Jurnal Penelitian dan Pengkajian Ilmu Pendidikan: e-Saintika
https://journal-center.litpam.com/index.php/e-Saintika/index

November 2022 Vol. 6, No. 3
e-ISSN: 2615-6881
pp. 137-156

Comics as a Teaching and Learning Strategy in Primary Social Studies Lessons

[1] Hamizah Sani, [2] Jainatul Halida Jaidin, [2*] Masitah Shahrill, [2] Rosmawijah Jawawi

[1] Sekolah Kesuma Mekar, Gadong, Brunei Darussalam
[2] Sultan Hassanal Bolkiah Institute of Education, Universiti Brunei Darussalam, Brunei Darussalam

* Corresponding Author e-mail: masitah.shahrill@ubd.edu.bn

Received: November 2022; Revised: November 2022; Published: November 2022

Abstract

The use of comics in the educational field is notable for their ability to motivate and attract students' attention. This study explores the impacts of comics as a teaching and learning strategy on the topic of 'Our Communication' in a Year 4 primary Social Studies class in Brunei Darussalam. The study addressed the questions on the effectiveness of comics in retaining knowledge and students' perceptions about their use. Action research is the designated method for this study, and two cycles were conducted on different samples. The samples consisted of 18 students for Cycle 1 and 14 students for Cycle 2, both from the same government school. Intervention lessons were conducted, and semi-structured interviews on randomly selected participants. Students' views on using comics in the classroom can be derived from dominant themes developed through thematic analysis. The findings indicated that students have a positive attitude toward applying comics in the lesson. This study concludes that comics are effective as teaching material in Social Studies.

Keywords: Comics; Teaching and Learning Strategy; Social Studies; Student Perspectives; Primary

How to Cite: Sani, H., Jaidin, J. H., Shahrill, M., & Jawawi, R. (2022). Comics as a Teaching and Learning Strategy in Primary Social Studies Lessons. *Jurnal Penelitian Dan Pengkajian Ilmu Pendidikan: E-Saintika*, *6*(3), 137–156. https://doi.org/10.36312/esaintika.v6i3.941

https://doi.org/10.36312/esaintika.v6i3.941

INTRODUCTION

Comics are a type of visual aid in teaching and learning. Visual images play a prominent role in daily language and as a learning mode for 21st-century students (Cramer, 2014). Comics are unique and part of the world's highly well-known literature (Zhao & Mahrt, 2018). In a classroom, comics are undeniably beneficial for improving Literacy and attending to the learners' varied educational needs (Ahmadi et al., 2017). According to Krishnan and Othman (2016), using comics in a primary classroom is popular among children, and comics are an excellent method for promoting children's creative thinking skills (Koutnikova, 2017). Comics as a teaching tool are essentially interesting and attention-grabbing through the displayed images; these produce motivated students and engagement in a classroom (Blanch & Mulvihill, 2013). Teaching with comics has been applied to various subjects, notably historical and literary materials (Azman et al., 2016). Hence, the focus of this present study is on Social Studies in primary education.

LITERATURE REVIEW

Comics have broad and varied meanings. Their changing and distinct styles make it challenging to produce a detailed description (Romagnoli, 2014). According to Zagkotas (2018), comics are identified as "a narrative and visual art that allows, through a succession of drawings accompanied by a text, a reference to an act whose evolution is performed by jumping from one image to another without interrupting its sequence" (p. 1). Meanwhile, Jackson (2009) used the term sequential art, which means "the sequence of words and images typically seen in graphic novels, comic books, web comics and comic strips" (p. 5). Romagnoli (2014), however, separated graphic novels from comics; the former differs from the latter through its length and content. Graphic novels are often longer and cover humorless stories (Romagnoli, 2014). The opinion of comic strips as independent material instead of an alternative name for comics varies (Koutnikova, 2017).

Researchers agreed that the precise establishment of comics could not be dated (Koutnikova, 2017). Nonetheless, people have associated comics with image-based stories since the beginning; for example, ancient cave murals are considered prehistoric comics (Koutnikova, 2017). While the history of comics' formation is unclear, people in the past were known to use comics as a mode for distributing information and entertainment (Abu Bakar, 2014). There are at least three structures of a comic that distinguish it from other literature: the panels, where the storyline is portrayed in the chosen frame; the thought or speech balloons, where the characters' scripts are displayed; and the expression for sound words, such as BOOM and Zzzz (Zhao & Mahrt, 2018).

The use of comics to assist and enhance educational objectives is a growing tendency today (Ahmadi et al., 2017; Chu & Toh, 2020; Toh & Cheng, 2022). W. W. Sones was one of the first scholars to experiment with using comics in a classroom (Blanch & Mulvihill, 2013; Zagkotas, 2018), deducing that the medium is helpful as a teaching instrument (Zagkotas, 2018). The involvement of comics in education shortly drew the attention of Fredric Wertham (Ahmadi et al., 2017) – a psychiatrist who published a book in 1954 that denounced comics for their portrayals of violence and ostensibly suggestive themes as well as their adverse effects on children (Ndalianis, 2011). Wertham claimed that such an approach of utilizing comics in education was "an all-time low in American science" (Ahmadi et al., 2017, p. 56). His arguments, however, were criticized due to the lack of scientific evidence (Beaty, 2005).

Nonetheless, such was one of the reasons why comics were impeded from fully being developed into intensive teaching instruments (Barbre, 2018). In a primary classroom, the media can also be used as an additional method for varying ways of presenting a particular lesson (Koutnikova, 2017). In research on the use of comics in education, Özdemir (2010) concluded that there are three ways of utilizing the media in the lesson: As an induction set, as the students' activity and as an assessment device. Barbre (2018) proposed using comics for a group discussion which is fundamental to learning progress.

Drawing teachers' recognition of comics stemmed from formulating motivations for learning by "illustrating information" (Zagkotas, 2018, p. 2). Illustrated stories are well admired; they provoke pupils' interest and allow explicit teaching by intermixing visuals and texts, decreasing time consumption (Zagkotas, 2018). Correspondingly, the nature of comics as an entertainment tool (Jacobs, 2007) can make the learning progression enjoyable and lively (Krishnan & Othman, 2016). This, in turn, would

alter the students' perspectives on learning to positive and consequently improve their learning accomplishments (Krishnan & Othman, 2016). In light of Fredric Wertham's opposition to comics as an educational approach, Ahmadi and colleagues (2017) argued that the drawings "give life to classrooms, they promote students engagement, they improve students' learning, they prolong student's attention span, and they also enhance student's communicative and linguistic competences" (p. 56).

According to Arinii et al. (2017), comics permit students to learn through texts and drawings; children, in particular, often choose comics over traditional texts as they provide the visual arts accompanied by dialogues. Barbre (2018) argued that while textbooks are the primary vessel for transferring information to students, other plausible means to deliver texts may also be used. Congruently, comic books are applicable as they present such texts in striking visuals; he quoted that the comic books "present information in the ways that are visually engaging and meets every level of quality that a traditional textbook could hope to do" (p. 52). Krishnan and Othman (2016) also noted that comics can solve pupils' challenges in recalling or simplifying complex facts and concepts. The scarcity of words in comics stimulates children's creativity and critical thinking and initiates discussions (Krishnan & Othman, 2016). The medium's words and the dialogue's humor often assist the students in better comprehension (Mahir et al., 2016).

Several studies from neighboring countries that included pre- and post-assessments have shown a remarkable increase in students' achievements from learning through comics. Krishnan and Othman's study (2016) on Year 5 primary students for a Science subject in Malaysia showed a significant increase in the scores of their post-test compared to their pre-test, which was given before the intervention with comics. In Indonesia, an action research by Sanjaya (2017) discovered an apparent improvement in the students' scores on vocabulary knowledge after using comics. Another study by Kamil et al. (2017) on comics as a learning media found an increase in eighth-grade students' achievements in reading comprehension. Meanwhile, Nur Fadhila and Widodo (2019) found a significant improvement in the lower secondary students' performance on Science topics after applying educational comics as the learning instrument.

In order to utilize comics for young learners and improve their learning progress, there should be thorough preparation and consideration of the topic to be taught. The pictures should be assimilated with a concrete story, for instance, characters debating on a particular phenomenon (Koutnikova, 2017). It would be helpful if the debated event mirrors a real-life situation – this would urge the children to think and activate their problem-solving skills.

Studies on using comics in a classroom specifically for the Social Studies subject are scarce. Nevertheless, there is research on applying comics in History, the most common and Geography classrooms, which are essentially separate components of Social Studies. There is also a relevant study on how comics can cause better information retention, a prerequisite for the text-filled subject.

Abu Bakar (2014) studied using comic strips for teaching History in a Bruneian secondary classroom. The class activity was to create a comic based on the topic learned. Visual aids were provided to clarify the task. The findings showed that only four out of 16 had positive feedback and only 25 per cent of the students scored higher in the post-test. These were the students who performed well in the comic activity. The students felt that the comic creation was irrelevant where the examination was

concerned, which required them to write extensively in words. Further observation and analysis also showed that the comic-making activity was scorned by the students and teachers, along with comic-creating skills, as an unnecessary requirement.

A study by Sharpe and Izadkhah (2014) recorded how using comics as a learning tool for preschool children promotes better learning outcomes in studying earthquakes. The topic, 'earthquake and safety issues', reflects basic Geography. The research was also to test whether the media affects students' engagement. To investigate this matter, their original comic strip instrument was narrated in a story – as consideration of the students' young age – and its use was observed. The children had a basic knowledge of the topic. The lessons proceeded with a heightened amount of student engagement in the discussion. The children found the comics interesting and reflected on them in a real-life setting. After teaching them the comic, the children were asked to narrate their perceptions of the story in a blank version of the comic strips filled with characters and speech balloons. This task allowed the children to learn deeper about the information processing theory, retaining the safety messages longer. The results of this study showed that comic strips have a positive outcome on engaging preschool children and developing their understanding of the subject.

A related study on the use of comics in a Year 5 primary Science classroom in Brunei (Phoon, 2017; Phoon et al., 2020) involved the design and creation of comics used as a teaching tool in educating the plant system. In the comics, the character resembled a plant-human and addressed the audience in a friendly manner. The character continued to explain the structures of a plant in a simple, plain background, eliminating any distractions. Group tasks and real-life objects accompanied three intervention lessons. The results showed that the students scored higher in the post-test. Three significant themes were depicted from the student interviews: a) enjoyment, b) engagement, and c) positive view of using comics in the classroom. Generally, most of the students agreed that the medium was engaging, fun and more straightforward to comprehend. The overall findings revealed that students' motivation and engagement could be attained by implementing comics as a teaching tool. Although the students were not involved in comic-making, most enjoyed the class. Similar findings were also observed in several studies involving comics for the Mathematics subject in Brunei (Azamain et al., 2020; Batrisyia et al., 2020; Musa et al., 2020; Shahrill et al., 2022).

This present study investigates the impacts of comics as a teaching and learning strategy in studying 'Our Communication' in the Year 4 Social Studies classroom. This study aims to explore students' perceptions of using comics in the Year 4 Social Studies classroom. The research question guiding this study is "What are the views of Year 4 students on using comics in the classroom?"

METHOD

The research design for this study is action research. This method is one of the preferred methodological approaches for short-term, small-scale and school-based research, which are the characteristics of this study (Wilson, 2017a). Action research can be described as investigating an actual school or classroom condition and enhancing the quality of instructions or actions (Johnson, 2012). Norton (2009) stated that reflection is crucial for the interventions to be effective as it requires revising the current practice to develop an amended and upgraded framework. Action research is

a cycle; the number of phases within a cycle varies depending on the research (McAteer, 2013). For this study, the 'Plan-Act-Observe-Reflect' cycle was utilized.

Considering this research was conducted in two cycles, the second cycle is equipped with a revised plan, see Figure 1. The plan stage is where researchers determine ways to teach the issue and how to collect and analyze the data; the act and observe stages are for implementing the new teaching strategy as well as collecting data; the final stage, reflect, is for analyzing the findings (Wilson, 2017b). The revised plan is an amended version of the first cycle. The lesson cycle procedure can be referred to in Appendix 1.

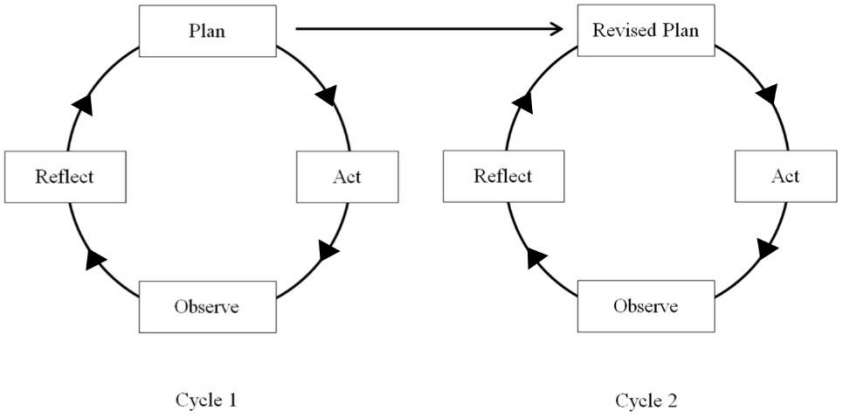

Figure 1. The 'Plan-Act-Observe-Reflect' Cycle adapted from Lau (2013)

Participants of the Study

The participants in this study were upper primary (Year 4) Social Studies students of mixed gender from a government school. Cycle 1 had 18 eligible participants, whereas Cycle 2 had 14. The age of participants was 10 to 11 years old. They were students of mixed races. Generally, the sampling is convenience, a variety of non-probability sampling as the first author, also referred to as the teacher-researcher, conducted the study in her classroom. Permission and any ethical consideration to conduct the study were sought from the relevant agencies in the country. In finalizing the data, pseudonyms were used in place of real names.

Data Collection and Analysis

The chosen method for data collection was semi-structured interviews with randomly selected Year 4 students. The interview was semi-structured as it is more fitting for small-scale studies (Warwick & Chaplain, 2017). Semi-structured interviews are also flexible, allowing interviewees to respond freely due to their combination of fixed questions and probes (Norton, 2009). For questioning young children, Warwick and Chaplain (2017) suggested the researchers consider these factors: building trust, unreserved, keeping casualness, evading the presumption that children 'know the answers', handling the issue of hesitant children, designing queries at the right level, choosing words within their vocabulary, non-verbal cues and unwaveringly accepting what the children believe the interviewer wants to hear.

The interview questions were adapted from the study by Phoon (2017), who also researched the use of comics in a primary classroom. The data collections for the interviews were through an audio recorder and handwritten notes. For the interviews, the participants were selected through random sampling from the class list. Random

sampling is a type of probability sampling that gives equal opportunity for any member of the targeted group to be included (Winterbottom, 2017); the targeted group in this study is the students in the Year 4 classroom.

For the interviews, thematic analysis was used as they are qualitative data. Transcription is needed for analyzing by converting the raw form to the textual presentation (Evans, 2017a). Thematic analysis is one of the frequently used qualitative analyses that look at patterns (Norton, 2009); it is essential for action researchers, founded in the works of theorists in the 90s (McAteer, 2013). It uses the coding process, which is the study of transcripts using categories or codes that are either prearranged or built from the data (Evans, 2017a). From the process, themes are developed and then used to answer the research question; the themes are more covert and conceptual than the categories or codes (Vaismoradi et al., 2016). There are seven stages in carrying out the thematic analysis, as described by Norton (2009). Table 1 depicts these stages in a simplified version.

Table 1. The seven stages of thematic analysis, according to Norton (2009)

Stages	Description
1. Immersion	Reading the transcribed data and listing the common ideas found in the interview.
2. Generating Categories	An in-depth reading of each transcript to generate several categories and provide appropriate labels for individual transcripts.
3. Deleting Categories	Removes categories that merely have a few examples or coincide with other categories.
4. Merging Categories	Reread all the categories collected and combine them to formulate themes.
5. Checking Themes	Generally revising all the themes by studying the transcripts and matching them with the gathered themes.
6. Linking Themes	Locating any relationships found between the themes while considering the research aim of the study.
7. Presenting the Findings	Extracting the essential themes and examples from the transcripts and forming a commentary on how they are linked.

Triangulation is used to strengthen the qualitative data. For both interviews and observations, triangulation of sources and triangulation of methods were utilized; the former signifies collecting data from multiple informants, and the latter indicates more than one instrument used for collecting data from the same subjects (Evans, 2017b). Both the interviews and observations in this study gathered data from more than one student and were handwritten and digitally recorded, which were then transcribed for analysis. This way, one method can cover the other's weaknesses. The written document of the interviews was used to check the accuracy of the responses with the interviewees.

As this study was a direct observation where students acknowledged they were being observed or were participating in research, their behaviors may be unnatural, known as the Hawthorne Effect (Johnson, 2012). Norton (2009), however, argued that it might not be the case as the act of teaching and learning is a form of observation.

Additionally, the shared role of the teacher and researcher (the first author) may affect the students' interview responses and observed behaviors (Evans, 2017b). During the interviews, the students may feel discomfort or threatened (McAteer, 2013); the guide supplied by Warwick and Chaplain (2017), which the teacher-researcher had followed, hopefully, covered this matter.

The reliability of a study depends on whether it can be replicated and gain similar outcomes (Johnson, 2012). Action research generally has less reliability than others due to its observation on real-world occasions with unpredictable individuals; the most probable repetition for reliability would be through the recurrent themes found in the analyzed findings (Johnson, 2012). As for the field notes on lesson observations, two possible causes of the instrument's unreliability are the instantaneous decisions of what to record after the lesson and no playback (Wilson, 2017c). These can be countered by determining types of behaviors to be registered beforehand and video-recorded lessons. Similarly, it could be done for written and audio-recorded interviews. Regarding convenience sampling, the findings cannot be generalized to the national population or other situations; the different backgrounds of the students may influence the results (Winterbottom, 2017).

RESULTS AND DISCUSSION

For Cycle 1, a total of eight participants were interviewed, whereas for Cycle 2, a maximum of 10 participants. The names mentioned are pseudonyms to protect their identities. The comics digitally drawn by the teacher-researcher are shown in Appendix 2 and the comics hand-produced by the students are shown in Appendix 3.

Major Themes from Cycle 1

From the transcribed interviews, four dominant themes concerning students' perceptions of using comics in the classroom were generated; the themes are organized accordingly: whether they perceive the comics in a positive or negative light; any beneficial outcomes from learning using the allotted comics; any beneficial outcomes from the comic- making activity; and their views on whether using comics differentiated at all in comparison to using textbooks. The four themes are:

Cycle 1 Theme 1: Positive attitude towards the utilization of comics in the classroom

The majority of the participants viewed the use of comics as a good addition to the classroom. When the teacher-researcher asked about the comics being a useful source in the lesson, six out of eight participants responded positively (Faezah, Asrin, Sameena, Amalia, Husna and Aisyah). Likewise, six out of eight participants (Asrin, Fatih, Sameena, Amalia, Husan and Aisyah) were optimistic about comics being used as a tool for learning or revising. Sameena stated that she "*like it. I feel... happy and... like... it's easy for me.*" Amalia expressed that using comics as a learning instrument would be "*very uh – ah great!*" and delightedly added, "*very exciting if – if it will happen (chuckles).*" Except for Raihanah, who felt indifferent, all participants welcomed the prospect of other teachers utilizing comics in future lessons. Faezah elaborated, "*I feel excited because we will, like, explain things and drawing... and... writing*", while Aisyah stated, "*that would be fun*". In short, the responses on using comics in the classroom were generally positive concerning their helpfulness and applying the materials for learning and teaching.

Cycle 1 Theme 2: Comics facilitate learning

The second theme pertains to two benefits the majority of participants believed the comics could offer: better insight and recollection of the studied topic. Six out of the eight participants (Asrin, Fatih, Sameena, Amalia, Husna and Aisyah) gave affirmative answers regarding comics used as a tool to ease their understanding of the subject being taught. As mentioned by Sameena, "*it's like, it shows me...ideas how to, like, understand*." Their increased understanding of the topic came from varying ways of applying comics, ranging from the projected comics in the lesson (favored by Asrin), their own produced comics based on the topic taught in the intervention lessons (selected by Aisyah), teachers employing them as a teaching tool (favored by Sameena), to the students exploiting them for their chosen method of learning (favored by Fatih, Amalia and Husna). In sum, the mainstream view of the students includes comics as a facilitating material to a better insight into the subject.

Out of the eight participants, five (Asrin, Fatih, Sameena, Husan and Aisyah) claimed that the involvement of comics aided their remembrance of the topic. While Amalia implied the ease of remembering the lesson through the comics in her statements, when asked which portion of the comics was helpful, she stated, "*the one that... uh... what was that for transportations... like... transportations in the past, and...the latest ones*" and added "*I remember the part, the... that says 'Dad! That's embarrassing!' (laughs)*." Fatih remarked, "*we should use [comic] because it's easy to memorize*". This signified that he agreed to and advocated using comics in lessons for better memorization. In summary, the theme also explores the common view of the students on comics as a facilitating material for a better recollection of the subject.

Cycle 1 Theme 3: Positive attitude towards comic-making

This theme elaborates on the beneficial outcomes of comic-making activity, which took place in both halves of the intervention lessons in Cycle 1. It was established before designing the lessons that most of the students participating in the research were interested in drawing, which was the main incentive to include the comic-making task. Three interviewees (Faezah, Asrin and Sameena) plainly stated a liking towards drawing; Aisyah declared a preference towards drawing comics and thus "*very happy*" with the activity, and Raihanah was implied to have an interest in drawing from the various sketches she made throughout lessons. From the interviews, five participants (Faezah, Asrin, Fatih, Sameena and Aisyah) had a positive attitude towards making comics based on the assigned topic; Raihanah allegedly shared the same view as she informed never feeling bored during said activity. Regarding their studies, Aisyah affirmed the positive effect of comic-making on understanding the subject. Fatih declared that, with proper instructions, the comic-making activity facilitated learning in the classroom. To simplify, the students showed a positive attitude towards the task of producing comics constructed from the knowledge of the studied subject. For some participants, the comic-making activity can also assist them in their learning by portraying the knowledge in a more coherent and memorable form.

Cycle 1 Theme 4: Inclination towards comics as a resource over textbooks

This theme is not advocating against using textbooks; it was developed from most participants' responses to emphasize their positive outlook towards using comics in the classroom. As a prompting question, the teacher-researcher asked if

comics are better than textbooks or if they differ from textbooks. Out of six participants that were inquired with such prompt, four declared a preference for comics.

Asrin, albeit opted for textbooks over comics, believed that the latter enhanced comprehension and remembrance of the subject. Sameena noted that "*it's better using comics*" when questioned about which of the two resources could enrich her knowledge of the subject. She nodded affirmatively in response to whether the comics enhanced learning enjoyment. Correspondingly, when the teacher-researcher queried Amalia regarding the comics' probable effects on understanding or remembering the subject, she proclaimed that the comics were "*better than the textbook. I don't really understand in the textbook*". The aforementioned responses showed that the participants saw the potential of using comics to broaden their comprehension of the knowledge being taught and enjoy their learning simultaneously.

Furthermore, Fatih stated that "*it's easier to understand because of the drawings [of transportation]*"; said drawings of transportation refer to the visuals in comics. The visuals were regarded favorably by Asrin and complimented by Amalia. From these notable accounts, the participants displayed partiality towards the comics' portrayal of the topic, with one reaching a better understanding through them.

In brief, the students were more inclined to apply comics than textbooks, highlighting optimism about using comics in the classroom. Notable gains from comics that are lacking in textbooks are their ability to amplify understanding, elicit joy in learning, and finer visuals that can be linked to helping their level of comprehension of the subject.

Significant Themes for Cycle 2

There are four major themes found in the Cycle 2 interviews regarding the students' perceptions of using comics in the classroom. The themes are assorted according to their views of comics as a learning tool, comics as a teaching tool, the effect of comics during the lesson and the impact of comics on their learning. The following four themes are:

Cycle 2 Theme 1: Positive attitude towards comics as a learning tool

All participants besides Emran believed learning with comics to be more enjoyable or "*fun*", as described by Nidah, Iskandar and Aqilah. Emran instead claimed the use of comics to be more interesting. Ishak and Ashrol expressed that they were "*excited*" to use comics for learning, whereas Laili claimed that comics are helpful and "*easy*". Adillah and Farina said that they were "happy" at the prospect of comics being utilized as a learning instrument. Haslina stated that "it's nice" to use comics in order to learn or revise. Although Iskandar proclaimed the potential fun in learning using comics, he was the only one that deemed the comics suitable merely for fun reading. In sum, the participants used various terms to describe personal views on using comics as a learning tool, with the majority expressing them positively.

Cycle 2 Theme 2: Positive attitude towards comics as a teaching tool

When asked about the future possibility of teachers applying comics as a primary resource to teach Social Studies, participants responded to it positively. The keywords used by the participants to describe the idea were fun and happy. Farina dubbed the notion "*having fun*", and Nidah stated, "*it's gonna be fun for me*". Ishak also expressed the idea as "*fun*", and both Haslina and Iskandar believed the lesson would become more fun. Iskandar, Ashrol, Laili and Adillah claimed they would be "*happy*"

if future teachers started employing comics as a teaching tool in Social Studies. Laili and Ashrol contended that it would be more exciting. For Aqilah, she simply stated "*ok*" with the idea of being taught with comics. Haslina commented, "it's nice" to use comics as the teaching instrument. Emran, in particular, said, "*I'll feel kind of surprised if teachers use comics to teach students Social Studies*" but saw potential in such an approach, adding that "*when it comes to memory, I think it's kind of useful*". In brief, the participants viewed comics as a positive teaching tool.

Cycle 2 Theme 3: Attentive to the lesson

Most participants (Emran, Ashrol, Laili, Aqilah, Nidah, Ishak, Iskandar and Farina) were never bored during the lesson. In a sense, boredom is defined as being disinterested in the lesson, which ultimately affects attention. The absence of such feelings from the majority infers that they were attentive during the lesson. Alternatively, Adillah noted boredom specifically during answering questions but declared never to be bored when reading the comics. Contrariwise, Nidah felt a slight lack of interest during reading, yet only for one of the comics, primarily due to the storyline.

Their attentiveness towards the lesson can be supported by class observations where the students were actively answering provided questions, reading the comics either passively or enthusiastically, participating in discussions, and chattering among peers regarding the comic materials. The characters in the comics that were chosen based on their interests also made them engrossed in the reading task. As a whole, the participants were predominantly attentive to the lesson.

Cycle 2 Theme 4: Comics increase understanding

The participants broadly agreed that they could further understand the topic through the comics. In the main, they had no problem understanding the words used in the comics (Emran, Ashrol, Laili, Aqilah, Nidah, Haslina, Ishak and Farina) and Ashrol, Nidah, Haslina and Ishak confirmed that they understood all of the comics. Nidah and Ishak affirmed that their understanding of the topic could be heightened through comics. Ishak, Farina and Iskandar mutually agreed that using comics would make the information gained easy to comprehend. Nidah, in particular, chose the comics over the textbook when asked which resources she would instead use to deepen her comprehension of the topic. Although Farina preferred the textbook over comics, she claimed she understood better.

Additionally, some participants (Laili, Aqilah, Nidah and Ishak) confirmed that the worksheet's comic-like structure had a hand in comprehending their task. The marks supported this in their submitted worksheets, where they scored 80% and above. To summarize, the mainstream found comics helpful for developing their understanding of the subject.

The abovementioned findings signify the students in both cycles as having a positive view towards using comics in the classroom. In Cycle 1, the first theme concurs with the theme found in Phoon's study (2017), which was the 'positive view of using comics in the classroom' where the students showed acceptance of the utilization of comics in the lesson. The theme also coincides with W. W. Sones' deduction that comics can be helpful as teaching material (Zagkotas, 2018). This theme is fundamental as it confirms the concept of comics in the classroom being well received by the students and that they favored the idea of teaching and learning using

comics.

The second theme of Cycle 1 attests to Krishnan and Othman's (2016) statement that the students' positive views on learning through comics can enhance their knowledge acquisition. The core of this theme lies in the fact that the students perceived comics as something they could use to assist their learning, one of which was comprehending what they were studying. The theme also supports another note from Krishnan and Othman (2016), where simplified ideas in the comics can assist the students in their recollection of the subject; this was verified when one of the students remembered and quoted a humorous dialogue from the comics during the interview. It suggests another aspect of learning that can be facilitated through comics, which is a reinforcement of memory.

The third theme of Cycle 1 contrasts with the findings of Abu Bakar's study (2014), where her students disapproved of comic-making. As opposed to that, the Cycle 1 students in this study were drawn to the activity. Argumentatively, this could be due to the Cycle 1 students' fascination with drawing, whereas the students in Abu Bakar's study (2014) regarded such skill as inconsequential. Furthermore, the students of Abu Bakar's study stressed that elongated texts were needed for their examination whilst the students of this study were content with the simplified version of the texts, which some confessed to having assisted in their knowledge acquisition. This is another confirmation of comics being an abridged solution to recalling topics, as stated by Krishnan and Othman (2016).

The final theme of Cycle 1 emphasizes the use of comics in the classroom as a welcoming concept. From the distinguished advantages of comics agreed by the students, such as the capacity to increase understanding, provide entertainment in learning and enhance visuals, future primary teachers can consider adding comics as a way to present a lesson. The fact that the students favored comics over textbooks is also in line with Arinii et al. (2017) that children are partial towards comics for their visual arts and dialogues. Barbre (2018) argues that comics offer engaging imageries and features that firmly surpass textbooks.

In Cycle 2, the first and second themes support the finding in Phoon's study (2017), where one of the main themes was 'enjoyment' for the students. It also corresponds with the statement by Krishnan and Othman (2016) that comics can produce enjoyable learning. These two themes concurred with Zagkotas (2018), in which illustrated information spurred the students' interest. The main description for using comics was fun, which qualifies the medium as the "Fun, Play and Learn more" technique of learning demanded by the Brunei curriculum (Curriculum Development Department, 2009).

The third theme of Cycle 2 mirrors another finding by Phoon (2017): 'engagement', where students claimed never feeling bored and responded well during the discussion in the lesson. It also attests to the statement that comics can formulate students' engagement and "give light to classrooms" as well as "prolong student's attention span" (Ahmadi et al., 2017, p. 56). The final theme of Cycle 2 correlates with the presumption that the way texts in the comics represent students' understanding of the subject being taught (Mahir et al., 2016).

Overall, interviews from both cycles substantiate students' positive views of using comics in the classroom. The themes that showed students' constructive outcomes in their learning also debunk Wertham's arguments on the negative consequences of children reading comics. Then again, his arguments also stemmed

from comics depicting violence and inappropriate themes, which was not the case for the comics used in this study.

CONCLUSION

This research discussed using comics as a teaching and learning tool in Social Studies. From existing literature and studies, comics provide motivation for learning, enjoyment in learning, amplify students' engagement in the lesson and enhance recollection of knowledge. The intervention lessons in this study were conducted using a reiterated procedure – with slight adjustments – from similar research. The findings of this study supported the idea of using comics as a teaching tool in Social Studies.

The students' perceptions of using comics in the classroom were obtained through face-to-face semi-structured interviews. The mainstream opinions found were wide-ranging yet similar in terms of having an optimistic outlook. Cycle 1 students had shown a positive attitude towards comics utilized in the lesson, claiming that the comics could help their understanding and recollection of the subject. The students also favored the comic-making activity and declared bias against textbooks. Cycle 2 students had shown a similarly positive attitude towards comics as a teaching or learning tool, resulting in their attentiveness towards the lesson. They also stated that comics could increase their comprehension of the subject. The students' common views from both cycles suggested their approval of comics being used in the classroom.

Scope and Limitations

This study explored the use of comics in a Year 4 primary classroom. The comics referred to in the study are either printed or displayed in PowerPoint slides. The study does not include in-depth research on digital comics, nor does it apply them in the classroom. The study concentrated on using comics in a Social Studies classroom; it may not reflect other subjects with different prerequisites or learning structures. The study also focused on upper primary students, specifically Year 4 pupils; the findings may not be relevant to the lower primary as they have a slightly different level of knowledge retention (Bergin & Bergin, 2012).

The limitations of this study are time constraints and the number of participants. The study was only conducted for six periods, with a mere 120 minutes reserved for the intervention lessons. The qualitative part of the research caused time consumption from the already limited timeframe. The number of participants involved is small and will not generalize the whole population. As the study focuses on using comics and their visual strength for acquiring information, it may not be generalizable to visually impaired students.

Implications and Recommendations

This study implied the potential usefulness of comics as a teaching or learning tool for Year 4 students in the Social Studies subject. By investigating the effects of using comics in the classroom on students' degree of knowledge of the subject and their thoughts on the matter, comics can be recognized as credible material for teaching. Teachers interested in diverse forms of teaching instruments or searching for enjoyable activities for their students may consider incorporating comics as part of their lessons. This is also in proportion to the Brunei school curriculum, where varying

teaching techniques are necessary to accommodate students' individual needs. How it is implemented depends on the teacher's creativity and the students' interests. From the students' views on using comics in this study, teachers may adopt the comic creation activity for a class that is partial to drawing and comic reading as a group.

Several recommendations for future research include a more significant sample, low achievers as the target group, comic-making activity as the focal point and an in-depth study on the effects of comics on students' engagement. The samples in this study were meagre, 18 for the first cycle and 14 for the second cycle; therefore, they do not equate to the general population. Future research with a more significant sample may be able to cover the limitations of this study and broaden information on the questions being studied.

Future studies may also investigate the effects of learning using comics with low achievers as the target population. This study involved mixed-ability samples and thus does not reflect its results to a specific category of ability. Studying specifically low achievers may provide insight into whether the comics are helpful for them and, if so, can be recommended as their alternative method for learning.

Based on the students' positive opinions in Cycle 1, the comic-making activity can be centralized in another research. With a revised procedure and extended intervention lessons, the comic-making task can be a valuable tool for the students to retain knowledge successfully. Finally, profound research on the effects of comics on students' engagement in the classroom would be helpful in detailing the efficacy of comics on their attentiveness. This study lightly touched on the students' engagement level based on recorded class observations and the students' perceptions. A thorough research by observing engaging and non-engaging behaviors within the lesson would determine the comics' height of intensity in attracting the students' attention.

ACKNOWLEDGMENT

The authors are grateful to the teachers and students in the sampled school.

REFERENCES

Abu Bakar, A. R. (2014). The Use of Comics in Teaching Upper Secondary History Class. *Master Dissertation*. Universiti Brunei Darussalam, Brunei Darussalam.

Ahmadi, N., Sadighi, F., & Gorjian, B. (2017). The effect of children's comic strip stories on beginners' English vocabulary retention. *Journal of Applied Linguistics and Language Learning*, *3*(3), 55-63.

Arinii, F. D., Choiri, A. S., & Sunardi, S. (2017). The use of comic as a learning aid to improve learning interest of slow learner student. European *Journal of Special Education Research*, *2*(1), 71-78. https://doi.org/10.5281/zenodo.221004

Azamain, M. S., Shahrill, M., Musa, N. K. H., & Batrisyia, I. (2020). How using comics can assist in determining the students' learning of distance-time graphs. *Journal of Physics: Conference Series*, *1470*(1), 012005. https://doi.org/10.1088/1742-6596/1470/1/012005

Azman F. N., Zaibon, S. B., & Shiratuddin, N. (2016). A study on user's perception towards learner-generated comics. *International Review of Management and Marketing*, *6*(S8), 37-42.

Barbre, J. O. (2018). The practical implications and possibilities for graphic novels and comic books as a component of the literacy experience: A proposal. *International*

Journal of Learning, Teaching and Educational Research, *17*(11), 48-55. https://doi.org/10.26803/ijlter.17.11.4

Batrisyia, I., Shahrill, M., Azamain, M. S., & Musa, N. K. H. (2020). Captivating primary school pupils' interests in solving mathematics word problems with the use of comics. *Journal of Physics: Conference Series*, *1470*(1), 012006. https://doi.org/10.1088/1742-6596/1470/1/012006

Beaty, B. (2005). *Fredric Wertham and the Critique of Mass Culture*. USA: University Press of Mississippi.

Bergin, C. C., & Bergin, D. A. (2012). *Child and Adolescent Development in Your Classroom*. USA: Wadsworth, Cengage Learning.

Blanch, C. L., & Mulvihill, T. M. (2013). The Attitude of Some Students on the Use of Comics in Higher Education. In C. K. Syma, & R. G. Weiner (Eds.), *Graphic Novels and Comics in the Classroom: Essays on the Educational Power of Sequential Art* (pp. 35-49). USA: McFarland & Company, Inc.

Chu, Y. L. L., & Toh, T. L. (2020). A framework for designing mathematics instruction using comics at the primary school level. *Journal of Research and Advances in Mathematics Education*, *5*(3), 218-230. https://doi.org/10.23917/jramathedu.v5i3.11373

Cramer, N. (2014). Supporting Literacy through the Visual and Communicative Arts: Building Momentum in Literacy 21st for Century Digital Learners. Texas Association for Literacy Education Yearbook: Building Momentum, 2, 62-77. http://www.texasreaders.org/uploads/8/6/6/5/8665759/chapter_6.pdf

Curriculum Development Department. (2009). Framework and guidelines for curriculum and assessment: Social studies (Years 4, 5 and 6). Brunei Darussalam: Ministry of Education.

Dhito. (2017). *Menyeberang Jalan di Brunei* [Crossing the road in Brunei] [Photograph]. Creator. https://muhdhito.me/2017/03/27/menyeberang-jalan-di-brunei/

Doroshin, O. (n.d.). The holiday, which has unknown origins, encourages people to learn more about the science and art of building skyscrapers [Photograph]. Bigstockphoto. https://www.timeanddate.com/holidays/fun/skyscraper-day

Evans, M. (2017a). Analysing Qualitative Data. In E. Wilson (Ed.), *School-Based Research: A Guide for Education Students* (pp. 260-273). UK: SAGE Publications Ltd.

Evans, M. (2017b). Reliability and Validity in Qualitative Research by Teacher Researchers. In E. Wilson (Ed.), *School-Based Research: A Guide for Education Students* (pp. 202- 216). UK: SAGE Publications Ltd.

Jackson, D. (2009). Cognitive Comics: A Constructivist Approach to Sequential Art. [PDF version]. Retrieved from http://www.cognitivecomics.webs.com

Jacobs, D. (2007). More than words: comics as a means of teaching multiple literacies. *English Journal*, *96*(3), 19-25. https://doi.org/10.2307/30047289

Johnson, A. P. (2012). A Short Guide to Action Research (4th ed.). USA: Pearson.

Kamil, A., Komariah, E., & Yuliana. (2017). The use of comic to improve students' reading comprehension skill at junior high school. *Research in English and Education*, *2*(3), 1-7.

Koutnikova, M. (2017). The application of comics in science education. *Acta Educationis Generalis*, *7*(3), 88-98. https://doi.org/10.1515/atd-2017-0026

Krishnan, S., & Othman, K. (2016). The effectiveness of using comic to increase pupils' achievements and higher order thinking skills in science. *International Journal of English and Education*, *5*(3), 281-293. http://ijee.org/yahoo_site_admin/assets/docs/22.19215604.pdf

Larryrains. (2018). Delivery Truck Illustration stock illustration [Cartoon Image]. iStock. https://www.istockphoto.com/vector/delivery-truck-illustration-gm914520518-251703704

Lau, G. (2013). Using collaborative "action research" for a genuine school-based educational change: An exemplar case and reference notes for novice teacher. *New Horizons in Education*, *61*(1), 49-69.

Mahir, N. A., Mohd Ali, R. & Mohamad Amin, K. (2016). Using newspaper comics strips to improve reading and writing among Muet Band 1 & 2 year 1 students of Faculty of Quran and Sunnah Studies, Universiti Sains Islam Malaysia (USIM). *Journal of Global Business and Social Entrepreneurship*, *2*(3), 57-62.

Maslanka, M. (2018). Water taxis in Kampong Ayer [Photograph]. Shutterstock. https://theculturetrip.com/asia/brunei-darussalam/articles/how-to-navigate-transport-in-bandar-seri-begawan-brunei/

McAteer, M. (2013). *Action Research in Education*. UK: SAGE Publications Ltd.

Musa, N. K. H., Shahrill, M., Batrisyia, I., & Azamain, M. S. (2020). Incorporating the use of comics in the secondary mathematics teaching of the order of operations. *Journal of Physics: Conference Series*, *1470*(1), 012004. https://doi.org/10.1088/1742-6596/1470/1/012004

Ndalianis, A. (2011). Why comics studies? *Cinema Journal*, *50*(3), 113-117. https://doi.org/10.1353/cj.2011.0027

Nicholls, C. M., Mills, L., & Kotecha, M. (2013). Observation. In J. Ritchie, J. Lewis, C. M. Nicholls, & R. Ormston (Eds.), *Qualitative Research Practice: A Guide for Social Science Students and Researchers* (pp. 243-265). London: SAGE Publications Ltd.

Norton, L. S. (2009). Action Research in Teaching and Learning: A Practical Guide To Conducting Pedagogical Research in Universities. USA and Canada: Routledge.

Nur Fadhila, S. F., & Widodo, W. (2019). The development of education comic as science materials for lower secondary on topic of light and optic to improve student learning outcomes. *E-Journal Pensa*, *7*(2), 262-267.

Özdemir, E. (2010). The Effect of Instructional Comics on Sixth Grade Students' Achievement in Heat Transfer. *Doctoral Dissertation*. Middle East Technical University, Ankara, Turkey.

Phoon, H. Y. (2017). Investigating the Use of Comics as a Resource for Teaching Plant System in a Year 5 Science Classroom. *Master Dissertation*. Universiti Brunei Darussalam, Brunei Darussalam.

Phoon, H. –Y., Roslan, R., Shahrill, M., & Said, H. (2020). The role of comics in elementary school science education. *Formatif: Jurnal Ilmiah Pendidikan MIPA*, *10*(2), 67-76. http://dx.doi.org/10.30998/formatif.v10i2.6257

Romagnoli, A. S. (2014). Comics in the Classroom: A Pedagogical Exploration of College English Teachers Using Graphic Novels. *Doctoral Dissertation*. Indiana University of Pennsylvania, Indiana County, Pennsylvania.

Sanjaya, R. E. (2017). Improving vocabulary ability by using comic. *Journal of English Language Teaching*, *1*(2), 184-189. http://dx.doi.org/10.30998/scope.v1i02.1510

Shahrill, M., Batrisyia, I., Musa, N. K. H., & Azamain, M. S. (2022). The enactment of lessons using comics to teach mathematics in Bruneian classrooms. *Proceedings of the Singapore National Academy of Science*, 16(1), 85-95. https://doi.org/10.1142/S2591722622400075

Sharpe, J., & Izadkhah, Y. O. (2014). use of comic strips in teaching earthquakes to kindergarten children. *Disaster Prevention and Management*, *23*(2), 138-156. https://doi.org/10.1108/DPM-05-2013-0083

Starder. (n.d.). Different Cargo ship design vector graphic 02 [Cartoon Image]. FreeDesignFile. https://freedesignfile.com/19819-different-cargo- ship-design-vector-graphic-02/

Toh, T. L., & Cheng, L. P. (2022). Using comics to contextualise the teaching of percentages: An adaptation of a comics-based teaching package for primary school mathematics classrooms. *Australian Primary Mathematics Classroom*, *27*(2), 25-30. https://search.informit.org/doi/10.3316/informit.605435467529010

Vaismoradi, M., Jones, J., Turunen, H., & Snelgrove, S. (2016). Theme development in qualitative content analysis and thematic analysis. *Journal of Nursing Education and Practice*, *6*(5), 100-110. https://doi.org/10.5430/jnep.v6n5p100

Warwick, P., & Chaplain, R. (2017). Research with Younger Children: Issues and Approaches. In E. Wilson (Ed.), *School-Based Research: A Guide for Education Students* (pp. 154-172). UK: SAGE Publications Ltd.

Wilson, E. (2017a). Research Design. In E. Wilson (Ed.), *School-Based Research: A Guide for Education Students* (pp. 65-81). UK: SAGE Publications Ltd.

Wilson, E. (2017b). How to do Action Research. In E. Wilson (Ed.), *School-Based Research: A Guide for Education Students* (pp. 107-123). UK: SAGE Publications Ltd.

Wilson, E. (2017c). Data Collection. In E. Wilson (Ed.), *School-Based Research: A Guide for Education Students* (pp. 175-200). UK: SAGE Publications Ltd.

Winterbottom, M. (2017). Taking a Quantitative Approach. In E. Wilson (Ed.), *School-Based Research: A Guide for Education Students* (pp. 217-238). UK: SAGE Publications Ltd.

Zagkotas, V. (2018). Are comic books appropriate for teaching History? Three suggestions for Greek Primary Education. *Education 3-13*, *47*(9), 1-8. https://doi.org/10.1080/03004279.2018.1452955

Zhao, F., & Mahrt, N. (2018). Influences of comics expertise and comics types in comics reading. *International Journal of Innovation and Research in Educational Sciences*, *5*(2), 218-224.

APPENDIX 1
Lesson Cycle Procedure

Cycle 1	Cycle 2
The Plan Stage	
▪ Before implementing comics in the lessons, the students were enquired about their opinions on drawing. ▪ The lesson plans, comics and worksheets were designed and finalized within eight days. ▪ The storyline depicted a discussion between a father and a son, represented in a real-life setting, as suggested by Koutnikova (2017). ▪ The comics digitally drawn by the teacher-researcher are shown in Appendix 2 and the comics hand-produced by the students are shown in Appendix 3.	▪ Before the intervention lessons, the researcher asked the participants about their favorite character, regardless of where it was from (i.e. games, movies, cartoons, etc.). ▪ The students cooperatively supplied their individual biases, recorded for use in the comics. ▪ Reflecting on the development in Cycle 1, the comic-making activity was not incorporated as it required a lot of time which inhibited the students from performing at their best. ▪ For this cycle, intervention lessons were planned to prepare the personally designed comics and lesson plans. ▪ The new comics were time-consuming as they encompassed more colors, details and prominent characters loved by the students. ▪ A class worksheet in the form of comics is shown in Appendix 3.
The Act Stage	
▪ In Cycle 1, there were four lessons in total within four weeks. ▪ For the first lesson, the students were informed and introduced to using comics for teaching and learning the topic, 'Our Communication'. ▪ To familiarize them with comics, the teacher-researcher attached a plain, four-paneled comic on the whiteboard with a simple character and balloon bubbles, demonstrating how a comic generally looks like and the use for each feature. ▪ The teacher-researcher ended the lesson with a Pictionary game on the set of comic panels for them to understand the upcoming comic-making activity. ▪ In the second lesson, the teacher-researcher first taught the students using comics displayed on a projector; in groups, they were required to take turns reading the dialogues. Several discussions were made on specific panels of the comics.	▪ In Cycle 2, four lessons were conducted in two weeks. ▪ For the second lesson, the teacher-researcher started with a brief demonstration of what a comic looks like and how to read them through the speech bubbles. She then gave clear instructions on how the lesson would be conducted: the teacher would first distribute four discrete, printed sets of comics – one set for each group; the students would then be given two minutes to read them and one minute to answer the question paper on what they have read; once that is done, they would be required to move to the next group to read a different set of comics and, by extension, topic. For instance, their first set of comics was about land transportation; when the students relocated to the following table, they would be reading comics about water transportation. ▪ Once all four groups finished circulating,

<table>
<tr>
<td>
▪ Once the session ended, the students were given 25 minutes to construct a four-paneled comic as a group based on their chosen topic. Each panel was an A3-sized paper accompanied by a separate four-paneled instruction sheet.
▪ The activity ended with a Gallery Walk, where students displayed their comics on the tables and walked around the classroom to read and inspect their friends' works. The teacher-researcher distributed the worksheets at the end of the lesson.
▪ Another comic-making activity was conducted in the third lesson, excluding the use of the teacher-researcher's personal comics. They were required to read the textbooks and transform the information into a four-paneled comic similar to the first activity, guided by the instruction sheet and the teacher-researcher herself.
▪ The emphasis on the contents rather than the art itself was stressed. The session took 30 minutes, and students were then asked to perform the Gallery Walk.
▪ After they accomplished that, the students sat down to discuss their comics.
▪ Following this lesson, eight students were selected randomly for interviews on their perception of comics' use.
</td>
<td>
they returned to their original seats for formal discussions with the teacher-researcher on what they had learned and answered in the question papers. The teacher-researcher issued the worksheets as their homework at the end of the lesson.
▪ The third lesson was extended till the last lesson due to half an hour lesson period, but went similarly to the second one, although with new topics.
▪ After the third lesson, the teacher-researcher randomly picked ten students for interviews on the use of comics (the interviewees were allowed to nominate their peers).
</td>
</tr>
<tr><td colspan="2">The Observe Stage</td></tr>
<tr>
<td colspan="2">
▪ The lesson observations were executed for both cycles during the two intervention lessons.
▪ The role of the teacher-researcher in these observations was a participant as an observer, where the researcher discloses their intent to observe and interacts with those being observed (Nicholls et al., 2013).
▪ The teacher-researcher set up a camera at the back of the classroom, minimizing the chances of taping the students' faces.
▪ The videos were taken after attaining consent from the parents, children and the school.
</td>
</tr>
<tr><td colspan="2">The Reflect Stage</td></tr>
<tr>
<td colspan="2">
▪ For both cycles, the teacher-researcher revisited the collected data and critically analyzed and identified any changes or effects caused by the intervention lessons.
▪ From the findings, the following were considered: Possible improvements, drawbacks, challenges and anything else that could help in future studies of a similar field.
</td>
</tr>
</table>

APPENDIX 2
Cycle 1 Digital Comics

Note. The image used in the 14th panel is a roadway in Bandar Seri Begawan by Dhito (2017). The image used in the 15th panel is Kampong Ayer by Maslanka (2018); in the 16th panel is an image of Skyscrapers from a skyward angle by Doroshin (n.d.). The 17th and last panel has images of cartooned container ship by Starder (n.d.), truck by Larryrains (2018) and cargo plane by Watch this Hulking Cargo (n.d.).

APPENDIX 3
Samples of Comic-Making Instruction and Comics by Students