who participated in the survey, only one hundred thirty-nine graduating Business Economics students have completed the online survey. The participants were taken from the population of commerce and business students of a university. The researcher employed a non-probability, purposive sampling based on the collective knowledge and experiences of the participants. The samples are expected to make an inference that can generalize the perception of non-accounting students of the College who are taking Financial Statement Analysis and Reporting. The study

conducted a 5-point and 4-point Likert Scale managed by Survey Monkey. The researcher explored on inferential analysis. On the study validity, the researcher did a construct and internal validity to measure if what is intended to measure was actually measured. Thus, the operationalization of the constructs clearly defines the association of the variables to the theoretical concept. In validating the quantitative findings, the researcher asked the students two open-ended questions: 1. What motivates you to engage in learning Accounting?; and two, What demotivates you to engage in learning Accounting? These two qualitative questions embedded in the survey contributed to the strength of the findings of the study.

**Data Analysis.** The study administered the data from the survey instruments in three ways. Warppls quantified the descriptive and correlations statistics. The bivariate analysis generated correlations among constructs and indicators. The indicators of Integrated Active Learning is matched with the dependent variable Motivation, Engagement and Personal Relevance to determine significant relationships between these variables. The descriptive statistics provided the mean result which signifies the degree of agreement or disagreement of the students to the given questions. The finding supports the path coefficient and effect size measured by PLS-SEM. The path coefficient confirms the significant effect of the Integration of Active Learning in the accounting course on the Motivation, Engagement and Personal Relevance of non-accounting students, while, the effect size shows the extent by which the independent construct influences the dependent variables. Cronbach alpha validated the consistency and reliability of the constructs. From the responses to the qualitative questions, the study employed text analysis. The significant statements of the students generated categories and codes. The responses of the students provided ranks of factors that affect the motivation of the students to engage and disengage from learning. The results of the qualitative findings were matched with the results of the quantitative to validate the results.

## III. RESULTS AND DISCUSSION

Table 1. Student's Information

<b>Gender</b>		
Female	82	59
Male	57	41
Total	139	100.0
<b>Age</b>		
18 to 20	124	89.2
21-22	14	10.1
23-25	1	.7
Total	139	100.0
<b>Interest</b>		
Research	13	9.4
Business & Industry	108	77.7
Academe	1	.7
Further Studies	17	12.2
Total	139	100.0
<b>Personality</b>		
Extrovert	35	25.2
Introvert	34	24.5
Intuitive	11	7.9
Thinking	26	18.7
Feeling	19	13.7
Judging	6	4.3
Perceiving	8	5.8
Total	139	100.0

Table 1 shows the characteristics of the student participants. The students belong to one program, all Business Economics major. There are more female students in the program at 59% than male at 41%. Generally, the students are within the age bracket of 18-20. Business Economics students showed various interest after college. Majority of the students showed interest in business and industry at 77.7%, while, 12.2% intends to pursue further studies. Surprisingly, despite exposure to research, only 9% expressed interest in pursuing a research-related career. The personality of the students may play a significant factor in the motivation, engagement and personal relevance. Out of one hundred thirty-nine participants, most of them are a cross between extravert (35, 25%), introvert (34), and thinking type (25%) of personality. Others are distributed into feeling, intuitive, judging and perceiving.

Table 2. Mean, SD, Skewness, Average Variance Extracted, and Correlation Coefficients

	RELEV	LEARN	MOTIV	INT-A-L	Mean	SD	Skewness
RELEV	(0.750)				3.16	0.44	-0.73
LEARN	0.673	(0.811)			3.06	0.39	-1.03
MOTIV	0.668	0.694	(0.851)		3.39	0.38	-1.75
INT-A-L	0.631	0.615	0.662	(0.820)	3.72	0.55	-0.96

Note: Enclosed in the parentheses are the square roots of average variance extracted (AVE) between constructs. For discriminant validity, the square root of the AVE should be larger than the correlation coefficients (values in italics).

**Descriptive Analysis.** The data in table 2 shows the correlations of the constructs. All variables of the study were statistically correlated to one another with correlation coefficients of IAL with Motivation, ranging between .662 (INT-A-L vs. MOTIV), IAL with Learning engagement between .615 (INT-A-L vs. LEARN) and IAL with Personal relevance between .631 (INT-A-L vs. RELEV). All correlation coefficients are positive, indicating that the higher, the higher the values of one variable, the higher also the values of the other variables. The result shows a significant positive relationship of Motivation with Learning engagement at a correlation coefficient between .694 (MOTIV vs. LEARN) which indicates that as motivation increases, the learning engagement of non-accounting student increases as well. Personal relevance shows a significant positive relationship between Learning engagement at a correlation coefficient between .673 (RELEV vs. LEARN) and with Motivation between .668 (RELEV vs. MOTIV). The result indicates that an increase in the value of Personal Relevance increases the value of Learning Engagement and Motivation. The mean analysis in Table 2 presents the degree of agreement and disagreement of the respondents. The overall outcome from a 4-point scale shows that the perceptions of the students are high in terms of IAL (mean=3.72, SD=.55), and moderately high in the aspects of Personal Relevance (mean=3.16, SD.44), Learning Engagement (mean=3.06, SD=.39), and Motivation (mean=3.39, SD=.38). For discriminant and convergent validity assessment, the Average Variance Extracted (AVEs) as presented in Table 2 shows normality at an acceptable validity value of 0.5 (Fornell & Larcker, 1981). The square roots of AVE between constructs are larger than the correlation coefficient indicating the

quality of the measurement instrument. The result implies that the instruments are well associated with the constructs and not confused by the respondents.

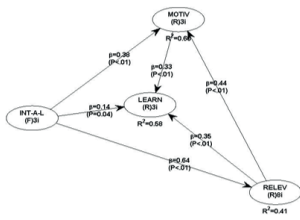


Figure 3. The Theoretical Model of Integrated Active and Traditional Learning

**Inferential Analysis.** Figure 3 presents the standardized path coefficients of the model. The model statistically shows the coefficient and p-value of the latent variable depicting the degree of significance and the effect size. Table 3 summarizes the paths illustrating the effect of controlling variables on outcome variables. The result indicates a significance level at \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . The overall model shows a good fit with the following indices:  $APC=0.381$ ,  $P<0.001$ ;  $ARS=0.527$ ,  $P<0.001$ ;  $AARS=0.521$ ,  $P<0.001$ ;  $AVIF=2.700$  (ideally  $<3.3$ );  $AFVIF=2.305$  (ideally  $<3.3$ ), and  $GoF=0.586$  (large at  $>=0.36$ ). The modification indices suggest significant cross loading.

Table 3. Effects of the Variables on the Other Variables

	Path coefficient	SE	p-value	Effect size (f)
INT-A-L → MOTIV	.377	.074	.000	.271
INT-A-L → LEARN	.141	.078	.037	.093
INT-A-L → RELEV	.640	.070	.000	.410
RELEV → MOTIV	.444	.073	.000	.326
MOTIV → LEARN	.331	.075	.000	.233
RELEV → LEARN	.352	.075	.000	.249

Note: f is the Cohen's (1988) effect size coefficient. .02=small, .15=medium, .35=large.

Table 3 summarizes the path coefficient model presented in Figure 3. As shown, the path coefficient of Integrated Active and Traditional Learning positively significantly affects the motivation ( $\beta=0.377$ ,  $p<.05$ ), learning engagement ( $\beta=0.141$ ,  $p<.05$ ) and personal relevance ( $\beta=0.640$ ,  $p<.05$ ) of the students. The result implies that a higher level of Integrating active learning results to a higher level of Motivation, Engagement, and Personal Relevance. Integrated active learning affects Motivation from a medium to a large extent ( $f^2=0.271$ ). The findings support the argument that Integrating Active Learning (IAL) in the accounting course significantly influences the motivation of the non-accounting students. The path coefficient shows a significant positive effect of IAL on Learning Engagement. However, the result shows a small to medium extent of influence ( $f^2 = 0.093$ ). The finding supports the argument that IAL significantly influences the engagement of the non-accounting

students. IAL positively significantly affects Personal Relevance to a large extent at ( $f^2=0.41$ ). The result supports the argument that IAL substantially influences the student's perceived personal relevance. Both Motivation and Relevance positively and significantly affect the Learning Engagement. The extent of the effect of Motivation and Relevance on Learning Engagement is medium to large. The result implies that a Higher Motivation and Personal Relevance lead to a higher Learning Engagement. The results support the arguments that a higher level of personal relevance leads to a higher level of engagement. A higher level of motivation leads to a higher level of engagement. Personal Relevance positively and significantly affects Motivation to a large extent ( $f^2=0.326$ ) indicating that a higher level of Personal Relevance results to a higher level of Motivation. The results support the arguments that a higher level of personal relevance leads to a higher level of motivation among non-accounting students.

Table 4. Coefficient loadings of Indicators

Indicators	R-Squared Coefficient	Item Loading	Cronbach's Alpha
<b>I. Integrated Active Learning</b>			
a. Academic Learning		.835	.761
b. Peer Collaboration		.710	
c. Professional Accounting Application		.920	
	$R^2=0.597$		.810
<b>II. Motivation</b>			
a. Motivation-Autonomy		.839	
b. Motivation-Competency		.838	
c. Motivation-Relatedness		.836	
	$R^2=0.575$		.739
<b>III. Learning Engagement</b>			
a. Behavioral Engagement		.752	
b. Emotional Engagement		.837	
c. Cognitive Engagement		.841	
	$R^2=0.410$		.878
<b>IV. Personal Relevance</b>			

Cronbach's alpha measurement of internal consistency:  $\alpha \geq 0.9$  = Excellent;  $0.9 > \alpha \geq 0.8$  = Good;  $0.8 > \alpha \geq 0.7$  = Acceptable;  $0.7 > \alpha \geq 0.6$  = Questionable;  $0.6 > \alpha \geq 0.5$  = Poor

Table 4 displays the coefficient loadings of the indicators of each of the constructs. The Adjusted R-Squared reflects the percentage and the predictive validity associated with each of the latent variables. The result in Table 4 shows that the variability of the dependent variable Motivation is 60% explained by the IAL. The variability of Learning Engagement is 58% explained by the independent variable IAL, and 41% of the dependent variable Personal Relevance explained by IAL. The results imply that the R2 of the latent variables at a value higher than 0.02 (Cohen, 1988), are considered relevant from a practical point of view. The measurements of the reliability of the indicators presented in Table 4 shows the Cronbach's alpha coefficients at an acceptable consistency level of greater than 0.7 (Fornell & Larcker, 1981; Nunnally, 1978; Nunnally & Bernstein, 1994). The result implies that the indicators of the IAL have an acceptable to high-value internal consistency (Peer Collaboration=0.710, Academic Learning=0.835; Professional Accounting Application=0.920). Indicators of Motivations shows a good internal consistency level (Autonomy=0.839; Competency=0.838; Relatedness=0.836), and indicators of Learning engagement shows an acceptable to good internal consistency level (Behavioral=0.752; Emotional=0.837; Cognitive=0.841) with the latent variables. The result

indicates that there is a high value of internal consistency in terms of relatedness of each item as a group.

**Text Analysis.** The structured questions were answered by the students as they go through with the survey instruments. From the significant statements arise categories and codes which become the basis for content analysis. Table 5 presents the summary of the frequencies and the validated variables.

Table 5. Summary of Categories from Students' Significant Statements

What motivates you to engage in learning Accounting?			What demotivates you to engage in learning Accounting?			
Categories	F	%	Validated Variable	Categories	%	
Classroom environment	2	1	Motivation	Work Overload	16	13
Peer Support**	34	23	Autonomy	Doing Alone	7	6
Mentoring from prof	11	7	Relatedness	High Grade	1	8
Presentation*	17	11	Competency			
Achievement	12	8				
<b>Engagement</b>			<b>Engagement</b>			
Activities**	22	14	Behavioral	Lecture Discussion	12	10
Assessment	6	4		Classroom/Online	26	21
Challenges	2	1	Emotional	Activities	8	6
				Class Suspension	8	6
				Challenges	15	10
				Time Pressure**	17	14
				Interest	1	8
				None	14	11
Critical Thinking**	25	17	Cognitive			
			Personal			
			Relevance			
Exposure	8	5				
Experience	7	5				
Confidence	6	4				
Total	152	100		Total	12	10
					5	0

Table 5 summarizes the significant statements of the participating non-accounting students. On factors that strongly motivates the students to engage in accounting subjects, the following categories take the most motivating factors: Peer Support (23%), Critical thinking (17%), Classroom Activities (14%), and Presentation or Reporting (11%). On factors that demotivate the students from engaging in accounting learning, students noted the following categories as the most demotivating factors: Assessments (21%), Time Pressure (14%), and Work Load (13%). Shown in Table 5 are the variables that were validated by the categories. These factors support the findings of the quantitative results. The result indicates that Relatedness and Competency are the two motivating factors that are strongly influenced by the integration of active learning in accounting course. Peer support and Group presentation are the factors of Active Learning that strongly motivated non-accounting students. The Behavioral and cognitive are the factors of Learning Engagement influenced by Active Learning. The manifestation of the student's motivation was saliently reflected in the student's attitude in the classroom that resulted in critical thinking competencies. The Personal Relevance is the least variable influenced by Active Learning. Exposure to professional practice has increased confidence of the non-accounting students. On the negative side, the integration of active learning in accounting course has resulted to disenchantment of the students. Autonomy is the factor of motivation that causes disengagement among non-accounting students. Workload affects the learning expectations of the students. Assessment and classroom discussion are factors that affect the performance of the students towards

learning accounting. Working on time pressure increases the challenges faced by the students which influence their attitude towards learning engagement. Some students seem satisfied that they nothing that demotivates them from learning accounting.

**Discussion.** Developing critical thinking skills required of the accounting profession is the primary concern of the conventional accounting approach. But not all taking accounting will get into the professional practice. The core of the study is to critically analyze the effect of teaching accounting to the non-accounting students. The study attempted to combine peer collaboration and professional accounting application into the conventional approach of teaching accounting. In our investigation, we found that motivation, engagement and personal relevance are strongly associated with the learning approaches. An combined learning strategy from the conventional approach adding peer interaction and actual application of the subject is assumed to add to the interest of the non-accounting students. The findings is supported by the notion of Kolesnikova, (2016) citing Matiru et al (1995) that an advance learning approach of active learning and conventional approach enhances the learning process. Further, the result collaborates with Dellaportas & Hassall, (2012), who posited that advancing learning to relational, interactive and critical thinking increases the interest of the students. According to Bonwell and Eison(2015), students should not be limited with listening and writing, learning process of the students must advance to thinking, synthesizing and collaboration. The authors added that learning becomes more effective when students experience associating accounting with the current issues and events of the time. The notion agrees with Martin et al. (2017), who posited that the deeper understanding of learning is the ability of the student to associate past knowledge with the current information and be able to explain what happened.

**Integration of Active Learning on Motivation, Engagement, and Personal Relevance.** The motivation to learning accounting is critical to the learning engagement of the students. The result of the study indicates that integrating active learning to the conventional approach results to a higher level of motivation, engagement and personal relevance of the students. The study asserted an inherent association of motivation, personal relevance, and engagement. The outcome of the study substantiated the findings of several authors. Reeve (2012) noted that a student's higher intrinsic motivation leads them to a higher level of engagement. Martin, et al. (2017) and Anderman & Patrick (2012) support the assertion of Reeve, suggesting that when the minds of the student's become entrenched with motivation, it follows behavioral, emotional and cognitive engagement. In the study, relatedness and competence are among the factors that initiate engagement. However, Martin et al. (2017) added from their study that motivation and engagement could be initiated or dejected. The authors are suggesting factors that increased the inner satisfaction and engagement of the students. Likewise, some factors may discourage

students that leads to disengagement. The findings show a positive impact when the academic learning does not restrict the students from the traditional memorization and computation. Validating the results presented, the significant statements of the students expressed their perceptions of the effect of integrating active learning in the traditional class activities. On academic learning, students are motivated by the lectures, taking down notes, class participation and teacher's mentoring. The experiences of the students supports the notion of Martin et al. (2017) that memorization of lectures can help students remember more, but, the authors added that memorization can be more effective if assimilated with problem-solving, and case analysis. On the downside of motivation, classroom learning can demotivate students when too many lessons-accounting policies and procedures, computations are given to them all at the same time. Students' experience difficulty in processing the lesson which affects their performances in quizzes, seat works, and major exams resulting in very low grades. On peer collaboration, the students' perceive that teamwork and groupings help them learn accounting better. The affirmation of the students indicates a significant impact of peer collaboration on the motivation and learning engagement of the non-accounting students. The students recognized the importance of interaction and cooperation in enhancing the learning process. Openness and communication with peers increase relatedness. Cate (2017) added that peer interaction may help students communicate better especially if they cannot open up with their teachers. Similarly, Havnes et al. (2016) posited that exchanging of ideas within the group is an effective learning technique. Although, Manwaringa, Larsenb, Grahamb, Henrieb, & Halverson (2017) finds peer collaboration can influence cognitive engagement because of the collective effort of the group, peer collaboration may not lead to emotional engagement. In the same way that Herrmann-Werner et al. (2017) presumed that not all the time peer interaction helps. Further, students' responses on working alone and with one to share ideas with, decreases their motivation and engagement. The statements validated the notion that experiences of doing things alone can demotivate the students. On Professional Accounting Application, students expressed positive feedback on the effect of the professional application of the accounting process. Most of them appreciated the experience of analyzing the audited financial statements of top 100 companies. Others have noted that they have gained confidence in doing the financial statement analysis, adding that they feel good that they have an advantage when they get to actual workplace. Further, some students are delighted with the experience of presenting their work to class, get feedback and express their opinions about their study. Furthermore, students are able to assimilate current issues with the changes in the financial performance and understand better the challenges of these entities. These attitude collaborates with the findings of Dellaportas & Hassall (2012) who asserted that experiences can be a "powerful tool" that may bring a deep-rooted sensitivity and

appreciation of the future things. In addition to this fulfilling experience, the affirming attitude on professional practice increases the personal relevance of the students. The students conveys optimism that they can do better and they can achieve better with what they went through. Students realized the relevance of the activity in their future endeavor and they feel positive of their abilities. The respondents' perception on these experiences validated the findings that integrating active learning with the traditional learning significantly affects the Motivation, Learning Engagement and Personal Relevance of the non-accounting students. However, in contrast to the findings, several authors claimed a "detachment" effect of accounting among students. Authors find that the challenges that students experience impede students from an utmost engagement. Ben-Eliyahu, Mooreb, Dorphc & Schunn (2018), Manwaringa et al. (2017), and Cazan (2015) claimed that motivation can also lead to disengagement when students are uncertain of what they are doing. The authors asserted that learning may bring satisfaction on the cognitive and behavioral engagement but is not feeling affirmative because of time pressure and workload (Ben-Eliyahu et al., 2018). Motivation could support the cognitive engagement but the challenges may disrupt the behavioral engagement when students experiences exhaustion (Manwaringa et al., 2017 and Cazan, 2015). The implication of the study suggests that the integration of active learning in teaching accounting may develop a well-rounded individuals in the workplace. The experiences that non-accounting students went through may lead them to a better understanding and appreciation of the subject. However, learning can be disheartening if the objective of the activity is not fully understood by the students. The misconception may lead to a "detachment attitude" of the student. The preparation of the educators and the institution provides students with necessary knowledge and foundation of the basics of accounting, but the interaction and collaboration with peers will help these future professionals develop cooperation and positive attitude towards others. Finally, the experience of doing the actual practice may help the students become self-reliant, confident and self-assured of working under pressure.

The study may account for several limitations. First, the findings in this study may not be generalizable to the general population of non-accounting students enrolled in a business program. The respondents represent only one business program. Consequently, students from another business program may have different perceptions. Secondly, some of the students who participated failed to complete the survey, however, their responses to the open-ended questions were considered as the researcher finds them significant to the study.

#### IV. CONCLUSIONS AND RECOMMENDATIONS

**Conclusions.** The current educational system dedicates to promote quality accounting education.

Despite this advocacy, there seems to be a salient difference on the objective of teaching and learning accounting between the educators and the students. The study attempted to address the issues of Motivation, Learning Engagement, and Personal Relevance by combining learning approaches which may predict the better performance of non-accounting students in taking accounting subjects. The study critically analyzes the compounding issues on students' behavior towards learning accounting. First, Motivation is influenced by the perception of the relevance of the subject in meeting the needs of the students. The result of the study addresses the issue positively, finding a significant effect of Active Learning on the students' motivation. Secondly, Engagement of students to learning accounting is influenced by the approaches to learning that motivate students. The significant statements of the students validated the positive effect of IAL to learning engagement of the students. However, there seems to be a negative effect of IAL on the emotional behavior when the students are experiencing exhaustion because of workloads and time pressure. Thirdly, learning accounting may influence the expectation of value in the student's personal and social identity. The result of the study finds a positive effect of the professional application of learnings on the students' perceived relevance Students' recognition of confidence after the activity stimulates self-efficacy in their personal and social identity. In conclusion, the outcome of the study suggests that the combined academics, peer collaboration and professional practice increase the motivation, learning engagement and personal relevance of the students. The study contributes to the literature by introducing a new strategy that will enhance the interest of non-accounting students in taking accounting subjects. Further, the exploration of a sequential-explanatory mixed method design may interest other scholars to replicate the study in their fields of educational specialization.

**Recommendations.** Motivation and personal relevance are crucial in initiating engagement. The study recommends that instructions and syllabus may incorporate a combined approach that will address the expectations of the students. While it is a given fact that traditional approach will exist over time, the innovation of the transmission of knowledge integrating active learning with the conventional approach may bring new experiences to students. The mentality of the students is evolving into technology, peer collaboration, and effective communication skills. These are factors that define the students at this current time. Thus, the evolution of learning approaches may be considered to catch up with the changing times.

#### ABOUT THE RESEARCHER

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