

Integrating Communication and Collaboration of 21st Century Learning Skills in Narrative Writing by Using an Online Learning Platform via Mobile Device among Upper Secondary Students in Penang, Malaysia

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Abstract

This research aimed to find out the effectiveness of integrating the main skills of 21st century learning model which are communication and collaboration for developing the main ideas, and organising the ideas into a few paragraphs to write a narrative essay using an online learning platform via mobile device. Henceforth, a narrative writing module was predominantly created to carry out this study which is known as 4C's to WRITE module. This research used a case study which incorporated a mixed-method research design. The sample of this study consisted of the Form 4 students in a national secondary school in Butterworth, Penang. The study involved 30 students as a sample of this study. In the process of data collection, the researcher used pre-test, post-test, participant observation, and document analysis. This study found that there was an improvement in students' narrative writing skills from the post-test. The outcomes from participant observation and document analysis by using a few common themes revealed that students were able to progress in identifying the main ideas and organising the ideas into a few paragraphs. Therefore, it could be concluded that using communication and collaboration skills via technologies significantly affect students' narrative writing skills.

Keywords: 4C's, Communication, Collaboration, Mobile Device, Narrative Writing

Introduction

Students need to master their writing skills comprehensively as these skills help them at later stages of education, especially at a higher level, as well as in professional life. The Ministry of Education of Malaysia has done many improvement pathways to help the students to improve their language proficiency. The hopes of various implementation have been done in Malaysia with the objective of the government to enable all Malaysians to improve their English language.

Some of the initiatives by the government were incorporating the use of technology platforms in teaching and learning English language as stated in the Shift 7 of the Malaysian Education Blueprint (2013-2025); Nawawi et al (2021), as well as implementing new programme as English Language Education Reform to establish students' proficiency level in English language (Nawawi et al., 2021). In 2017, a new Secondary School Standard Curriculum (KSSM) associated with Common European Framework of Reference (CEFR) for English language was introduced in Malaysian secondary schools (Ghulamuddin et al., 2021).

Consequently, the researcher in the current study chose to integrate the use of the two main skills of 21st century learning skills which are communication and collaboration in activities by using the 4C's to WRITE module. This integration would enable the upper secondary students to construct the main ideas and organise their ideas or the elements of plot in a few paragraphs for narrative writing. Narrative writing is focused because students need to share their life experience or provide their thoughts when compared with other types of essays. However, they are unable to score high marks in narrative essay as they are unable to construct relevant main idea and have problems in organising their ideas in a few paragraphs (Firmansyah, 2015 cited in Selvaraj et al., 2020). Thus, two research questions are navigated in the study, which are

- (a) Is there any significance effect of using communication and collaboration skills-based activities in developing main ideas and organisation skills (plot) to write a narrative essay?
- (b) How does the 4C's to WRITE module enable students to complete their activities to improve narrative writing skills by using an online learning platform via mobile device?

Literature Review*Narrative Writing Skills*

Narrative writing is a type of essay which requires the students to write an essay by incorporating all the elements of narrative essay, such as plot, characters, setting, events, and moral values. Hence, to compose a good narrative writing, the key elements play a central role (Selvaraj & Aziz, 2021). It reveals that the classroom practices and using the same teaching approaches are not sufficient for improving narrative writing, but students need more exercises to write a good piece of narrative essay (Ghulamuddin et al., 2021). Henceforth, educators need to use different approaches to teach this essay for the students in Malaysia. Planning writing exercises after school hours by using a technology platform would be a good idea to enhance students to improve their narrative writing skills.

Implementation of the 21st Century Learning Skills Model to Teach Narrative Writing Skills

In this globalisation era, the educators need to impose various types of teaching approaches to enable the upper secondary students to improve their narrative writing skills. One of the learning skills that the educators could utilise is by using the 21st century learning skills to teach narrative writing. The main 21st century learning skills are communication, collaboration, critical thinking, and creativity thinking (4C's). Reshid and Jeyaraj (2022)

indicated that the accountability of applying the 4C's is very essential in vision to accomplish Malaysia Education Blueprint (MEB 2013-2025) (Nawawi et al., 2021).

Communication is known as the capability of students to arrange their ideas, thoughts and findings, as well as able to share them effectively using verbally or in written (Limna et al., 2022). Collaboration is defined as students working together in their group to achieve a goal, as well as putting talent, experience, and their intelligences to complete their tasks (Chiruguru & Chiruguru, 2020). On the other hand, critical thinking is a development phase that purposes to make a sensible process decision about what people believe and do, as well as it is a higher-order thinking skill phase (Supena et al., 2021). Creativity thinking is implementing a new approach or technique to enable to complete a given task (Chiruguru & Chiruguru, 2020).

In this study, two main skills, such as communication and collaboration are analysed. These two main skills would enable the students to communicate and collaborate with one another through the given activities from the 4C's to WRITE module. Arifani et al (2020) elucidated that group activities were found to develop students' interest to participate in a learning session and these group activities would subsequently expand their knowledge in that related field. It is believed that when students practise narrative writing skills with their group members, it enables them to communicate and collaborate with their group members by using their mobile device to write better in their narrative essay.

Incorporating an Online Learning Platform via Mobile Device to teach Narrative Writing Skills Including technology platforms to teach writing skills has a high possibility to help them to develop their writing ability (Budiarta & Santosa, 2020). Choosing a right online learning platform is an important aspect which would help students to practise narrative writing with their friends. In this study, the researcher had included Google Classroom to learn the aspects of narrative writing via their mobile device.

There were many past studies that explained the usage of Google Classroom to practise writing skills shown positive effects. The usage of Google Classroom helps students to practise without any bound by time and space (Laili & Muflihah, 2020). Besides that, educators are able to use blended learning environment to practise writing skills, as well as students are able to communicate and collaborate with their group members and use their creativity to practice writing skills when compared with the conventional learning methods (Warman, 2021).

Furthermore, students can use their mobile device to log into Google Classroom to do their assignments. Using mobile device is convenient and easy as they can use their device anytime and anywhere to communicate and collaborate with their group members (Dias & Victor, 2022). Apart from that, using mobile device enables students to immediately clear their doubts by looking at various resources to before completing their activities. Henceforth, it motivates students to learn better in the new learning environment (Gupta et al., 2021).

Gaps from the Previous Studies and the Current Study

After reviewing the importance of communication and collaboration skills from the past studies, it has a gap that very few studies have been conducted in Malaysian National secondary schools to integrate the two skills which are communication and collaboration skill to boost students' ability to construct main ideas and organising their ideas in a few paragraphs for narrative writing skills. Aside from that, there are very few studies that have been carried out by using these two skills through an online learning platform via mobile device in Malaysian national secondary schools to practise narrative writing elements. On the

other spectrum, this study has established a narrative module which would serve a guideline for educators while using technologies to teach narrative writing skills for the students.

Accordingly, the usefulness of communication and collaboration skills to develop students' knowledge to create main ideas and organising skill to narrate a narrative essay is analysed. It is observed that the usefulness of employing technologies in developing narrative writing skills for upper secondary students in Malaysian National schools and the usefulness of using a proper writing module are imperative to be investigated to guide the students to practise narrative writing skills.

Methodology

Participants

The researcher used a purposive sampling method in this study. There were 30 students who participated in this study. They are students from Form 4 class. They took part in the treatment process for eight weeks. They were supposed to allocate about 20 minutes of their time every day from Monday to Friday to complete the given activities. Every day, they practised one element of narrative writing skills from the created module.

Data Collection Methods

The data in this study were collected by using a mixed-method design. The data for quantitative study were collected by conducting the pre-test and post-test with the students. The qualitative data were gathered through participant observation and document analysis by using a checklist. The total duration to conduct this study was 10 weeks, in which the researcher had divided the activities from Week 1 to Week 10 for conducting the pre-test and post-test. For Week 2 to Week 9, a treatment by using Google Classroom was done in this study. The activities were carried out from the 4C's to WRITE module.

The total number of students was 30 and they were divided to six groups. The students in this study would communicate and collaborate for constructing main ideas and organising the ideas in a few paragraphs for the first section. Then, each Friday, they were required to write their individual task which was their narrative writing assessment. This assessment required them to write their narrative essay of about 250 words.

Instruments

Pre-Test and Post-Test

The researcher included the pre-test and post-test to investigate the usefulness of integrating the main two skills which were communication and collaboration to determine whether both communication and collaboration skills helped the students to improve their knowledge and understanding to create main ideas and organise their ideas in a few paragraphs for a narrative writing. The pre-test and post-test essays would be marked by the language teacher and the marks would be given to the researcher.

Participant Observation

In this study, the purpose of participant observation was to observe the students' activities in their group. It was employed to examine whether they were able to use the Google Classroom via mobile device to communicate and collaborate to complete the given activities. The researcher had observed the students' activities by using a checklist.

Document Analysis

After completing all the given assignments, at the end of each week which was Friday, the students were requested to write a narrative essay as their summative assessment. The aim of asking them to take part in the individual writing task was to determine whether they were able to construct main ideas and organise their ideas in a few paragraphs to produce a good piece of a storyline. They needed to write their essay of about 250 words. Finally, the language teacher would check 240 summative essays used the given checklist by the researcher.

Data Analysis

Before marking the pre-test and post-test narrative essays, the researcher created a marking rubric based on Brown's (2007); Jacobs et al.'s (1981); Wong (1989) marking rubrics. It contained four elements which were on main idea or content, organisation or the elements of plot, vocabulary, and grammar. Each element consists of five marks. As a result, the total mark was 20. For analysis of quantitative data, the researcher used Statistical Package for the Social Sciences (SPSS) version 25 to demonstrate the pre-test and post-test data. Additionally, since the researcher would use the same group of students to be involved in pre-test and post-test, paired samples t-test was used to classify the difference between two mean scores of the same group. The significance range was set at 0.5 for both essays.

Findings and Discussion

Quantitative Data from Pre-and Post-test

The results show that the students improved in their narrative writing because there is a difference between the pre-test scores (9.97) and post-test scores (16.00) which is 6.03 (see Table 1).

Table 1

Descriptive statistics for pre- and post-tests' scores

		Mean (upon 20)	N	Std.Deviation	Std.Error Mean
Pair 1	Overall Marks for Pre-Test	9.9667	30	1.93842	.35391
	Overall Marks for Post-Test	16.0000	30	1.94759	.35558

From Table 1, the result of the within group comparison indicates that the students' post-test ($M=16.00$, $SD=1.95$) is significantly higher than their pre-test ($M=9.97$, $SD=1.94$). The significance of the mean difference between the students' scores in the pre-test essay and post-test essay was notified (see Table 2).

Table 2

Paired samples t-test results

		Mean (upon t 20)	t	df	Sig. (2- tailed)
Pair 1	Overall Marks for Pre-Test	-6.03333	-21.429	29	.000
	Overall Marks for Post-Test				

* Correlation is significant at the .05 level (2-tailed)

Table 2 indicates that the mean difference of 6.00 between the pre-test and post-test scores is statistically significant, $(29) = 21.43, p = .00$. Therefore, the result claims that the communication and collaboration skills-based activities developed the students' elements for main idea and organisation skill for writing a narrative essay. This finding is similar to Jong and Tan's (2021) study, which indicated that using a proper teaching method via an online learning platform is evidential for students to improve their writing skills.

Moreover, an analysis for each element of narrative writing (main idea, organisation or plot, grammar, and vocabulary) was carried out. Table 3 shows that the students' pre-test scores for each dimension are significantly lower than their post-test scores.

Table 3

Descriptive statistics for pre- and post-tests' scores (n = 30)

Dimensions	Mean	Std. Deviation
Pair 1		
Main Idea for Pre-test	2.7667	.72793
Main Idea for Post-test	4.3333	.66089
Pair 2		
Organisation/Plot for Pre-Test	2.5000	.73108
Organisation/Plot for Post-test	4.2333	.77385
Pair 3		
Grammar for Pre-Test	2.4000	.41827
Grammar for Post-test	3.8333	.59209
Pair 4		
Vocabulary for Pre-Test	2.3000	.53498
Vocabulary for Post-Test	3.6667	.60648

The mean difference between the pre-test and post-test scores for each dimension were verified for their statistical significance using paired samples t-test. Table 4 indicates the SPSS output for these tests.

Table 4

Paired samples t-test results

	Mean	t	Df	Sig. (2-tailed)
Pair 1				
Main Idea for Pre-test	-1.56667	-11.788	29	0.00
Main Idea for Post-test				
Pair 2				
Organisation/Plot for Pre-Test	-1.73333	-12.835	29	0.00
Organisation/Plot for Post-test				
Pair 3				
Grammar for Pre-Test	-1.43333	-13.814	29	0.00
Grammar for Post-test				
Pair 4				
Vocabulary for Pre-Test	-1.36667	-15.272	29	0.00
Vocabulary for Post-Test				

*Correlation is significant at the .05 level (2-tailed)

The findings demonstrate that all the mean differences between the pre-test and post-test scores for each dimension are statistically significant. The differences between the pre-test and post-test scores for main idea [$t(29) = -11.79, p = .000$], organisation or plot [$t(29) = -12.84, p = .000$], grammar [$t(29) = -13.81, p = .000$], and vocabulary [$t(29) = -15.27, p = .000$] are statistically significant. Since the significant value, p is less than .05, this means that main idea, organisation or plot, grammar, and vocabulary integration to write a narrative essay has shown positive feedback by using a narrative module.

Qualitative Data from Participant Observation and Document Analysis

Data for the participant observation and document analysis were collected by using a checklist. Data were organised according to common themes.

Participant Observation

There were 24 items for participant observation. The usefulness of communication and collaboration in narrative writing activities via Google Classroom was examined by using five scales which were “very frequently (VF),” “frequently (F),” “occasionally (O),” “very rarely (VR),” and “never (N)”. The scales were listed according to the time that the participants spent while doing their tasks. In other words, for the scale of “very frequently”, they spent more than 15 minutes to do their assignment. Moreover, the time taken for the scale “frequently” was 11 to 15 minutes, the scale “occasionally” was 6 to 10 minutes, the scale “very rarely” was 1 to 5 minutes, and the scale “never” was 0 minutes. Then, the researcher divided the findings from the checklist to some common themes, as communication, collaboration, and the usability of Google Classroom in this study. The researcher observed each item by ticking an appropriate scale (see Appendix 1).

For Week 1, the students from the first three groups were able to occasionally communicate and collaborate with their group members to complete the given activities. Students from another two groups had communicated and collaborated rarely to complete the given activities and students from one group had never done any discussion by using the Google Classroom but they used WhatsApp to communicate and collaborate to complete the activities. This is because the students faced some difficulties as they misinterpreted the giving instruction wrongly. Apart from that, students just occasionally used their mobile device to log into Google Classroom to do their activities with their group members.

For Week 2, students from all six groups were able to communicate and collaborate to complete their activities occasionally by using the Google Classroom via their mobile device. None of them used another online platform to communicate and collaborate. For Week 3 and Week 4, students were able to frequently communicate and collaborate with their group members to complete the given activities. In addition, they started to spend more than 10 minutes and discussed each question acutely before uploading the worksheet, frequently used their Google Classroom via mobile device and helped one another to find the answers for the given worksheets.

For Week 5, the students were able to spend about 15 minutes and provide a lengthy idea for each question. They were able to understand the two elements (main idea and plot) well because they were able to list down the main ideas and elements of plot without any mistakes. They were also able to frequently use the Google Classroom via their mobile device. For Week 6, Week 7 and Week 8, the students had shown a good progress as they communicated and collaborated very frequently with their group members. Other than that, they were able to conduct more relevant discussions to complete the activities. Furthermore, they were able to communicate and collaborate more formally when compared with the first week. They spent about 15 to 20 minutes as they understood to construct the main ideas and the elements of plot. In addition, they did not face any difficulties to use the Google Classroom.

Document Analysis

The researcher had checked 240 summative essays of the students and had evaluated their summative assessment for narrative writing using a checklist (see Appendix 2). It encompassed 26 items, in which 10 items were for main ideas and plot and the remaining 16

items were for grammar and vocabulary elements. The researcher had divided each item into “done”, “pending” and “not applicable”. The items were also divided into a few themes. When the students were able to use at least three main ideas to write a narrative essay, differentiate the main ideas and the elements of plot, include the five story to tell the story, and apply some themes or provide messages for the readers, they would be grouped under main ideas theme. For the theme of organisation or elements of plot, the students would be able to organise their paragraphs by including the elements of plot, write an appropriate introduction by introducing the characters and setting in the first paragraph, write a paragraph of rising action by including events that begin to lead to the conflict and climax, write a paragraph of climax where they were able to identify how a problem that the character(s) must overcome, write a paragraph of falling action by identifying or including ideas of resolving problem(s) which leads to the resolution, as well as write a paragraph of conclusion where matters are resolved and the moral value(s) or lesson(s) is mentioned.

The findings of Week 1 stated the students were still unable to include all the elements accordingly. The researcher ticked “pending” and “not applicable” as the students were not able to provide a minimum of three main ideas. Not all the students included the five senses to write their story, and they were unable to find some good themes. Besides that, for the elements of plot, they were still unable to write into a few paragraphs and describe a good introduction. Not everyone was also able to use the elements of plot to write their story. The students were still unable to incorporate some moral values and failed to include the elements of suspense. For Week 2, the researcher had ticked “pending” for 30 essays. For Week 2, students started to construct at least two ideas, as well as describe their storyline by using a few senses and very minimal themes. Additionally, for the elements of plot, the students were able to create an introduction about three to four sentences, present some main characters and include some events. However, they still lacked maturity in creating a climax and exposition by including some moral values.

For Week 3 and Week 4, the students started to show some progress as the researcher ticked “done” and “pending” for 30 essays. This is because the students were able to create at least three main ideas, include some senses to construct their storyline, as well as differentiate the elements of plot and main ideas. In addition, students started to construct a proper introduction by including the main characters and setting, some events with minimal explanation, as well as generation of ideas for the rising action, climax, falling action, and moral values for the resolution. For Week 5 and Week 6, the students had shown a good progress as they did not have any difficulties to construct the main ideas, use five senses to construct their ideas and apply proper themes. For the elements of plot, they were able to differentiate the main ideas and the elements of plot, as well as include some suspense and moral values.

For Week 7 and Week 8, the students did not face any difficulties as they mastered to construct the main ideas, include five senses to construct their ideas throughout the writing process and applied the themes appropriately. On top of that, for the elements of plot, the students were able to write their narrative essay into a few paragraphs, as well as introduce some main and minor characters accordingly. The events were also very relevant because the students were able to use different types of setting correctly, as well as interpret the ideas for rising action, climax, falling action, and resolution without any major problems. The students were also able to provide a good conclusion with moral values by summarising the whole story.

Conclusion

Students' narrative writing skills for developing main ideas and organisation skill improved as a result of using the two main skills of 21st century learning through activities and group work. Students are encouraged to collaborate and communicate with their friends in their learning process to improve their narrative writing abilities. After the treatment, for post-test, students were able to show maturity in their storyline writing with better organisation. Consistent activities among their group members enabled them to communicate and collaborate to identify proper main ideas and the elements of plot for writing their essay in a few paragraphs.

Therefore, using online learning platform after school hours by integrating the skills of communication and collaboration would enable them to discuss with their group members. They would be able to list down proper main ideas and organise the ideas in a few paragraphs by providing relevant supporting details to allow the storyline to flow smoothly. Moreover, when they were divided to their group, it allowed them to mingle with groups of members with different cultural backgrounds and levels of proficiency to provide them with an opportunity to look at things from different perspectives. This would aid them to include those ideas into their narrative writing.

Other than that, using the online learning platform to learn writing skills is prevalent as it helps the students to become competent to respond to their friends' comments in order for them to construct more appropriate main ideas and organise the ideas in a few paragraphs. When students are reading their friends' comments and narrative essays, it guides them to develop their thinking ability more critically and creatively.

Suggestions

A few suggestions could be carried out in the future studies. Firstly, the duration for practising the narrative writing process or other types of essays should be longer as this would assist the students to write a good essay (Rezai et al., 2022). Secondly, educators would need to prepare a complete module which contains a series of activities to foster narrative writing abilities among students and educators need to prepare a complete material set to foster other types of essays among upper secondary students before they sit for their public examinations. This shows that by using a proper module as a guideline, it helps the educators, as well as the students to follow the instructions accordingly while using technology platform (Singh et al., 2020).

Co-Author Contribution

The first author in this study searched for relevant articles, carried out the study and analysed the data. On the other hand, the second, third and fourth authors contributed their ideas and revised the manuscript.

References

- Arifani, Y., Asari, S., Anwar, K., & Budianto, L. (2020). Individual or collaborative Whatsapp learning? A flipped classroom model of EFL writing instruction. *Teaching English with Technology*, 20(1), 122-139.
- Brown, J. D. (2007). *Multiple views of L1 writing score reliability*. University of Hawai'i Second Language.
- Budiarta, I. K., & Santosa, M. H. (2020). TPS-Flipgrid: Transforming EFL speaking class in the 21st century. *English Review: Journal of English Education*, 9(1), 13-20.

- Chiruguru, S. B., & Chiruguru, S. (2020). *The essential skills of 21st century classroom (4Cs)*. Shingania University.
- Dias, L., & Victor, A. (2022). Teaching and learning with mobile devices in the 21st century digital world: Benefits and challenges. *European Journal of Multidisciplinary Studies*, 7(1), 26-34.
- Firmansyah, A. (2015). The influence of mind mapping technique and students' attitude toward students' ability in writing a recount text of the eighth grade students of State Junior High School 45 Palembang. *Ripteksi Kependidikan PGRI*.
- Ghulamuddin, N. J. A., Mohari, S. K. M., & Ariffin, K. (2021). Discovering writing difficulties of Malay ESL primary school level students. *International Journal of Linguistics and Translation Studies*, 2(1), 27-39.
- Gupta, P., Kumar, V., & Yadav, V. (2021). Student's perception towards mobile learning using internet enabled mobile devices during COVID-19. *EAI Endorsed Transactions on Industrial Networks and Intelligent Systems*, 8(29), Article e1.
- Jong, B., & Tan, K. H. (2021). Using padlet as a technological tool for assessment of students' writing skills in online classroom settings. *International Journal of Education and Practice*, 9(2), 411-423.
- Laili, E. N., & Muflihah, T. (2020). The effectiveness of google classroom in teaching writing of recount text for senior high schools. *Journal of Languages and Language Teaching*, 8(4), 348-359.
- Limna, P., Siripipattanakul, S., Phayaphrom, B., & Siripipattanakul, S. (2022). The relationship between twenty-first-century learning model (4Cs), student satisfaction and student performance-effectiveness. *International Journal of Behavioral Analytics*, 2(1), 1-18.
- Nawawi, N. M., Zuhaimi, N., Sabu, K., Mahamud, N. S. R., & Nasir, N. A. M. (2021). CEFR for languages and its effective implementation in secondary schools in Malaysia. *Asian Journal of Assessment in Teaching and Learning*, 11(1), 63-72.
- Rezai, A., Namaziandost, E., & Rahimi, S. (2022). Developmental potential of self-assessment reports for high school students' writing skills: A qualitative study. *Teaching English as a Second Language Quarterly (Formerly Journal of Teaching Language Skills)*, 41(2), 163-203.
- Selvaraj, M., Aziz, A. A., Mariam, S. T., & Pahat, B. (2020). Utilizing flow chart in writing narrative essay: English as second language students' perceptions. *International Journal of Academic Research in Business and Social Sciences*, 10(3), 1-16.
- Singh, C. K. S., Gopal, R., Ong, E. T., Singh, T. S. M., Mostafa, N. A., & Singh, R. K. A. (2020). ESL teachers' strategies to foster higher-order thinking skills to teach writing. *Malaysian Journal of Learning and Instruction*, 17(2), 195-226.
- Supena, I., Darmuki, A., & Hariyadi, A. (2021). The influence of 4C (constructive, critical, creativity, collaborative) learning model on students' learning outcomes. *International Journal of Instruction*, 14(3), 873-892.
- Warman, L. A. D. (2021). The effect of Google classroom in blended learning on university students' English ability. *J-SHMIC: Journal of English for Academic*, 8(1), 12-23.
- Wong, H. (1989). *The development of a qualitative writing scale*. Universiti Kebangsaan Malaysia.

Appendices

Appendix 1

Table 5

Total student participation of Group 1 to Group 6 from Week 1 to Week 4

Item	Week 1					Week 2					Week 3					Week 4					
	VF	F	O	VR	N	VF	F	O	VR	N	VF	F	O	VR	N	VF	F	O	VR	N	
1			3	2	1			6				6					6				
2			3	2	1			6				6					6				
3			3	2	1			6				6					6				
4			3	2	1			6				6					6				
5			3	2	1			6				6					6				
6			3	2	1			6				6					6				
7			3	2	1			6				6					6				
8			3	2	1			6				6					6				
9			3	2	1			6				6					6				
10			3	2	1			6				6					6				
11			3	2	1			6				6					6				
12			3	2	1			6				6					6				
13			3	2	1			6				6					6				
14			3	2	1			6				6					6				
15			3	2	1			6				6					6				
16			3	2	1			6				6					6				
17			3	2	1			6				6					6				
18			3	2	1			6				6					6				
19			3	2	1			6				6					6				
20			3	2	1			6				6					6				
21			3	2	1			6				6					6				
22			3	2	1			6				6					6				
23			3	2	1			6				6					6				
24			3	2	1			6				6					6				

Note: Note: VF-Very Frequently, F-Frequently, O-Occasionally, VR-Very Rarely, N-Never

Table 6

Total student participation of Group 1 to Group 6 from Week 5 to Week 8

Week 5					Week 6					Week 7					Week 8					
VF	F	O	VR	N	VF	F	O	VR	N	VF	F	O	VR	N	VF	F	O	VR	N	
	6				6					6					6					
	6				6					6					6					
	6				6					6					6					
	6				6					6					6					
	6				6					6					6					
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