

## **Enhancing Students' Leadership Ability through Collaborative Learning: A Gender analysis**

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### ***ABSTRACT***

Teaching approaches embraced in consideration of various factors including nature of the subject, students as audience, teaching environment and teaching facilities. Appropriate teaching approaches stimulate students' learning and enhance their understanding. Teaching approaches adopted in universities also act as a platform that provides opportunity for students to develop not only study skills and interpersonal skills but also leadership skills. A commonly accepted social perspective is that male leadership roles are more than the female roles. The issue of gender gap or differences between women and men have been reflected not only in social, political, intellectual or economic attainments or attitudes but also in education. Thus, this study attempts to assess the perceived leadership ability achieved through collaborative learning approach and to examine the relationship between gender and perceived development of leadership ability. Based on purposive sampling, a survey conducted to a group of students who have been exposed to a collaborative learning at a public university, known as an In-class Supplemental Instruction. Using SPSS, mean scores analysis shows that collaborative learning highly contributes towards the development of their leadership ability, but at a lower end of the score. Meanwhile, independent t-test results indicate that there is no gender difference in the perception about development of leadership ability through collaborative learning. The findings are able to provide support on the effectiveness of collaborative learning as one of the mechanisms to develop students' interpersonal skills in shaping them as future leaders in business and government. Future research can be extended to examine the development of leadership ability among students based on other teaching and learning approaches adopted in university. Moreover, future research could also be directed to examine other interpersonal skills that may be developed through collaborative learning.

*Keywords: Collaborative learning, Leadership ability; Gender; Interpersonal skills, Teaching approach*

## **INTRODUCTION**

Leadership is applicable in any organization, can it be a political leadership, community leadership, religious leadership, university leadership, school leadership, business leadership and government leadership. Education leadership among students cannot be ignored because with this leadership ability, they may assist their lecturers or university to have higher achievement. Leadership is a common word to describe the ability of a person to lead others and act as the role model among their members. In other words, a person who is appointed as a leader will have the ability to motivate a group of people in achieving a common goal.

In the context of learning, do we need leadership? In traditional learning, students listen and receive the knowledge from the expert who is their lecturer. The main focus here, the lecturer is the leader. However, with our millennial students, solely traditional learning is no more suitable. In improving the understanding of certain knowledge, the students need to be engaged and be responsible in obtaining the knowledge. According to John F. Kennedy "Leadership and learning are indispensable to each other" (Kennedy, 1963). Leadership cannot be separated from learning mode. Therefore, the students need to take the charge in obtaining the knowledge. In reality, not everybody can be a leader because some are naturally born with natural behaviour to be a leader but then some need to be given assistance to become a leader. In other words, leadership can be nurtured. A study from the University of Illinois, Urbana-Champaign demonstrated that the leadership skills of the participants have improved after using the 'Ready, Willing and Able' model' (Winch, 2015). This model examines the students' readiness to lead, motivated to lead, and effective in their efforts and the most important factor for successful students is their 'Willingness'.

The primary objective of educational institutions in imparting academic learning to the students is to ensure that they are able to achieve their personal and professional goals, sustain their livelihoods opportunities in an appropriate manner and turn out to be productive citizens of the country. Educational institution is also a platform that provides opportunity for students to develop and display their leadership qualities. The students are given opportunity to be leaders especially in the students' activities. Apart from academic learning, it is essential for students to develop leadership skills among themselves. When they develop leadership skills, they are able to lead and guide others in the right direction, inculcate the traits of diligence and conscientiousness and differentiate between appropriate and inappropriate. The educators are vested with the responsibility to assign students tasks and activities that may render an effective contribution in augmenting their leadership skills (Kapur, 2019). Development of leadership skills among students is an integral part of education. The educators need to ensure that opportunities should be provided to them and activities should be encouraged that would facilitate the development of leadership skills. These skills enable the individuals to acquire self-autonomy and they are less likely to be dependent on others for the implementation of various tasks and activities (Kapur, 2019).

In reality, through the learning process, students can be exposed to the leadership role model where they can lead and inspire peers to problem solving in learning engagement. In other words, good leaders among students are those who do not leave their friends behind but continually encourage and inspire others to achieve best examination results. In addition, the students are able to develop study skills and interpersonal skills from their learning experience at the university.

Various teaching approaches have been introduced to stimulate students' learning and enhances their understanding. Among those approaches is the collaborative learning approach that has developed the study skills such as deeper understanding, discussing and solving problems, teamwork and academic skills (Shazalina, Yunita, Norazamina, & Zaiza Norsuriati, 2018). Furthermore, the understanding whether this approach improves the leadership skill among students; and, whether male or female is more outstanding in performing the leadership role are issues to be explored. The issue of gender gap, which is about the difference between women and men has been reflected in education, social, political, intellectual, cultural, or economic attainments or attitudes.

Thus, it is an interesting area to investigate if the learning process via collaborative learning approach enhances leadership ability among the students. This study also attempts to examine any gender differences in the leadership ability among the students that participated in the collaborative learning. The remainder of the paper is structured as follows. The next section offers the review of relevant literature on overview of teaching approaches that describes the collaborative learning, leadership ability and gender differences in education. The subsequent section elaborates on the research methodology, followed by the analysis of findings. The final section describes the conclusion and suggestions for future research.

## **LITERATURE REVIEW**

### **Overview of teaching approaches**

Teaching approaches play an important role in the efforts to enhance understanding among the students in the "hard" or "soft" disciplines. In keeping with the growing international competition, the universities are to provide quality education in catering the diverse and discerning student population. Various approaches are adopted with the aim to deliver the knowledge in the best manner to facilitate teaching and learning. In these teaching approaches, the teaching materials depend on among other things: nature of the subject; students as audience, teaching environment and teaching facilities. Among researchers who investigated the effectiveness of teaching approaches in delivering the knowledge to further improve students' understanding on particular courses were Drevdahl, Stackman, Purdy and Louie (2002), Ironside (2003) and Chow, Tang, Teng, and Yen (2003). There is also evidence that teaching approach is connected with the teachers' conception of teaching (Lindblom-Ylänne, Trigwell, Nevgi, & Ashwin, 2006). Empirically, relationships were established between not only students' approaches to studying, their conceptions of learning and their perceptions of the academic context, but also the relationships between teachers' approaches to teaching, their conceptions of teaching, and their perceptions of the teaching environment.

Teaching approaches have changed throughout the years with the introduction of different teaching methods and teaching models. These are to ensure students' understanding of subject contents will be better, students' ability to connect knowledge with the work reality will be enhanced and indirectly improve the soft skills, intellectual skills and leadership skills of the students. Among teaching methods and models already applied by most universities are depicted in Table 1.

**Table 1: Summary of teaching methods and models**

Teaching methods	Teaching models
Traditional	<ul style="list-style-type: none"> <li>- Case study,</li> <li>- Quiz team and control group</li> <li>- Collaborative teaching and lecture</li> <li>- Homework</li> <li>- Pause method</li> <li>- Blackboard and simple computer program</li> </ul>
Modern	<ul style="list-style-type: none"> <li>- Software programs</li> </ul>
Distance learning	<ul style="list-style-type: none"> <li>- Interactive multimedia</li> <li>- Interactive TV and tele-education</li> <li>- Virtual Learning Environment</li> <li>- Teaching aids through software tools</li> <li>- ICT Technology</li> <li>- Use of blackboard tool</li> </ul>
Hybrid Teaching models	<ul style="list-style-type: none"> <li>- Combination various media and face to face</li> <li>- Business planning model</li> <li>- Creating Financial Model and calculation of cost buy using spreadsheet</li> <li>- Low incomes taxpayers' clinic tools</li> <li>- Accounting program SCAM</li> </ul>

(Source: Dimitrios et al., 2013 cited in Azuraidah, Rohayati, & Yunita, 2018)

Teaching methods or approaches can be teacher-centred and student-centred. The earliest study on teacher-centre was Marton and Saljo (1976) who introduced the learning–deep and surface approaches, which until today some of the educators still adopted these approaches in ensuring students understand the content of knowledge. Later, among researchers who studied on teacher-centred were Dredahl et al. (2002), Ironside (2003), Johnson-Farmer and Frenn (2009), Shamsudin, Abdullah and Yaamat (2013) and Ruthven et al., (2017). Table 2 describes the teacher-centre approaches.

**Table 2: Teacher-centre approaches**

Researchers with focus of teacher-centre	Teaching methods applied
Dredahl et al. (2002) : A focused and systematic inquiry	Reflective self-study
Ironside (2003) : Narrative pedagogy	Mind opening, freeing and thought provoking.
Johnson-Farmer & Frenn (2009) : Active engagement of both the student and faculty. Clear communication of the objectives/outcomes Encourage student centered, Creating active learning environment (active questioning and learning)	<ul style="list-style-type: none"> <li style="width: 50%;">- storytelling</li> <li style="width: 50%;">- videos</li> <li style="width: 50%;">- humor, sadness</li> <li style="width: 50%;">- pictures</li> <li style="width: 50%;">- reflection</li> <li style="width: 50%;">- role playing</li> <li style="width: 50%;">- role modeling</li> <li style="width: 50%;">- guest speakers</li> <li style="width: 50%;">- group interaction</li> <li style="width: 50%;">- rehearse, etc</li> </ul>
Shamsudin, Abdullah and Yaamat (2013) : Enhancing students' understanding of the contents Stimulate creative thinking Improve the problem-solving skills.	Inquiry approach
Ruthven et al. (2017): Effecting Principled Improvement in STEM Education.	The pedagogical approach focusing on dialogic teaching.

While among researchers who studied on student-centered were Moraros, Islam, Yu, Banow and Schindelka (2015), and, Kaddoura, Van-Dyke and Yang (2016). According to Moraros et al. (2015), flipped-classroom has provided more opportunities for students to engage in critical thinking, independent learning and effectively interact with their peers. While, a study by Kaddoura, Van-Dyke and Yang (2016) explored the development of critical

thinking using the concept of mapping among nursing students in their introductory courses. In addition to this new era, where technologies are now controlling the world, hence in the business world and also in education. Among studies regarding teaching and learning approaches using technologies were Anne, Seppo and Shoji (2010), Idris and Rajuddin (2012) and Englund (2017). Anne, Seppo and Shoji (2010) explored university teachers' ICT approaches to teaching in three countries (Finland, Japan and India). Result shows that, the Finnish teachers scored higher on the conceptual change orientated (student-focused) approach, the Japanese teachers scored higher on the information transmitting (teacher-focused) approach while Indian teachers use mixed approaches to teaching. Idris and Rajuddin (2012) revealed that problem-based, context based and fieldwork-teaching methods were significant predictors of technical skills among students. Englund (2017) explored the conceptions of teaching and learning with educational technology influences the implementation of three-dimensional virtual worlds (3DVWs) in health care education. In addition, Gurses, Dogar and Gunes (2015) evaluated learning as a mental transition or an oriented change from understanding (two dimensions) to conceptualization (three dimensions) in their *Interactive Direct Teaching Based on Constructivist Learning (IDTBCL) model*.

In today's reality, the education world cannot be too rigid in focusing only to teacher-centred or student-centred. Due to the current scenario in the education world, a combination of both but not ignoring other factors such as nature of the subject, millennium students, teaching environment and teaching facilities relating to technologies should be given more attention. New teaching approaches that will give wider opportunities to cater for the differences in students' learning approaches in enhancing students' understanding of the related courses should be taken into the picture of approaching a new norm of education. Therefore, appropriate teaching strategies that contribute to excellence teaching need to be considered so that the faculty is committed to collaborating with students in attaining teaching excellence. This new approach can be obtained from collaborative learning as it can improve many skills such as learning skill, soft skills, intellectual skills and leadership skills.

### **Collaborative learning**

In this study, a specific technique to collaborative learning is implemented referred to as an In-Class Supplemental Instruction (ICSI) approach. The ICSI is a refined Supplemental Instruction (SI) method developed in 1973 at the University of Missouri in Kansas City by Deanna Martin (Widmar, 1994 in Bowles, McCoy, & Bates, 2008). The concept behind SI is that learning a subject is improved by an exchange of ideas and thoughts between students (Malm, Bryngfors, & Mörner, 2010). The key persons that are involved with the SI program are the SI leaders, the SI supervisor, and the course instructors or the faculty members, and the students (Hurley, Jacobs, & Gilbert, 2006).

Based on the SI model, a modification is done in the current study that leads to the implementation of ICSI. The main difference in ICSI as compared to SI is where ICSI is implemented in the classroom during the tutorial sessions. As such, it is referred to as an In-class Supplemental Instruction (ICSI) approach.

Four main players are involved in the ICSI including the ICSI Course instructor, ICSI Peer-Leaders, ICSI Students and ICSI Recognition (by Faculty). The following are the definitions of the main players within the context of ICSI:

1. ICSI Course instructor is the lecturer or course instructor
2. ICSI Peer-Leaders are those students who had prior formal introductory accounting course
3. ICSI Students are those students without basic knowledge of accounting course
4. ICSI Recognition is the recognition given to the ICSI peer-leaders by the Faculty Coordinator

The ICSI approach is illustrated in Figure 1.

Figure 1: In-class Supplemental Instruction (ICSI) approach

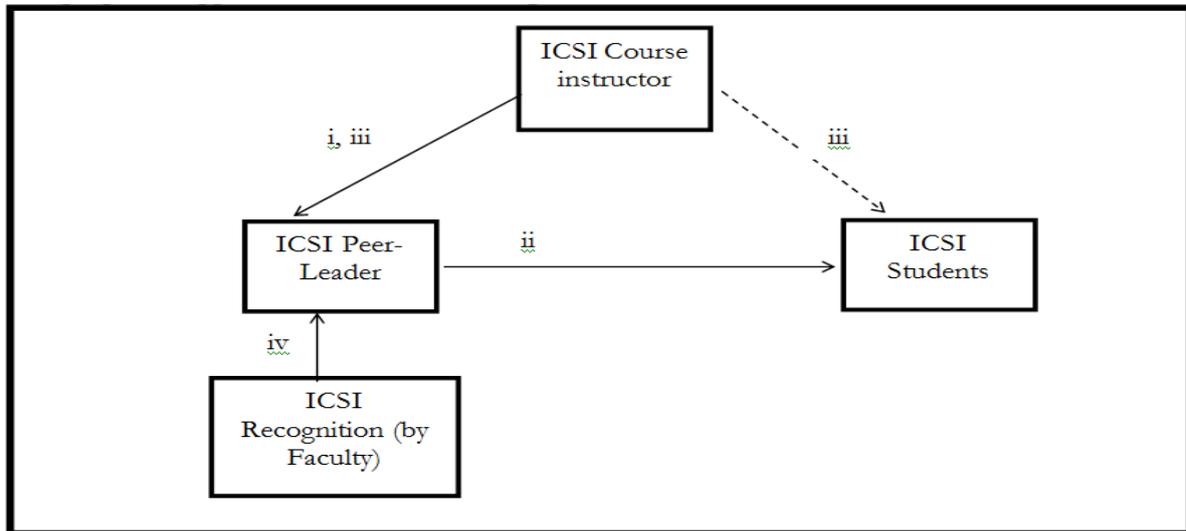


Figure 1 indicates the four (4) main players in ICSI implementation. Additionally, the Figure describes the ICSI implementation process, which takes place as follows:

- Step 1: ICSI Course instructor identifies and selects the ICSI Peer-Leader
- Step 2: ICSI Peer-leader helps the ICSI Students (collaborative learning)
- Step 3: ICSI Course instructor monitors the ICSI sessions
- Step 4: ICSI recognition by Faculty Coordinator to the ICSI Peer-leader

The ICSI approach, as depicted in Figure 1, added a new element (as compared to the original SI approach) which is the recognition of the ICSI Peer-Leaders from the relevant faculty. It is vital to acknowledge the contribution of ICSI Peer-Leaders towards helping the ICSI students. It would also motivate the ICSI Peer-Leaders to give better commitment towards the ICSI program. The ICSI is capable of delivering effective learning and understanding at an early stage to cultivate a culture of long-life learning. This method of collaborative learning has been implemented to the group of non-accounting majoring students who undertake Introductory Accounting subject in their degree course. Through ICSI, students with zero knowledge and students with sufficient previous accounting knowledge learn simultaneously by helping each other as Peer-Leader and Student member.

Through observation, the ICSI approach is able to stimulate students' interest in learning accounting courses and enhance their understanding of the course contents. The collaborative learning approach using ICSI, can improve the academic performance of non-accounting background students because they have the role model and assistance among them (i.e. ICSI Peer-Leader). Interestingly, Muda et al., (2013) also reported that there is a significant relationship between prior knowledge in accounting and performance in the introduction to accounting course, which supports ICSI as proposed by this current study. At the same time, ICSI approach could also be a platform to develop soft skills among the students. ICSI peer leaders will increase their level of confidence and leadership skills while at the same time allowing ICSI students members to improve skills such as teamwork, problem-solving, presentation and discussion. In other words, ICSI enables the development of cognitive and soft skills, such as leadership skills among students.

### **Leadership ability**

Leadership is characteristics that mainly focus on a clear vision, action, modelling the way, ethical relationships, congruence, trustworthiness and collaboration (Avolio, Gardner, Walumbwa, Luthans, & May, 2004). This study focused on ICSI as a collaborative learning approach to stimulate students' interest in learning accounting courses and enhance their understanding of the course contents. Through ICSI, the academic performance of non-accounting background students can be improved because they have the role model and assistance among them that come from the Peer-Leader. Many academics developed affecting teaching and learning methods to students by making them be peer-leaders that can give good effect to their colleagues, institutions, and themselves (Raven, 1990).

At the same time, the collaborative learning through ICSI approach also could be used to develop soft skills among the students. The ICSI Peer-Leaders enhance their level of confidence and leadership skills, in which this approach enables the Peer-Leader to conduct the discussion where he/she will become a leader that will set the time, resolve any conflict and make a proper decision for the ICSI students. The Peer-Leader also will have the responsibility of delegating any task to the ICSI students. These experiences have led to a sense of fulfilment, increased self-confidence and a higher level of responsibility among SI leaders (Lockie & Van Lanen, 2008). SI leaders also develop leadership skills, learn how to exploit group dynamics, and learn how to encourage others to succeed (McGuire, 2006). Similarly, the leadership skill also will inculcate the ICSI Students as they observe the peer-leader. According to Hofmeyer (2015) studies, participants learned leadership skills through reading, looking after colleagues, and taking formal or informal mentoring opportunities with experienced academics. Thus, the ICSI approach encourages formal and informal mentoring among the ICSI Students.

### **Gender and skills development**

In the efforts of producing students that are able to compete in the job market, they need to be equipped with good knowledge, skills and quality education. In fact, every student needs to have leadership skills to achieve success in a professional career. Diverse studies prove that gender is an influential aspect in skills development. It was concluded that students' gender is a significant predictor of their business management skills in business enterprise (Nwachukwu, 2020). In addition, students' gender is a significant predictor to their technical skills, marketing skills, accounting skills, financial management skills and ICT compliance skills in business enterprise. According to Yarrish, Zula and Davis (2010) there are significant differences in perceived leadership skills between males and females. They found that females perceived cognitive and interpersonal/intrapersonal skills as more important than did the male participants. Alexander, Guta and Poole (2014) findings revealed that for female college students there are specific strengths and weaknesses in perceived leadership. Male students found more perceive at decision making or overall leadership. While female students dominate in team working and communication skills. Thus, this study hypothesized that:

H<sub>1</sub>: There is a significant positive relationship between gender and development of students' leadership ability through collaborative learning

## **METHODOLOGY**

### **Population and sample**

The unit of analysis is students from the Faculty of Hotel and Tourism Management at a public university that undertook an Introductory Accounting subject. Sixty-five students had to learn the Introductory Accounting subject in the selected semester. Based on purposive sampling, 38

students formed a sample of study. These students have been introduced to collaborative learning (i.e. ICSI approach) from the beginning of the semester for their Introductory Accounting subject. Thus, they fulfilled the criteria as the target group that was involved in collaborative learning (i.e ICSI) approach. Sekaran and Bougie (2010) stated that purposive sampling is “*confined to specific types of people who can provide the desired information, either because they are the only ones who have it, or conform to some criteria set by the researcher*” (p276).

### Data collection and instruments

A survey was conducted at the end of semester to the students who have been exposed with collaborative learning (i.e ICSI), to gauge on the development of leadership ability. Five questionnaire items on Likert-scale of 1 “Strongly disagree” to 5 “Strongly agree” are used to measure the development of leadership ability through collaborative learning. These items were taken from Malm, Bryngfors and Morner (2010).

**Table 1: Leadership ability measurement items**

Label	Items
DLA1	ICSI sessions have given me confident in leading any group discussion
DLA2	ICSI sessions have improved my confident in meeting different individuals
DLA3	ICSI sessions have improved my ability to inspire my friends
DLA4	ICSI sessions have developed my ability to inspire my friends to do the required task
DLA5	ICSI sessions made it easy for me to help my friends with the subject

## EMPIRICAL RESULTS

Based on 38 responses, data was analysed using SPSS software and elaborated in the following sub-sections.

### Respondents’ profile

Table 2 highlights the respondents’ profile, with the majority of respondents (81.6%) are female students. Most students (44.7%) had successfully undergone Matriculation as university entry qualification. More than half (i.e. 60.5%) had no basic in Accounting, and the remaining of 39.5% had learnt basic accounting mostly during Matriculation (53.3%).

**Table 2: Respondents’ profile**

Items	Category	Frequency	Percent
Gender	Male	6	15.8
	Female	31	81.6
	No information provided	1	2.6
Program	HM240	38	100.0
Group	A	9	23.7
	B	12	31.6
	C	10	26.3
	D	6	15.8
Entry Qualification	Diploma	6	15.8
	Matric	17	44.7
	STPM	9	23.7
	Degree	1	2.6
	Foundation	4	10.5

	Others	1	2.6
Basic Knowledge in Accounting Subject	Yes	15	39.5
	No	23	60.5
Previous Learning for Basic Accounting	SPM	6	40.0
	Matriculation	8	53.3
	Diploma	1	6.7

Throughout the semester, these students have been exposed to collaborative learning (i.e. ICSI) for the Introductory Accounting subject. As mentioned in the earlier section, ICSI involved peer-leaders helping peer-students in a group discussion for assigned tutorial questions. The peer-leaders with basic accounting knowledge are expected to collaborate with peer-students (with no basics in accounting) in the learning process to understand the subject matters. In this process, the peer-leaders assist by leading the group discussion and collaborate with the peer-students in solving problems or related tutorial questions. At the end of the semester, these students are required to assess the development of leadership ability through this collaborative learning (i.e. ICSI) approach.

### Normality test

A degree to which the sample data distribution corresponds to a normal distribution is referred to as Normality (Hair, Black, Babin, & Anderson, 2010). This study assessed normality by obtaining skewness and kurtosis values, that measures the symmetrical distribution of a variable and the peak of the variable's distribution, respectively (Hair, Hult, Ringle, & Sarstedt, 2014). In assessing normality, a threshold for skewness value of not more than 3 and for kurtosis value of not more than 10 are acceptable (Chou & Bentler, 1995 and Kline, 1998 in Dayana, 2010). Table 3 reflects the normality test results. The skewness values are not more than 3 and the kurtosis values are not more than 10, therefore indicate that the data is normally distributed.

**Table 3: Normality test**

	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
DLA1	-.033	.388	-.220	.759
DLA2	.220	.388	-.792	.759
DLA3	.484	.388	-.673	.759
DLA4	.371	.388	-.509	.759
DLA5	-.232	.388	.150	.759
MeanLshipAbility	.528	.388	.038	.759

### Reliability analysis

A reliability test of Cronbach's Alpha was conducted to test for internal consistencies of items used to measure leadership ability (Cronbach, 1951), which is reflected by the Cronbach Alpha coefficient of above 0.7 (DeVellis, 2003 in Pallant, 2010). Based on the results in Table 4, the value of 0.886 suggests a very good internal consistency reliability for the scale measuring leadership ability. In addition, the mean inter-item correlation of 0.609 with the range of values from 0.453 to 0.792 suggests quite a strong relationship among the items.

**Table 4: Reliability test**

Reliability Statistics							
Cronbach's Alpha		Cronbach's Alpha Based on Standardized Items			N of Items		
		.886			5		
Item-Total Statistics							
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted		
DLA1	14.95	5.664	.712	.602	.866		
DLA2	14.73	6.369	.566	.329	.896		
DLA3	14.89	5.821	.787	.712	.849		
DLA4	14.95	5.275	.849	.772	.831		
DLA5	14.76	5.856	.726	.601	.862		
Summary Item Statistics							
	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.609	.453	.792	.338	1.747	.015	5

**Mean analysis**

In evaluating the development of leadership ability through collaborative learning (i.e. ICSI), mean analysis was conducted. The mean scores for each measurement item and for overall development of leadership ability items are summarized in Table 5.

**Table 5: Mean score on development of leadership ability**

Development of leadership ability	Mean	S.D	Min	Max
ICSI sessions have given me confident in leading any group discussion (DLA1)	3.62	.758	2	5
ICSI sessions have improved my confident in meeting different individuals (DLA2)	3.84	.688	3	5
ICSI sessions have improved my ability to inspire my friends (DLA3)	3.68	.669	3	5
ICSI sessions have developed my ability to inspire my friends to do the required task (DLA4)	3.62	.758	2	5
ICSI sessions made it easy for me to help my friends with the subject (DLA5)	3.81	.701	2	5
<b>Overall score</b>	3.71	.594	3	5

In interpreting the level mean scores for leadership ability and its five items, the reference is made to the level described by Landell (1997 as cited in Abdul Halim, Sharifah Nurarfah, & Mohd Hilmi, 2017; Hairuzila & Muhammad Ridhuan Tony Lim, 2018).

**Table 6: Interpretation of mean score**

Level of perception	Mean Score
Low	1.00 to 2.33
Medium	2.34 to 3.67
High	3.68 to 5.00

(Source: Landell, 1997 as cited in Abdul Halim et. al., 2017; and, Hairuzila & Muhammad Ridhuan, 2018)

Based on the mean scores in Table 5 and its interpretation in Table 6, students perceived that collaborative learning highly contributes towards the development of their leadership ability, but at a lower end of the score with a value of 3.71. Individual item shows mean score within the range of 3.62 (SD = 0.758) to 3.84 (SD = 0.688). The highest item of “*ICSI sessions have improved my confident in meeting different individuals (DLA2)*” followed by “*ICSI sessions made it easy for me to help my friends with the subject (DLA5)*”, while the lowest two items are “*ICSI sessions have given me confident in leading any group discussion (DLA1)*” and “*ICSI sessions have developed my ability to inspire my friends to do the required task (DLA4)*”. Low standard deviation (SD) values of less than 1.0 indicates consistency in the responses gathered for all the items.

The findings may indicate that the students developed leadership ability partially through collaborative learning. This is not a surprise as the leadership ability may have also been developed through other platforms such as involvement in students’ activities, which is not examined in this study. The results are consistent with a study by Malm et. al., (2010), which indicates that the majority of students develop their leadership ability through a collaborative learning referred to in this study as SI. The other research also revealed a higher sense of responsibility for its leadership experience during the SI sessions (Lockie & Van Lanen, 2008; McGuire, 2006).

### Independent-samples T-test

In testing for the hypothesis of the study, an independent-samples T-test is carried out. The results are summarized in Table 4 below.

**Table 7: Independent samples t-test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean difference	Std. Error difference	95% Confidence Interval of the Difference	
									Lower	Upper
Mean Leadership ability	Equal variances assumed	.036	.851	.991	34	.329	.267	.269	-.280	.814
	Equal variances not assumed			.886	6.526	.407	.267	.301	-.455	.989

Since p value for the Levene’s test (p-value=0.851) is more than  $\alpha=0.05$ , then equal variances are assumed. The results as shown in Table 7 produced no statistically significant differences with p-value=0.329 ( $p>0.05$  at 95% confidence interval), indicating there is no difference between the two groups. Accordingly, it can be concluded that there is no gender difference in the development of leadership ability through collaborative learning. Male and female students are indifference on the perception that collaborative learning helps to develop their leadership ability. This findings is contradict with the past studies that found differences in gender in relation to skills development, namely Nwachukwu (2020); Yarrish, Zula and Davis (2010); and, Alexander, Guta and Poole (2014)

## CONCLUSION

Appropriate teaching approaches in “hard” or “soft” discipline are crucial in enhancing students’ understanding. Not only the knowledge is well delivered and received by students but also the teaching approaches should provide many skills to the students such as soft skills, academic skill, intellectual skills and leadership skills. The universities should be able to achieve certain standards and qualities through the application of suitable teaching approaches.

The observation on ICSI implementation as a collaborative learning approach applied in the classroom of non-majoring accounting students learning Introductory Accounting shows that ICSI is able to stimulate students’ interest in learning accounting courses and enhance their understanding of the course contents. The findings of this study indicate that students perceived that collaborative learning highly contributes towards the development of their leadership ability. In terms of gender, male and female students are indifferent to the perception that collaborative learning helps to develop their leadership ability.

The implementation of ICSI in this study focused on only a group of students at one of the branch campus in a public university. Thus, future research may be extended to a wider group of non-majoring accounting students taking Introductory accounting subjects in other campuses or other universities. Similarly, future research could cover other introductory subjects at the university.

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