

Educational Comic Strip as Visual Medium for Enhancing Learners' Higher Order Thinking Skills in Economics

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Abstract

The research paper entitled “Educational Comics Strip as Visual Medium for enhancing Learners’ Higher Order Thinking Skills in Economics” was conducted to identify the learners’ higher order thinking skills in terms of inference, analyzing, evaluating, and predicting using educational comic strips in Economics. Using a quasi-experimental method, it involved 34 purposively selected Grade 9 students of Bondoc Peninsula Agricultural High School during the school year 2021-2022. Data gathering was done online; the respondents through Google Forms accomplished a digitized version of the questionnaire. The students were given a self-made pre-test, and then engaged in a comic strip; afterward, a post-test was administered, followed by a survey questionnaire on their perception of the comic strip. Pearson product-moment correlation, t-Test, Mean and Standard Deviation were used to analyze and interpret the data. The result revealed that the students were in a very great extent-using comic strip in terms of multimodal communication, narrative experiences, text and images, and contextual clues. There is an improvement in the students’ Higher Order Thinking Skills. The pre-test resulted in less frequency of satisfactory to very satisfactory on inferring and analyzing and did not meet expectations on evaluating and predicting. While the post-test resulted in a greater frequency of very satisfactory to outstanding, compared to the pre-test, on inferring, analyzing, and predicting. This result implies that different type of questions on pretest and posttest with the same competencies affects the respondents’ post-test scores, especially in terms of analyzing and evaluating. Based on the findings, the following conclusions were derived. There is a significant difference in the students’ pre-test and post-test mean scores on Higher Order Thinking Skills assessment. Moreover, there is a significant relationship between the student’s perception of the use of comic strips in terms of multimodal communication, narrative experiences, text and images, and contextual clues, and their Higher Order Thinking Skills to analyze, evaluate and predict. Also, there is a significant relationship between their higher-order thinking skill inferring and multimodal communication, text, images, and contextual clues.

Keywords: comic strip, Higher Order Thinking Skills, inferring, analyzing, evaluating, predicting.

Introduction

Education is the teaching process designed to develop cognitive abilities, and physical abilities and establish the values and beliefs of individuals. It is a vital, compelling, and complex process. Therefore, educators use different teaching strategies and develop instructional materials to respond to the different learning styles of students amid this pandemic. In addition, it was confirmed that teacher-student support relationships have a positive impact on a student's classroom participation, engagement and finally accomplishments.

The World Health Organization declared the occurrence of a pandemic on March 11, 2020 when the new life adjustment process began after fundamental changes in the world and new normality were later revealed. The pandemic affected all areas in the world; though, it played an active role in the program and adaptation of the education that will lead the next generation.

During the closure of all schools, face-to-face classes have been canceled, which has convinced many institutions, including our school, to move immediately from face-to-face learning to full online or modular distance learning. However, this quick shift has resulted in problems for learners and teachers.

As stated in DepEd Order No. 012, s. 2020 entitled "Adoption of the Basic Education Learning Continuity Plan (BE-LCP)" for the 2020-2021 school year. The Department of Education has developed a range of education interventions that will address the challenges of basic education during the pandemic". BE-LCP modernizes K to 12 "in the most essential learning competencies (MELCs), to be integrated across multiple learning modalities or platforms. Distance learning modalities include modular distance learning, online distance learning, TV and radio instruction, as constrained by COVID-19 in the community and school environment.

This form of learning is changing the way Filipinos teach and learn. This change is complex and often challenging not only for individual teachers but also for the schools as a whole. Modular Distance Learning is the most typical form of distance learning for K to 12 students, in which modules are printed so that the students can study for themselves and subject them to teacher's evaluation. Transfer of responsibility of teaching and learning at home with the help of modules provided by the school; however, is likely to increase educational dissimilarity because of differences in household income, educational attainment of family members, and family context. In addition, there are students who may or may not have access to modern information and technologies; this is why the Department of Education prepared Self- Learning Modules for education in the new normal. Through distance learning, teaching is disseminated over the internet on any social media platform. Such platforms as Facebook, messenger, g-mail and google classroom. But like any other school program, there are a number of advantages and disadvantages to distance learning.

In the town of Mulanay, Quezon province where the researcher's school was located, modular distance learning was used as a distance learning modality. Using the preferred modality of the school, students follow lessons and perform tasks from the comfort of their own homes. While eliminating their shuttle-related expenses, renting an apartment, and/or obtaining meal plans. There are many advantages to distance learning but it is not the best choice for seeking to pursue a high school education. Distance learning merely restricts students to courses and learning resources that are based on the Most Essential Learning Competencies (MELCs). Although students can interact through chat rooms or e-mails, the experience cannot be compared with this traditional form of education. Without face-to-face interaction with teachers and students, those without communication equipment may find it difficult to follow up on their other homework. Despite the convenience of remote learning, this is still not the greatest opportunity for various Filipino, the designs and delivery of every subject differ greatly.

In this study, the researcher used comic strips as instructional material that may enhance learners' higher-order thinking skills in Economics at Bondoc Peninsula Agricultural High School (BPAHS), Mulanay, Quezon, Schools Division of Quezon.

The use of comic strip in education rests on the idea of shaping student engagement and motivation. Numerous studies have shown that students learn from classes that provide information in visual form (Raiyn, 2016). Frederick and Alexandra (2020) report, in their study, that students who learn with comics have memory scores that are much higher than students who do not learn with comics. It was noted that using narrative form such as a comic strip can stimulate the learners' interest in the economy and help learners recall what they have learned. Through activities using comics strip, students could appreciate their learning and explore their learning skills.

Through education, an individual can acquire 21st Century skills like learning, literacy and life skills (Stauffer, 2022). These skills are the capacity of learners that needs to be improved by the school so that they can cope with the demands of this changing world and are vital to a prosperous and safe future. The school, particularly the educators, should develop other strategies to ensure that these skills are adequately maintained and developed during the years when learners are under school care.

When COVID-19 converted homes around the world into temporary classrooms, the learning environment was radically transformed. Different distance learning modalities were applied in all schools across the world. While BPAHS implemented modular distance learning to continuously serve and cater students coming from the different barangays of Mulanay and other nearby towns. The distribution and retrieval of modules, answer sheets, and worksheets were scheduled weekly. Therefore, studying the lesson within one week provides a lot of work to the learners. Different subjects in a week are required to accomplish and to be learned by their understanding. Since the new normal setup of education was started, students' attention to education has changed. Change is inevitable, even the attitudes and interests of today's students actually differ from those of years ago.

According to the study of Marquez (2019), students right now are more absorbed in computers and social media, anything that isn't visually appealing doesn't get their attention. However, besides the use of modern and enjoyable technological innovations, traditional comics, while almost forgotten, could also be used as another amazing and brilliant tool for learning. Comics are an effective teaching tool to be used in class with learners various subjects, particularly in teaching economics. The visual content is much more easily processed, understood, and memorized.

According to Educomics (2019), "A lot of teachers still hesitate to use comics strips, thinking of them as "low brow". However, there many comics and graphic novels out there that don't only appear to be visually beautiful, they are also extremely well written".

In the Social Studies area, there are plenty of abstract concepts in its scope and educators provide essential knowledge to students who want to make informed decisions for the future, but then again many find it boring. Maybe because it requires a lot of reading, remembering and understanding. For Susanti (2019), the student's boredom will disappear if teachers use attractive media in teaching. If the students are interested in the lesson, then the instructional activity will take place smoothly and the students will understand the lesson (Susanti, 2019). To concrete abstract subjects, it is important to use teaching tools and materials (Ilhan, Kaba, & Sin, 2021). Thus, there is a need to modify teaching materials like comic strips to integrate theory and practice into the learning procedure.

Therefore, the purpose of this study was to provide additional instructional material to motivate learners and enhance their learning skills. This paper discussed the effect of using comic strips on enhancing learners' higher-order thinking skills.

Objectives of the Study

This study aims to deliver supplemental instructional material to motivate learners in their study habits and enhance their learning skills. It may also help educators motivate students in learning Social Studies, especially Economics. Using the result of this study, it may also improve the teaching skills and teaching strategy of teachers of Bondoc Peninsula Agricultural High School, Mulanay, Quezon.

Methodology

The type of this research is quantitative research, which used a quasi-experimental design. In a quasi-experimental design, the policy is observed as an “intervention” in which treatment- comprising an element of the program/policy is evaluated-is and tested for how well it achieves its objectives, as measured by pre-specified set of indicators (White and Sabarwal,2015).

The researcher utilized a survey questionnaire in Google Form to assess the perception of students on the use of comic strip. Twenty (20)-item statements were developed to seek the perception of the sample of the study about the educational comic strip which served as the learners' material. The acceptability level was measured using a five (5) point system gauging the degree of agreement of the respondent on the four indicators of the teaching medium. The four indicators presented in survey form were enumerated as such: multimodal communication, narrative experiences, text and images and contextual clues. The questionnaire included Filipino translation for each indicator so students to understand the statements better (Appendix K). The study also utilized a self-made pre-test post-test consisting of 40 questions each to assess the higher-order thinking skills of the students; each higher order thinking skill in terms of inferring, analyzing, evaluating and predicting. There were 14 questions for inferring, 12 questions for analyzing, 8 questions for evaluating and 6 questions for predicting. Five (5) qualified Araling Panlipunan teachers / experts validated the questionnaire. All comments and suggestions were incorporated for the improvement of the instruments. Required permits to conduct the research were made by the researcher. After securing the approval of the panel to conduct the study, the researcher also secured the approval of the principal of the target high school to allow her to conduct the study to the chosen respondents.

On the first week of the third quarter SY: 2021-2022, the researcher oriented the students regarding the study via google meet, and then gave the pre-test using google form before proceeding to the implementation of comic strip with four topics in Economics. Afterwhich, the post-test was given to the students via the same platform. Lastly, the google form for survey questionnaire on the perception of the students about comic strip was given in the google classroom. After retrieving the instrument, the results were tallied and submitted to the Statistics Center for the statistical treatment. Later the researcher analyzed and interpreted the results of the study.

The data were collated, tallied, tabulated, analyzed, and interpreted using appropriate statistical tools. Mean and standard deviation were used to determine the perception of the students on the use of comic strip in Economics.

To interpret the significant difference between the pre and post-test higher order thinking skills of the students, T-test statistics was used. Pearson Product-Moment Correlation Coefficient was used to assess the Higher Order Thinking Skills (HOTS) of the students in relation to students' perception on comic strip.

Results and Discussion

1. Use of Comic Strip in Learning Economics

1.1. In terms of Multimodal Communication

Table 1 with an overall mean of 4.5 described as Very Great Extent, the students perceived that comic strip offered a multiple mode of communication to understand the lesson. With the highest mean of 4.80; students perceived that, to a very great extent, the sequence of drawings in comic strip enabled them to enjoy reading thus, making learning easier. While the lowest mean, 4.3 students also perceived, to a great extent, that the comic strip provided emotional attachment and self-references. These findings were supported by Ozdemir (2017) study, “Humor Elementary Science: Development and Evaluation of Comic Strips about Sound” which found that when comics are used in science classes, students felt they can concentrate on the lesson and learn more effectively. Additionally, he noted that comic strips had a good impact on students’ science achievement and help them to appreciate and perceive success in science.

Table 1
Respondents’ Perception on the Use of Comic Strips in Learning Economics in terms of Multimodal Communication

Statement	Mean	SD	Verbal Interpretation
1. The sequence of drawings in comic strip enabled me to enjoy reading thus making learning easier.	4.8	0.5	Very Great Extent
2. The texts combined with images in the comic strip decreased my boredom in learning Economics.	4.6	0.7	Very Great Extent
3. Comic strip provided emotional attachment and self-reference.	4.3	0.75	Very Great Extent
4. Comic strip is an effective tool to improve my engagement in Economics.	4.6	0.78	Very Great Extent
5. Comic strip increased my curiosity about Economics.	4.5	0.75	Very Great Extent
Overall	4.5	0.48	Very Great Extent

He also added that there is a positive effect of comic strips on students’ science achievement and contributes on students’ enjoyment and perception of success in science.

Students enjoy reading from the sequence of drawing in comic strips. This study is supported by the findings of Linklater (2019), who found that sequential art offers many opportunities for children to relate a story to their own experiences, predict what will happen, infer what took place between panels, and summarize, exactly like you would with a text story. The benefit of sequential art, according to Manno, is that students can acquire and practice comprehension abilities without having to be able to decipher words.

1.2. In terms of Narrative Experiences

Table 2 with an overall mean of 4.6 described as very great extent, the student’s observation of the content of comic strip was sufficient.

With the highest mean of 4.7, the students perceived that comic strip gave direct information about the topic, was an effective tool in meeting the learning objectives, and satisfied their learning. While the lowest mean of 4.5, students perceived that comic strip facilitated the organization of the content of the topic.

Table 2
Respondents’ Perception on the Use of Comic Strips in Learning Economics in terms of Narrative Experiences

Statement	Mean	SD	Verbal Interpretation
1. Comic strip gave direct information about the topic.	4.7	0.47	Very Great Extent
2. Comic strip facilitated the organization of content of the topic.	4.5	0.61	Very Great Extent
3. Comic strip is an effective tool in meeting the learning objectives.	4.7	0.53	Very Great Extent
4. Comic strip broadened my knowledge about Economics.	4.6	0.89	Very Great Extent
5. Comic strip satisfied my learning.	4.7	0.51	Very Great Extent
Overall	4.6	0.46	Very Great Extent

1.3. In terms of Text and Images

Table 3
Respondents’ Perception on the Use of comic Strips in learning Economics in terms of Text and Images

Statement	Mean	SD	Verbal Interpretation
1. The texts used in comic strip are readable and easy to remember.	4.7	0.57	Very Great Extent
2. Images in comic strip caught my attention and facilitated learning.	4.6	0.66	Very Great Extent
3. Text and images in comic strip improved my comprehension about the subject.	4.7	0.52	Very Great Extent
4. Different images helped me in identifying characters and objects of comic strip.	4.4	0.78	Very Great Extent
5. Comic Sans MS font style improve my memory.	4.3	0.93	Very Great Extent
Overall	4.5	0.57	Very Great Extent

Table 3 with an overall mean of 4.5, described a Very Great Extent, the respondents observed the use of text and images tin comic strip that helped them understand the topics in Economics.

The highest mean of 4.7, students perceived that the text used in comic strip are readable and easy to remember while images improved their comprehension of the subject. While the lowest mean 4.3 students perceived that Comic Sans MS font style improve their memory.

The Benefits of comics as instructional tools, according to Linklater (2019), include the improvement of memory retention, recall, and learning transfer when an image is combined with text. Additionally, he said that by using comics, students would not only learn the content more quickly but also more effectively.

1.4. In terms of Contextual Clues

With an overall mean of 4.4, described as a very great extent, the respondents perceived that comic strip helps them understand an unfamiliar word. While the lowest mean 4.2 students perceived that they can find words in comic strip with the same meaning to avoid repetitive and antonyms to help them understand the situation and circumstances.

Table 4
Respondents' Perception on the Use of Comic Strips in Learning Economics in terms of: Contextual Clues

Statement	Mean	SD	Verbal Interpretation
1. Comic strip provided a direct definition of an unknown word.	4.5	0.62	Very Great Extent
2. Comic strip used words having the same meaning to avoid repetitive text.	4.2	0.84	Very Great Extent
3. Comic strip used antonyms to help me to understand the situations and circumstances.	4.2	0.92	Very Great Extent
4. Comic strip provided examples that helps me understand an unfamiliar word.	4.8	0.41	Very Great Extent
5. The comic strip helped me to increase my vocabulary.	4.7	0.45	Very Great Extent
Overall	4.4	0.57	Very Great Extent

According to the study of Ahmed, (2013), context has a significant effect of gaining knowledge of word meaning. She also added that many words can be learned from the context in which the writer of the passage used. In contrast, she states that learners may ignore unknown words in uninformative contexts.

1.5. Summary of Student's Perception of the Use of Educational Comic Strip in Economics

Table 5
Summary of Student's Perception on the Use of Educational Comic Strip in Economics

Educational Comic Strip	Mean	SD	Verbal Interpretation
Multimodal Communication	4.5	0.48	Very Great Extent
Narrative Experiences	4.6	0.46	Very Great Extent
Text and Images	4.5	0.57	Very Great Extent
Contextual Clues	4.4	0.57	Very Great Extent
Overall	4.5	0.52	Very Great Extent

The overall mean of 4.5, the students were to a very great extent on the use of educational comic strip in Economics. Respondents agree on the use of multimodal communication, narrative experiences, text and images, and contextual clues in economics.

With the use of comic strip, communication takes advantage of multiple modes using words, images, and other resources.

This educational comic strip gave the students informative material and an opportunity to become active learners even in independent learning.

2. Level of Higher Order Thinking Skills

2.1. Respondents' Pretest and Posttest Scores on Higher Order Thinking Skills in terms of inferring

Table 6
Respondents' Pretest and Posttest Scores on Higher Order Thinking Skills in terms of inferring

Score	Pretest		Posttest		Remarks
	f	%	f	%	
94-100	-	0.00	9	26.47	Outstanding
86-93	3	8.82	7	20.59	Very Satisfactory
78-85	8	23.53	11	32.35	Satisfactory
70-77	14	41.18	6	17.65	Fairly Satisfactory
69 and below	9	26.47	1	2.94	Unsatisfactory
Total	34	100	34	100	

The pretest result of students' higher-order thinking skills in terms of inference is 11 or 32.35% got a rating of 78-93. While 27 or 79.41% got 78-94 and above in the posttest result. On the other hand, 23 or 67.65% of the students got the rating of 70 and below in the pretest, while 7 or 20.59% in posttest.

This table reveals that before using comic strip, most of the students failed to make an educated guess in answering questions in terms of inference. However, the post-test result shows that there is an improvement in students' higher-order thinking skills in terms of inference.

2.2. Respondents' Pretest and Posttest Scores on Higher Order Thinking Skills in terms of Analyzing

Table 7
Respondents' Pretest and Posttest Scores on Higher Order Thinking Skills in terms of Analyzing

Score	Pretest		Posttest		Remarks
	f	%	f	%	
94-100	1	2.94	4	11.76	Outstanding
86-93	-	0.00	3	8.82	Very Satisfactory
78-85	13	38.24	7	20.59	Satisfactory
70-77	13	38.24	15	44.12	Fairly Satisfactory
69 and below	7	20.59	5	14.71	Unsatisfactory
Total	34	100	34	100	

Table 7 shows the pretest and post-test results of the respondents in terms of analyzing. It can be seen from the table that the pretest and posttest resulted in 14 or 41.18% got a rating of 78-94 and above. While the students' pretest and posttest is, 20 or 58.83% got a rating of 70 and below. This table described that the student has a limited idea of observing and breaking knowledge into parts in the form of recognizing purposes, and reasons for inferences and find confirmation to support generalization. This

result implies that most of the students are not capable of examining information in parts by identifying motives or causes.

2.3 Respondents' Pretest and Posttest Scores on Higher Order Thinking Skills in terms of Evaluating

Table 8
Respondents' Pretest and Posttest Scores on Higher Order Thinking Skills in terms of Evaluating

Score	Pretest		Posttest		Remarks
	<i>f</i>	%	<i>f</i>	%	
94-100	-	0.00	-	0.00	Outstanding
86-93	1	2.94	5	14.71	Very Satisfactory
78-85	18	52.94	7	20.59	Satisfactory
70-77	7	20.59	4	11.76	Fairly Satisfactory
69 and below	8	23.53	18	52.94	Unsatisfactory
Total	34	100	34	100	

The result of students' higher order thinking skills in terms of evaluating the increase in posttest from one student from the pretest who obtained very satisfactory to five students who also got very satisfactory. Evaluating skills of students defend opinions by making judgments about information based on a set of criteria.

2.4. Respondents' Pretest and Posttest Scores on Higher Order Thinking Skills in terms of Predicting

Table 9
Respondents' Pretest and Posttest Scores on Higher Order Thinking Skills in terms of Predicting

Score	Pretest		Posttest		Remarks
	<i>f</i>	%	<i>f</i>	%	
94-100	-	0.00	6	17.65	Outstanding
86-93	-	0.00	7	20.59	Very Satisfactory
78-85	5	14.71	9	26.47	Satisfactory
70-77	9	26.47	9	26.47	Fairly Satisfactory
69 and below	20	58.82	3	8.82	Unsatisfactory
Total	34	100	34	100	

The pretest result of students' higher-order thinking skills in terms of predicting is 5 or 14.71% got a rating of 78-85. While 22 or 64.71% got 78-94 and above in the post-test result. On the other hand, 29 or 85.29% of the students got a rating of 70 and below in the pretest, while 12, or 35.29% in the post-test result.

This result implies that most of the students can process what might happen next based on what they already know.

3. Test of Difference in the Pre-test and Posttest Scores

3.1. Test of Significant Difference between the Students' Pre and Posttest Mean Scores in the Assessment of their Higher Order Thinking Skills

Table 10

Test of Significant Difference between the Students' Pre and Posttest Mean Scores in the Assessment of their Higher Order Thinking Skills

Higher Order Thinking Skills	Pre-Test		Post-Test		t	df	Sig. (2-tailed)	VI
	Mean	SD	Mean	SD				
Inferring	7.47	2.15	10.62	2.36	-7.596	34	0	S
Analyzing	6.79	2.27	7.35	2.39	-1.412	34	0.167	NS
Evaluating	4.35	1.37	3.88	1.45	1.491	34	0.145	NS
Predicting	2.29	1.03	4.06	1.37	-6.888	34	0	S
Overall	20.91	4.83	25.91	5.61	-5.987	34	0	S

The findings show that there is a significant difference between the pretest and posttest performance of the students in terms of inferring and predicting. While in analyzing and evaluating, there is no significant difference. The overall results show that there is a significant difference between the pretest and post-test mean scores in the assessment of their Higher Order Thinking Skills. This significant difference implies that comic strip can enhance students' higher-order thinking skills.

This result implies that different type of questions of pretest and posttest with the same competencies affects the respondents' posttest scores, especially in terms of analyzing and evaluating.

The results above support what Wulandri and Soviyah (2017) revealed in their study of using comic strip and its effectiveness in the reading skill of the seventh-grade students of Yogyakarta in the Academic Year 2016/2017 wherein students' achievement taught by using comic strip is better than the student without using comic strip.

4. Test of Relationship between Variables

4.1. Test of Significant Relationship between the Students' Perception on the use of Comic Strip and Students' Level of Higher Order Thinking Skills

Table 11

Test of Significant Relationship between the Students' Perception on the use of Comic Strip and Students' Level of Higher Order Thinking Skills

Independent Variable	Higher Order Thinking Skills			
	Inference	Analyze	Evaluate	Predict
Multimodal Communication	0.292	0.697**	0.870**	0.438**
Narrative Experiences	0.392*	0.681**	0.588**	0.587**
Text and Images	0.036	0.784**	0.297	0.685**
Contextual Clues	0.021	0.938**	0.842**	0.506**

**Correlation is significant at the .01 level (two-tailed)

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

There is a significant relationship between students' perception and students' level of Higher Order Thinking Skills (HOTS) except in terms of inferring, which is significantly related only to narrative experiences, and students' level of higher-order thinking skills in terms of, evaluating which is not significantly related to text and images.

The findings revealed that students agreed of using comic strip as part of their learning in Economics even if it is their first time using it. They enjoyed reading because of the multiple mode of communication offered by the material. The dialogue using mother tongue helps them understand the lesson and the images caught their attention. Furthermore, lessons from comic strip based on Most Essential Learning Competencies (MELCs) have to improve by means of expounding every topic using the dialogue and images will help the respondents in analyzing and evaluating skills.

The result is similar to the study of Badriah (2015), that the use of comics allows and promotes students' higher-order thinking skills. He added that comic strip provides room for student to experience independent thinker and to maximize the activity of analyzing, synthesizing, and creating text (higher-order thinking skills).

This results also aligned in the study of Casumpang and Enteria (2019), entitled "Effectiveness of Developed Comic Strips as Instructional Material in Teaching Specific Science Concepts", that the student respondents generally have favorable attitudes towards comic strips as instructional material for learning science concept and skills. In their study, students appeared to have learned better using developed comic strip. They also added that the expert evaluator inferred that the comic strip possesses a high level of acceptability and efficacy.

Another piece of evidence to support the result of the study of Akcanca (2020), entitled "An Alternative Teaching Tool in Science Education: Educational Comics", claims that teaching science to students in an engaging way will help them understand the subjects, which they frequently find difficult, more clearly and enjoyably.

Conclusions

This study was designed to determine whether the comic strip in teaching Economics may enhance the learner's level of higher-order thinking skills. This study yielded the following findings.

1. The students perceived that the use of comic strip in terms of multimodal communication, narrative experiences, text and images, and contextual clues strengthened their higher-order thinking skills performance to a very great extent.
2. Pretest score in terms of inferring was obtained 67.65% of the students who got the rating of fairly satisfactory and below while in the posttest 79.41% of the students got the rating of satisfactory to outstanding. Pretest score in terms of analyzing is 58.83% of the students got a rating of fairly satisfactory and below while in the post test 41.17% of the students got a rating of satisfactory to outstanding. Pretest score in terms of evaluating is 44.12% of the students got the rating of fairly satisfactory and below while in the post test 35.30% of the students got the rating of satisfactory to very satisfactory. Pretest score in terms of predicting is 85.29% of the students got the rating of fairly satisfactory and below while in the posttest 64.71% of the students got the rating of satisfactory to outstanding.

3. There is a significant difference between the pre-test and post-test scores of the respondents on higher order thinking skills assessment.
4. There is a significant relationship between students' perception on the use of comic strip and students' level of higher order thinking skills except in terms of inferring, which is significantly related only to narrative experiences and students' level of higher order thinking skill in terms of, evaluating which is not significantly related to text and images.

Recommendations

Based on the findings of the study the following are hereby recommended:

1. Teachers. They may be more creative in choosing strategies and methods of learning to teach Social Studies course. The teacher may use comic strip in teaching as a good material to motivate students in learning Social Studies especially Economics. Prior to the use of comic strip as visual medium, the teacher should understand the features of comic strip, how long does it take to write a comic and how comics are written. The educator should give a clear explanation about the comic strip for the learners to have the same perception. The teacher should know the learners' level of learning the sequence of drawing in panels.
2. Students. They may be encourage to make comic strip for school project or activity by utilizing their skills to infer, analyze, evaluate and predict.
3. It is recommended to improve comic strip to enhance analyze and evaluate skills probably to expose students to comic longer to increase students Higher Order Thinking Skills in analyzing and evaluating.
4. It is recommended that a parallel study may be conducted in the future to further test the validity of the result of this study.

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