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## **INTEGRATION OF MULTIMEDIA TO WRITING CLASSES: ITS EFFECT TO WRITING QUALITIES**

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### **ABSTRACT**

This study utilized a quasi-experimental research paradigm particularly the Pretest-Posttest Design where the groups of participants were measured on the dependent variable both before and after the manipulation of the independent variable. The respondents of this study were two sections of English 2 (Writing in the Discipline) classes where the sections were referred as the Picture Group and Video Group respectively. Both groups were exposed to multimedia interventions, namely: Hamlet, Scarlet Letter, Romeo and Juliet and Huckleberry Finn. The data gathered through classroom activities were tabulated, analyzed and interpreted using standard deviation, mean ratings and T-test. The findings of the study revealed that: (a) the writing quality of the students has a significant improvement from the picture group after exposing the respondents to multimedia activities; (b) respondents from the video group improved their writing quality after exposing them to multimedia interventions; (c) video as an intervention has more significant improvement than pictures, however both bettered the writing quality of the students; (d) multimedia learning improves the writing skills of the students. On the basis of the research findings, it is recommended that teachers should adopt and integrate advanced pedagogical techniques like multimedia assisted learning in their teaching.

**Keywords:** Multimedia, Writing Quality, Content, Organization, Grammar, Diction, Mechanics

### **Introduction**

For hundred years of teaching learners with textbooks, verbal messages, printed images, printed lectures, etc. educators will agree that achieving learning of the students is indeed a laborious task. Mayer (2001) posited that although the said learning strategy offers a powerful tool, a lot of studies explore ways of going beyond it; one is the multiple media assisted learning. Several researchers (Burns 1979; Burn and Culp 1980; Woodruff and Bereiter 1981) advanced and explored computer programs to motivate the activation of ideas that students use in writing. Recent advances in graphics technology have generated to new efforts of understanding the potential of multimedia learning as a way of advancing human understanding which also support the prevailing hypothesis that people learn better from words and pictures rather than words alone (Mayer 2001).

Over the past years, a number of studies have shown benefits from the use of technology in education. The role of technology in education is vital, and the question is no longer if technology enhances learning, but rather how do we improve our use of technology to enhance learning? In many cases, like that of the researcher's observation, performances of the learners in the different macro skills seemed to be dropping as time goes by.

Students were not as active and interested in today's educational system which may be the cause of new technological advances which may distract the learners' attention. Hence, the researcher had decided to explore different and timely medium of instruction from which learners will not only learn but they will also be given the avenue to express their thoughts and gather their ideas with the use of technological devices, through multimedia activities.

One of the dilemmas of educators in the Philippines is the undeniable fact that a lot of students nowadays are exposed to the technological tools, yet educators do not have proper knowledge or training in using such tools in teaching. This study aims to show the significance of accepting recent pedagogical strategies in teaching, which includes the use of multimedia and other technological tools. Some related studies in the Philippines are that of Estroga's (2011) "Web Blog and Email Dialog: Effects on Writing Quality and Technical Literacy", which showed that students are literate in terms of technology. Positive difference scores in developing skill of students' writing quality particularly in organization, diction, content and mechanics was one of the findings of the study. In quite similar study of Sarip (2013) entitled "Web 2.0 Tools: Effects in the Writing Quality", it keyed out that technological tools have minimal effect in the writing quality of the student-participants

Multimedia technology is probably one of the most exciting innovations in the information age. The incorporation of multiple media in learning has become a feasible and affordable option due to the rapid expansiveness of technology and its undeniably many uses. Multimedia has the potential to create high quality learning environments, with the capability of creating a more realistic learning context through its different media. It also helps allowing a learner to take better control of the classroom especially when the class size is large (Norhayati & Siew, 2004).

Primarily, researchers have opened up many ways to unravel many learning experiences of both the educators and the learners through the advances in digital technology during the past fifty years. On the other side, at the University of Colorado, the quality of student writing had declined so rapidly in 1975, to the point that faculty from all departments and school were complaining. The students who were aware of their inadequacies were even unwilling to help themselves (Guralnick & Levitt, 1977). Because people have witnessed the benefit of having such gadgets in our lives, researchers and people in the academe have seen it as a good avenue to unriddle the never ending issues in the nation's education system, as well.

In this investigation, the primary concern of the researcher was to find out how multimedia, specifically the use of videos and pictures, affects the learning of the students in writing classes. The goal of this study was to examine the effects of incorporating multimedia learning in enhancing the writing skills of randomly chosen students. In like manner, it is as well a big advantage on the researcher's part, as an educator, to know and understand whether multiple media helped in improving the writing skills of the learners.

### **Main text, tables and figures**

The framework of this study is premised on certain theories of **Cognitive Theory of Multimedia Learning** (Mayer, 2001), **Multiple Media Assisted Learning** (Hubbard &

Levy, 2006), **Computer Assisted Language Learning** (Levy 1997); and other related theories that could help establish the assumption of this research study.

According to the Cognitive Theory of Multimedia Learning (CTML), proponent of such theory is Mayer (2001), the visual information processing channel may become overloaded when students must process on-screen graphics and on-screen text at the same time. However, when words are presented as narration, words can be processed in the verbal channel, thereby reducing the cognitive load in the visual channel. By reducing the cognitive load in the visual channel of the students which can be experienced in a multimedia class setting, the burden on the part of the students to generate too much information one at a time is reduced too.

Another theory that helped the researcher in analyzing the data gathered is the Multimedia Assisted Learning. It is filled with areas that are unknown and in need of exploration. It began in the 1960s with mainframe-based drill and practice materials (Hubbard & Levy, 2006). Multimedia learning as defined in Cambridge Handbook of Multimedia Learning (2005), the world's first handbook devoted to comprehensive coverage of research and theory in the field of multimedia learning, is the process of learning from words (e.g. spoken and printed text) and pictures (e.g. illustrations, photos, maps, graphs, animation, or video).

Moreover, Robert Ayres in his article "Learner Attitudes towards the Use of Computer Assisted Language Learning (CALL)", he also supported the notion on computer-mediated classrooms. Agreeing with Scinicariello (1997) highlights, he noted that technology is simply another tool to be used in the language learning process.

Integrating multimedia in classroom does not assure the educators as well as the learners to achieve their individual goals in the academe. However, if the educators are literate enough in the proper use of multimedia then students might as well learn in a multimedia class environment. Based on the different theories and researches mentioned earlier, it is assumed by the researcher that multimedia have its significant effects on the learning process of the students.

It is always important to note the principle of multimedia learning that people learn better from words and pictures rather than words alone (Mayer, 2001). The effect of multimedia on the writing of the students is the focus of this study. Thus, the researcher has to identify different approaches of multimedia that will be given to the respondents. One approach is by exposing videos to the first group and after which they will have to write essay; another approach for the other group of learners is showing them screenshots from the videos presented to the Video Group while the teacher is discussing.

This study utilized a quasi-experimental research paradigm particularly the Pretest-Posttest Design where the groups of participants were measured on the dependent variable both before and after the manipulation of the independent variable. The respondents of this study were two sections of English 2 (Writing in the Discipline) classes where the sections were referred as the Picture Group and Video Group respectively. Both groups were exposed to multimedia interventions, namely: Hamlet, Scarlet Letter, Romeo and Juliet and Huckleberry Finn. The data gathered through classroom activities were tabulated, analyzed and interpreted using standard deviation, mean ratings and T-test.

There were two groups of respondents in this research. The two classes were divided according to the multimedia approach that they were exposed into. One class was exposed to videos, thus, they were called the Video Group. The other one had pictures as the intervention. This class was called the Picture Group. The researcher gave a pre-test and a post-test. The pre-test in writing was conducted prior to the interventions, this aimed to determine the quality of the specific skill.

The pre-test was an essay entitled “*Who Am I?*” The student-respondents were asked to construct a descriptive essay based on the said topic. On the other hand, the post-test required the student-respondents to write an essay entitled “*My Purpose in Life.*”

There were four interventions that were exposed to each section in the span of two months. It is important to note that the student-respondents were asked to write either descriptive or persuasive essay in each intervention.

There were four (4) interventions given in between the pre-test and the post-test. Each of the intervention was based on specific materials that were given to the student-respondents. The essays of the student-respondents were considered as assessments after discussing each of the selected multimedia work. These interventions, videos and pictures of four literary fiction, were all from Sparknotes. The Sparknotes.com is a website that provides content and services such as study guides for literature, poetry, history, film and philosophy. It also includes hundreds of study guides available for viewing online and downloadable instructional materials which can be used by students or any professional who have access to the internet.

The interventions for the Video Group given sequentially were the short film “Hamlet”, then “Romeo and Juliet”, “Scarlet Letter” and “Huckleberry Finn” while the Picture Group had screenshots from the same videos consecutively. The student-respondents were required to construct a descriptive or persuasive essays based on a statement that was given to them by the researcher. After the brainstorming and reflection in every intervention, the student-respondents were asked to write their thoughts in a 3-5 - paragraph essay.

The methods of data gathering consisted of analyzing students’ responses and changes in the writing quality after exposing them to multimedia learning, providing feedback to learners and evaluating learner’s performance in various classroom activities.

On this part, the data and their corresponding interpretation and analyses that provide answers to the identified research problems will be presented. The result and findings of this research were based on the student-respondents’ performance before and after exposing them to multimedia interventions.

**Problem Number 1: How do the students perform in the following discourses, in terms of organization, content, diction, mechanics and grammar:**

The researcher provided interventions to the student-respondents to simply address the need to improve their writing quality. These interventions let the student-respondents write essays based from the prompts given by the researcher.

The student-respondents were tasked to make a descriptive essay on the short film Hamlet and Romeo and Juliet. As can be seen from the tables, majority of the respondents, if not all, performed from **Average to Good** in the five writing qualities, namely: organization, content, diction, mechanics and grammar. However it is also an important observation that among the

mentioned five writing qualities, 8% of the respondents had a **Very Good to Excellent** performance in the film *Romeo and Juliet*, as well as **Poor to Fair** performance in grammar, 48% for *Hamlet* and 12 % for *Romeo and Juliet*.

#### A. Descriptive

**Table 1. Percentage of the Performance of the Video Group in the Descriptive Discourse (*Hamlet* and *Romeo and Juliet*)**

Intervention	Rating	Organization %	Content %	Diction %	Mechanics %	Grammar %
<b>Hamlet</b>	Very Good to Excellent	0	0	0	0	0
	Average to Good	84.0	100.0	100.0	8.0	52.0
	Poor to Fair	16.0	0	0	92.0	48.0
	Very Poor	0	0	0	0	0
	Total	100.0	100.0	100.0	100.0	100.0
<b>Romeo and Juliet (VG)</b>	<b>Rating</b>	<b>Organization %</b>	<b>Content %</b>	<b>Diction %</b>	<b>Mechanics %</b>	<b>Grammar %</b>
	Very Good to Excellent	0	0	0	0	8.0
	Average to Good	100.0	100.0	100.0	96.0	80.0
	Poor to Fair	0	0	0	4.0	12.0
	Very Poor	0	0	0	0	0
	Total	100.0	100.0	100.0	100.0	100.0

As teachers, the responsibility of improving and enhancing students' writing is a laborious task. From the given table above, the results of the performance of the students in the writing qualities, particularly in grammar are quite appalling. In this study, grammar included the mastery of grammar rules, forms, patterns and correct subject-verb and pronoun-antecedent agreement. Educators usually experience to have students who are quite problematic in grammar; this might be addressed in other studies. The teacher had learned that a lot of the student-respondents in the class still were not able to master the basic grammatical structures. Even after checking the outputs of the student-respondents, the teacher had still realized that student-respondents were not still conversant of the basic grammatical structures. An excerpt from an essay of one of the respondents who had grammatical lapses is given below:

*Romeo and Juliet loves each other even if their families is against with the relationship. They fought for there love, its like love against all odds. The type of love that was shown on the story is something that only exist in fiction. Although there is some real life stories, still I do not think that it will reach to the point that the family will fight until the last member died or the lovers will commit suicide. If there may be true to life stories like that of Romeo and Juliet, I think there is only few numbers.*

In the case of the student-respondent who owns the essay above, the teacher had actually understood the point however the obvious mistakes seemed to be frustrating on the teacher's part. The errors committed were just basic grammar rules, like subject-verb agreement, pronoun-antecedent and other grammatical structures.

Buck (1997) believes that studying grammar improves the quality and clarity of critical thinking. Grammar may not directly improve the student's writing immediately but will improve their thought process and analytical abilities. This grammar instruction needs to be addressed in the intermediate level of elementary education. The approach in such lessons or instructions does not have to be addressed in a formal designated time period.

The grammatical structures of sentences and spelling should be addressed as the problems are presented in the context of their own work.

The table below shows the performances of the student-respondents from the picture group in their descriptive essays. The student-respondents were asked to make a descriptive essay based on the screenshots of pictures from the same film, Hamlet and Romeo and Juliet.

**Table 2. Performance of the Picture Group in the Descriptive Discourse (Hamlet and Romeo and Juliet)**

Intervention	Rating	Organization	Content	Diction	Mechanics	Grammar
		%	%	%	%	%
Hamlet	Very Good to Excellent	0	8.0	0	8.0	12.0
	Average to Good	84.0	80.0	76.0	84.0	72.0
	Poor to Fair	16.0	12.0	24.0	8.0	16.0
	Very Poor	0	0	0	0	
	Total	100.0	100.0	100.0	100.0	100.0
Romeo and Juliet	<b>Rating</b>	<b>Organization</b>	<b>Content</b>	<b>Diction</b>	<b>Mechanics</b>	<b>Grammar</b>
		%	%	%	%	%
	Very Good to Excellent	0	12.0	4.0	8.0	12.0
	Average to Good	84.0	84.0	92.0	84.0	76.0
	Poor to Fair	16.0	4.0	4.0	8.0	12.0
	Very Poor	0	0	0	0	0

Although it is apparent from the tables that most of the respondent also performed from **Average to Good** in the five writing qualities, it is also important to note that there are number of student-respondents from this group who performed both excellently and poorly in the five writing qualities. A percentage which seemed to catch the attention of the researcher is the **Poor to Fair** performance of the student-respondents on organization and diction, 16% for organization in both interventions while 24 % in diction for the first intervention, Hamlet.

There is a significant role of the teachers in preparing children for the challenges and pressure of the society. There are different types of genres that a child must learn to have the key to power, prestige and privilege, either oral or written. Writing generally gives people a chance to show their emotions and thoughts, it is an effective way of expressing oneself. Hence, it is one of the most significant skills that one has to be equipped of.

Consequently, one important thing that has to be enlightened is that one should not just teach writing, but teaches to write something, that includes giving the children of today the opportunity to express themselves through writing. These opportunities should not only be given by specific areas of subjects, like English, these should be afforded by other fields of learning too. A successful person is respected and influenced in their interaction with others because they are able to express themselves in expository and persuasive forms of language. By developing these styles of writing, a child is empowered to unlock any door that leads to success.

## **(B) Persuasive**

In table 3 in the next page, the performances of the respondents in persuasive essay from the video group are reflected. Persuasive works are frequently as less clearly confrontational in nature and instead present a subtler argument. These types of written

works are often created by a writer to persuade the reader into a certain mode of thinking, usually through the presentation of information from a particular perspective. The respondents were asked to write a persuasive essay on the questions that were given by the researcher based on the films *The Scarlet Letter* and *Huckleberry Finn*.

**Table 3. Performance of the Video Group in the Persuasive Discourse (*The Scarlet Letter* and *Huckleberry Finn*)**

Intervention	Rating	Organization	Content	Diction	Mechanics	Grammar
		%	%	%	%	%
Scarlet Letter	Very Good to Excellent	8.0	12.0	0	4.0	16.0
	Average to Good	92.0	88.0	100.0	96.0	80.0
	Poor to Fair	0	0	0	0	4.0
	Very Poor	0	0	0	0	0
	Total	100.0	100.0	100.0	100.0	100.0
Huckleberry Finn	Huckleberry Finn	Organization	Content	Diction	Mechanics	Grammar
		%	%	%	%	%
	Very Good to Excellent	16.0	20.0	20.0	20.0	12.0
	Average to Good	84.0	80.0	80.0	80.0	88.0
	Poor to Fair	0	0	0	0	0
	Very Poor	0	0	0	0	0
	Total	100.0	100.0	100.0	100.0	100.0

The table 3 above shows an average performance of the respondents in organization, content, diction, mechanics and grammar. However, an important detail noticed by the researcher is the undeniable quite big percentage of student-respondents who performed **Very Good to Excellent** in terms of mechanics, 4% for *Scarlet Letter* while 20% in *Huckleberry Finn*. Nonetheless, the rest of the writing quality also had quite impressive numbers. A part of one of the essays that got a **Very Good to Excellent** performance in Mechanics is given below, one respondent wrote:

*Slavery is one of the effects of poverty where one holds an over dominance of power to the oppressed and powerless. Years ago, slavery served as a means of trade and even until now in the less developed countries.*

*For me, based on my interpretation slavery can also be the opposite of freedom. It is like you don't have the power to do anything you want or anything your heart desires. Slavery is being a property of a person who is superior and dominant than you are. One of the ways to stop it is to never let people look down on you, be hopeful and hardworking for you to become a successful one. Study hard and don't give up on your dreams. Raise the awareness of the oppressed to fight for their rights, promote their rights and let them know the benefits of being free, teach them how to fight! Let your voice be heard and be free!*

Going back to the discussion of what comprises the Mechanics as one of the writing qualities, it includes the rules of punctuation marks, paragraphing, capitalization and other writing conventions. As can be seen in the given sample above, the respondent seemed to be very sure with writing conventions, including the use of punctuation marks, like how the writer used an exclamation point at the last sentence of the second paragraph to show how eager the writer is to convey the message of the essay. The teacher also did not find any misspelled words in the entire essay.

Table 4 below shows the performances of the respondents from the picture group in persuasive discourse as well. The bases of these persuasive essays were the questions given by the researcher. Alike to the previous tables, the respondents from the picture group also did an average performance in the persuasive essays.

**Table 4. Performance of the Picture Group in the Persuasive Discourse (*The Scarlet Letter and Huckleberry Finn*)**

Intervention	Rating	Organization	Content	Diction	Mechanics	Grammar
		%	%	%	%	%
Scarlet Letter	Very Good to Excellent	0	8.0	0	16.0	16.0
	Average to Good	96.0	92.0	96.0	84.0	76.0
	Poor to Fair	4.0	0	4.0	0	8.0
	Very Poor	0	0	0	0	0
	Total	100.0	100.0	100.0	100.0	100.0
Huckleberry Finn	Rating	Organization	Content	Diction	Mechanics	Grammar
		%	%	%	%	%
	Very Good to Excellent	12.0	16.0	0	0	12.0
	Average to Good	80.0	84.0	96.0	100.0	80.0
	Poor to Fair	8.0	0	4.0	0	8.0
	Very Poor	0	0	0	0	0
	Total	100.0	100.0	100.0	100.0	100.0

In tables 1, 2, 3 and 4, there is an observed of almost **Average to Good** performance of the student-respondents in both types of discourses. However, during the giving of tasks, the student-respondents appeared to be more excited and motivated to write persuasive essays. When asked about this, the student-respondents have answered that it is because they felt to be less caged in terms of expressing their own ideas and thoughts when writing persuasive essays than descriptive essays, because in persuasive essays, the student-respondents just had to lay down their opinions and thoughts in order to convince their readers. On the other hand, in descriptive essays, student-respondents still had to make an in depth observation of the subject. Yet, some of the student-respondents also found it easier to write descriptive essays because accordingly what they only needed to do is to study the subject well and they can already start writing. Thus, the researcher may suggest that other researchers may design a separate study about this matter.

#### **Problem Number 2: What is the performance of the students in writing before and after exposing them to multiple media assisted learning?**

The researcher measured the performance of the respondents before giving the respondents multimedia activities through pre-test. A preliminary test or pre-test is given in advance of instruction of evaluation, in this study, the pre-test given to the respondents is an essay on "Who Am I?" On the other hand, the performances of the respondents after the multimedia activities were evaluated through a post-test. The post-test that was given to the respondents is an essay on "My Purpose in Life". Both groups were asked to write 4-5 paragraphs on the topic given to them. The respondents outputs



were scored according to the Final Rating Distribution as used by Sarip (2013) on her study “*Web 2.0 Tools: Effects in the Writing Quality of Students in MSU.*”

**Table 5. Performance of the Respondents on Pre-test and Post-test**

Rating	Picture Group		Video Group	
	Before	After	Before	After
<b>Good</b>	40.0	88.0	20.0	56.0
<b>Average</b>	60.0	12.0	80.0	44.0
<b>Total</b>	100.0	100.0	100.0	100.0

As can be seen in table 5, 10 student-respondents, that is 40% of the population of the Picture Group gave a **Good** performance before they were exposed to the multimedia activities, that means that they scored from 31-40 while majority of the population of the Picture Group that is 60% of the 25 respondents got an **Average** rating on the pre-test, meaning their scores ranged to 21-30. On the other hand, 20% from the Video Group achieved the range of 31-40 which is classified as **Good** while 80% of the population of the same group of respondents, got an **Average** score too.

As reflected in table 5, the respondents who belonged to the Picture Group seemed to have better performance in the pre-test as 40% of them got the a **Good** rating than that of the Video Group that which 20% only got a **Good** rating according to the rubric used by the researcher. A significant note also as shown by the table 5 above is that 80% of the respondents, majority of the population, from the Video Group achieved an **Average** performance only. This may support the interpretation brought in earlier by the researcher that, initially, student-respondents from the Picture Group performed better than those in the Video Group in the pre-test given to them by the researcher.

Theoretically, technology is simply another tool to be used in the language learning process. While it has very high appeal, learners view it as enhancing, not replacing, their classroom-based instruction (Scinicariello, 1997). Moreover, Mayer (2001) posited that importance of the principle of multimedia learning that people learn better from words and pictures rather than words alone. This may explain the unimposing scores of the respondents, which is only in the range of **Average to Good**, since initially the respondents in the groups were not exposed to any multimedia approach in teaching.

Another significant goal of this study is to identify the performance of the student-respondents after exposing them to multimedia activities. Essentially, the performance of the student-respondents has to be measured in order to support later on either the interventions, multimedia activities, that were given to the student-respondents did or did not bear on the improvement of the writing skills of the respondents. The table below shows the performance of the student-respondents after exposing them to multimedia activities.

After the interventions were given to the groups of respondents, it is evident from table 5 that the respondents' performances improved. In fact, 88 % of the respondents from the Picture Group and 56 % from the Video Group got a rating of **Good** in their outputs. While another 12 % from Picture Group and 44 % from the Video Group achieved a **Very Good** rating. As revealed in the table above, the respondents got the highest two ratings, the **Very Good and Good**.

The overwhelming improvement of the student-respondents in their Post-Test scores initially supports the theories about the significance of multimedia in teaching. One of the factors of **Cognitive Theory of Multimedia Learning** (Mayer, 2001) is that the multimedia principle that people learn better from words and pictures than from words alone. Research suggests that the visual channel handles less information than the auditory channel (Miler, 2005). However, when information is presented using both the visual and auditory channels, working memory can handle more information overall. Using multiple channels can increase the amount of information that the brain can process (Sweller, 2005). The results of the Post-test of the respondents support these studies because there is an overwhelming improvement on the respondents' scores after exposing them to multimedia activities.

When the teacher-researcher realized this overcoming improvement in the scores of the student-respondents after exposing them to multimedia, the researcher immediately asked the student-respondents about their possible reflections or realizations within the period of exposure to multimedia activities. According to them, they found it easier to gather and retain information in their minds when they see the images or animation together with the texts and narration. This is one of the highlights of multimedia learning, there is an integration of the skills that have to be developed in the learners. This is one of the factors that multimedia offer and which the traditional teaching cannot afford. Thus, it may be deduced that the student-respondents learned better in multimedia setting. The researcher had also observed that during the gathering of data, when the student-respondents were exposed to the same usual activities they do in their other subjects, the tendency is the teacher drags down the students into a boring class.

From the existing researches mentioned earlier, it can be deduced that more English teachers would agree that teaching English using multimedia makes the English class dynamic than that of the teacher-centered model. In traditional English classrooms, teachers have to even write the vital language points and important terms on the chalkboard. In the multimedia classrooms, the teacher may simply click the button and keyboard in showing important content, so long as the teacher is also conversant in operating multimedia tools.

**Problem Number 3: Is there a significant difference in the performances of the students after exposing them to multiple media activities?**

*Ho: There is no significant difference between the performance (mean scores) of the students in video group and picture group approaches in teaching*

To find the significant difference between the performance (mean scores) of the student-respondents in Video Group and Picture Group approaches in teaching, the method used is the t-test (Dependent Samples), and the statistic used in rejecting the null hypothesis is the t-test.

**Table 6. Mean Ratings, Standard Deviation and T-values of Performance of the Respondents Before and After the Interventions in the Video and Picture Group (Over-all Score)**

Group Paired	Paired Differences		T	Sig. (2-tailed)
	Mean	Std. Deviation		
Video	-12.32000	3.31311	-18.593	.000
Picture	-6.44000	3.57165	-9.015	.000

Based on table 6, the value of the t statistic for pre-posttest video is -18.593 while in the picture group is -9.015 while both are with a p-value of 0.000 which is less than  $\alpha=0.05$  level of significance, thus the null hypothesis that *there is no significant difference between the performance (mean scores) of the students in both video group and picture group approaches in teaching* is rejected in this study. Thus, the results suggest that in both groups, the students' scores in their post-test, which served as the respondent's assessment to the performance of the students, have significantly improved.

In the same way, Table 6 shows the p-values of each writing quality. Apparently, Table 7 shows that the p-values of organization, content, mechanics, diction and grammar between the pre-test and post-test of both groups, Video and Picture Groups, are less than  $\alpha=0.05$  level of significance, thus the same with the over-all scores, still, the null hypothesis is rejected.

**Table 7. T-value and P-values of the Performance of the Students in the Writing Quality from the Video and Picture Group**

Group	Values	Organization	Content	Diction	Mechanics	Grammar
Video	t-value	10.729	10.539	13.887	9.576	7.579
	p-value	0.000	0.000	0.002	0.001	0.000
Picture	t-value	6.393	5.881	3.536	3.693	6.834
	p-value	0.000	0.000	0.002	0.001	0.000

To simply explain this, the results showed that there is a significant improvement in the performance of the students after exposing them to the multimedia interventions. In the earlier chapters, it has been stated that Miler (2005) suggested that less information can be handled by the visual channel compared to the auditory channel. However, working memory can handle more information overall when information is presented using both the visual and auditory channels. Thus, using multiple channels can increase the amount of information that the brain can process (Sweller, 2005). This supports the results of the study that the writing skills of the student-respondents had a significant difference before and after exposing them to multimedia activities. Since multimedia learning involves the presentation of both the auditory and visual channels, students were able to generate more ideas from themselves compared to the traditional setting of just showing texts to the students or by just providing explanation to them.

One of the principles of the Multimedia Learning which was designed by Mayer (2001) is the principle that people learn better from words and pictures than from words alone. If we are going to check again the pre-test which was given before the student-respondents were given multimedia activities, it is very apparent that the student-respondents had low scores; in fact, they only had the *Average and Good* ratings. On the other hand, the post-test rating of the student-respondents is in the range of *Good and Very good*. That means to say that multimedia exposures that were imparted to students really did a significant difference to the performance of the students.

In addition, Liu and Reed (1995) asserted that multimedia learning provides a more authentic learning environment. Consequently, listening is combined with seeing, just like in the real world in multimedia learning setting. To boot, integration of skills is easily done since the variety of media make it natural to combine reading, writing, speaking and listening in a single activity. Thus, these may explain the significant improvement in the writing skills of the student-respondents after generating the multimedia activities in the

chosen classes. Another student-respondent who had an apparent improvement in writing skills wrote:

*I am just ordinary student a simple guy who walk in MSU everyday to attend his classes. Not well-known in our campus, not so active for the extra curricular activities. But I always give my best to have good grades to make my parents happy.*

The student-respondent had same problems in the different writing skills with the other student-respondents but he did improve in his performance in the post-test; a part of his essay is given below:

*My purpose in life it to worship God, that is the first rule that my parents had told me since then. While doing my duties to the Almighty Creator, I also need to fulfil my role as a son to my parents. I know that I have to make them proud of me; I have to make them happy. Making my parents happy means I need to show them good grades in return to all their sacrifices just to send me in school.*

The teacher had enough interaction to the student-respondents by asking them share their thoughts on the activities that were given to them as prompts. Some student-respondents shared in the class about their personal struggles in writing. According to some, they found it quite difficult to come up with good output because others cannot really find the exact words to express themselves. However, based on the sharing of the majority of the class, although they had the same struggles with others, what helped them a lot to continue writing was because the stories, which served as the topics on their essays, were given well through multimedia devices. Basically, they found answering the questions manageable because they had understood the stories very well, they did not need to read long paragraphs before answering the questions but they only had to watch and listen carefully.

Thence, the researcher had deduced from the findings of this study that indeed multimedia instruction creates the opportunity for learners to improve their learning effectively, like the videos and pictures which were used in this study. By utilizing modern education technology reasonably, English teachers may achieve their target or goals in teaching. It is very important to understand and explore each individual's learning through multimedia. Multimedia may serve as an aid to the learners by becoming more focused on an attentive learner, which ultimately will increase educational success, of course with the effort of the instructor to analyze the students' individual multimedia learning strategy. Discovering this multimedia learning will allow the student to determine his or her own personal strengths and weaknesses and learn from them. As to what had been shown in the results of the data gathered, there is an overwhelming positive benefits that the student-respondents had by exposing them to multimedia activities. It is also important for students to have multiple learning opportunities and teachers should achieve a match between teaching strategies and the students' unique multimedia learning.

#### **Problem Number 4: Which of the two approaches in multimedia learning is better?**

*Ho: there is no significant difference between the mean gain scores of the students in the two groups (video and picture)*

**Table 8. Mean Ratings, Standard Deviation and T-values of Performance of the Respondents from the Video and Picture Group**

Group	Mean		Gain Mean	Std. Deviation	T	Sig. (2-tailed)
	Before	After				
Video	28.20	40.52	12.3200	3.31311	6.035	0.000
Picture	30.24	36.68	6.4400	3.57165		

In comparing the mean gain scores of the two groups, it can be seen from the Table 8 that the t-value is 6.035 and the p-value of 0.000 which is less than 0.05 level of significance, thus the null hypothesis that *there is no significant difference between the mean gain scores of the students in the two groups (video and picture)* is rejected. Therefore, the result is significant. It means on the average, mean gain scores in the video group and picture group are not the same. As shown in the table, the Video Group has the mean of 12.32 which is obviously greater than the mean 6.44 of the Picture Group.

Based on the sample of the study, it can be recommended that the video group approach is better than the picture group approach. The films that were watched by the student-respondents before giving them the prompt questions are films that are combination of animation, text and narration, while the Picture Group were given screenshots of pictures from the same film given to the video group less the narration. This affirms to other researchers who found that the combination of pictorial, text and auditory materials yield better test results on the performance of target audience compared to a combination of written and pictures alone (Mayer, 1998; Mayer & Moreno, 2002; Austin, 2009).

Indeed, the interventions given to the student-respondents agreed to the study of Estroga (2010) as stated by Sarip (2013) that in order to develop the writing skills, teachers have to assure that the prompts given should craft students to relate their real experience. As well as, the words used in giving the prompts should be perfect to the subject, audience and situation that students write for.

One of the observations of the researcher during the administration of prompts to the two groups was that in the Picture Group, the student-respondents from the Picture Group seemed to be more attentive to the discussion of the teacher than that of the pictures shown to them. They were busy taking down their notes to what the teacher was saying because they feared that they might not digest the stories well. On the other hand, the student-respondents in the Video Group just seemed to be more relax while watching the videos. Their expressions or reactions on some parts of the video were also more apparent compared to the Picture Group whose concern is to listen to the teacher well.

The researcher derived several insights during the data gathering procedure and after learning the results of the data gathered. First, students may perform differently in the different types of discourses. Others do well in descriptive while others excel in persuasive essay writing too. Thus, as educators, it is also our role to develop the learners' ability to the different kinds of discourses. Second, the student-respondents still find it difficult to develop certain writing qualities, such as grammar, organizations and others. Hence, teachers might as well spend ample time to maximize the students' improvement in these writing qualities since these are what compose a good writing output. Lastly, even if studies have proven the significance of multimedia and other technological devices in teaching, as educators and learners, we still need to know the different learning styles that

are best suited to us because new pedagogical approaches may not be as effective to one person like that from others.

## Conclusions

From the significant findings of the study, the following conclusions on the effect of multimedia, such as Video and Pictures in the Writing Quality of the students were drawn:

This study has identified that Multimedia are effective when it comes to improving the writing quality of the students-respondents. Video and picture tool of instructional material can be adopted in the learning and teaching of writing. This can be adopted as new pedagogical strategy but, never as a replacement. Multimedia needs to be used carefully and judiciously and must be tightly integrated into the learning curriculum in order for learners to obtain maximum benefit from its use.

Today's generation seemed to be very open to technological advancement, thus, if they are well informed on the proper use of the technology to enhance their learning, writing skills and other skills that need to be improved, then learning would probably be an enjoyable and interesting experience for them.

Furthermore, students tend to be more interested to write something that includes more their personal thoughts, opinions and experiences. This study proved effective in the production of write-up especially because the prompts pave way to them to share personal thoughts. What is more interesting is it used technology which is the in-trend of the society nowadays.

With this, teachers have to be open to new pedagogical techniques, like the use of multimedia to classes. Based on the result of the data analyzed and interpreted, multimedia caused a significant improvement to the writing quality of the student-respondents as reflected in the pretest and post-test scores of the respondents.

Nonetheless, teachers should always be involved in monitoring and coaching the students as much as they need in order to enhance more the individual writing qualities such as organization, content, diction, mechanics and grammar.

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