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The Use of Audio-Video Instructional Materials to Improve the Performance of Learners in Social Studies

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Abstract: ***This study focused on enhancing the performance of learners in social studies using the audio-video instructional materials to the Grade VI learners of Nagpayong Elementary School, Pasig City. The participants were the two sections of Grade VI. One group was represented as the experimental group and the other as the control group. They were chosen according to their average grades and the same mental ability. The two sections that had almost the same number of cases of forty-five (45) learners were used as respondents. The experimental research design was adapted in which a 50-item validated researcher-designed test was used as the instrument. Pre-test was administered to both groups the day before the start of the experimentation and post-test was given after the experimentation. The results revealed that learners in the experimental group who were taught using audio-video instructional materials gained higher scores in the post-test than the learners in the control group who were taught using the traditional method of teaching. Therefore, it is concluded that learners learned and performed better when exposed to the audio-video instructional materials as strategy in teaching. The study recommends the use of audio-video instructional materials as strategy in teaching social studies and other subjects as well.***
Keywords: audio-video instructional materials, traditional approach, experimental group, control group

I. INTRODUCTION

Education is the primary agent of transformation towards sustainable development and the main instrument of equipping people the necessary skills, attitudes, and values. It is life's foundation of every individual and a process that makes an individual's transformation to become competitive and survive life's challenges. Furthermore, education is necessary to every individual to learn and to achieve their dreams. Through education, a child acquires knowledge, skills, attitudes, and behavior that he needs to achieve the goals and fulfill ambition in life. A study of social studies is essential for good citizenship. This is the most common justification for the place of social studies in school curricula. Sometimes advocates of citizenship social studies hope merely to promote national identity and loyalty through social studies spiced by vivid stories and lessons in individual success and morality. But the importance of social studies for citizenship goes beyond this narrow goal and can even challenge it at some points.

Social studies that lay the foundation for genuine citizenship returns, in one sense, to the essential uses of the study of the past. It provides data about the emergence of national institutions, problems, and values, it's the only significant storehouse of such data available. It offers evidence also about how nations have interacted with other societies, providing international and comparative perspectives essential for responsible citizenship. Further, studying social studies helps us understand how recent, current, and prospective changes that affect the lives of citizens are emerging or may emerge and what causes are involved. More important, studying social studies encourages habits of mind that are vital for responsible public behavior, whether as a national or community leader, an informed voter, a petitioner, or a simple observer. Social studies, in sum, is crucial to the promotion of that elusive creature, the well-informed citizen. It provides basic information about the background of our political institutions and about the values and problems that affect our social well-being. It also contributes to our capacity to use evidence, assess interpretations, and analyze change and continuities. No one can ever quite deal with the present as the historian deals with the past, we lack the perspective for this feat; but we can move in this direction by applying historical habits of mind, and we will function as better citizens in the process. Education today is just beginning to think of shifting the basis of certification from time served to skills and knowledge obtained. Multimedia holds great promise for improving the quality of education because multimedia provides the ability to illustrate ideas with visual, audio, text, or any combination of media so learners can create new ways of communicating ideas. They are also able to engage themselves in many types of virtual experiences which will allow them to broaden their skills and imagination.

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In recent years, it has been realized that there is an immense benefit in applying Multimedia-Based Instruction in the social studies classroom. Many teachers struggle with finding out how to motivate learners to learn, and this is especially true when teaching social studies, because so many learners find this subject boring. Multimedia-Based Instruction used in education has become more popular in recent years. The use of Multimedia in education opens a new area of knowledge and offers a tool that has a potential to change some of traditional and ineffective educational methods.

According to the study of Liang (2019) on the Scene craftsmanship plan based on human-computer interaction and interactive media data framework: an intuitively viewpoint, expressed that the improvement and development of developing advances has ended up the most references within the field of education to assist learners' set up successful self-learning strategies and created the capacity to ceaselessly overhaul information. As a second-generation Web dialect, his article presents Virtual Reality Modelling Dialect (VRMD) as a technique. Combined with the characteristics of real cases, his paper analyzes the application of VRMD in virtual instructing environment and gives a concrete usage strategy. In see of the application of VRMD in online instructing, his paper summarizes and analyzes the capacities, essential highlights and improvement course of VRMD.

In the study of Mesfin, et. al. (2018) on the Improved Nimbleness of E-Learning Selection in Tall Schools showed that the encounters of instructors and understudies on e-learning assets are reasonable. In any case, there's as it was constrained get to the multimedia-riched assets, and untimely honizing and utilizing them for the real learning. The mapping of these come about to the models for e-learning selection moreover appeared that the schools' status compared to the beginning stage. Besides, since outfitting schools with computing foundation and e-learning assets did not fundamentally infer successful adoption, schools got to consider the proceeded support and overhaul; re-evaluate their educational module for the selection; and point for the following level within the chosen e-learning appropriation showed.

According to Farhan, et. al. (2018) on mixed media based subjective evaluation strategy in eLearning: understudy educator engagement investigation expressed that Multimedia-based Electronic learning (eLearning) is a viable strategy of information exchange. Multimedia-based eLearning gave the opportunity to the understudies that they can utilize once conveyed and recorded video address any time. Interactive media instruments and its applications in case utilized in eLearning empower the understudies and instructors to require such kind of focal points. Mixed media applications gave the focal points to understudies and instructor in eLearning but challenges were moreover striking highlights.

In the study of Gorghiu, et. al. (2018) on Enhancing the ICT Competencies of College Understudies – A Key Calculate For Instructors expressed that the presentation of ICT in school, but moreover in out-of-class exercises, contributed to an awesome degree on moving forward the student's learning. ICTs can be adjusted to the students' learning needs, but moreover to the teachers' instructing needs. The utilization of ICT within the teaching-learning forms made understudies more mindful to what is instructed, expanding their receptivity and interactivity, invigorating their inventiveness. On the other hand, utilizing ICT within the instructive context makes a difference to the advancement of advanced aptitudes (not fair for understudies), to work collaboratively in ventures and to fathom issues quicker and with awesome precision.

According to the study of Reyna and Mejer (2018) on Utilizing the Learner-Generated Computerized Media (LGDM) System in Tertiary Science Instruction expressed that Systems have been developed for video-making within the classroom that consider specialized necessities, pedagogies, and the combination of both. Be that as it may, lost could be a common sense to direct scholastics and understudies on the usage of LGDM assignments. Understudies delighted in the gathered work and imagination, and they recognized computerized media bolster as a basic component of their learning involvement. Preparatory information backed-up utilizing the LGDM system to plan computerized media assignments for science instruction.

In the study of Halim, et. al (2018) on the Examination on Understudy Getting to Data for ICT- Learning Approaches appeared that through e-learning it can evaluate understudy execution by giving a log report. In evaluating the execution of understudies through e-learning the used the capabilities of e-learning in coordination with assessment within the educating handle. Agreeing to a ponder conducted most of the understudies concur and favor to utilize e-learning. Preparation of instructing materials in various designs within the e-learning made understudies curious about utilizing it as a reference. Recurrence of get to e-learning understudies, especially the utilization of learning materials have appeared to extend understudy execution.

Agreeing to the study of I Gede, et. al. (2018) uncovered that the address video and slide synchronization was utilized gave distant better impact compared to the course which was not treated with this media. Hypothetically, the utilization of the guidelines media-based on video and slide synchronization system facilitates the understudies at the time of learning, at the time of fabric talk and it made use of guidelines time more successful. The imperative in this ponders lies within the truth that the address video and slide synchronization framework has not been utilized ideally in e-learning for the understudies to get into it well.

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In connection with the present study, all the above-mentioned related studies provided clear information on how to enhance the performance of the pupils using audio-video instructional materials. Most of the foregoing studies and literature bore similarities with the current study, the only difference is on the subject matter and the format, as well as the validation of instrument through a researcher-made test and learner-respondents.

The study aimed to enhance the performance of leaners in social studies using audio-video instructional materials.

The study used quantitative approach to research. The purpose of this study was to determine the appropriate and effective approach in teaching social studies.

The study aimed to enhance the performance of grade six learners in social studies using audio-video instructional materials in Nagpayong Elementary School.

Specifically, this study sought to answer the following questions:

1) What is the performance of the learners in the control and experimental groups during the pretest?
2) Is there a significant difference in the performance of the control and experimental groups during the pretest?
3) What is the performance of the learners in the control and experimental groups during the posttest
4) Is there a significant difference in the performance of the learners in the control and experimental groups during the posttest
5) Is there a significant difference in the performance of the learners in the control and experimental groups from pretest to posttest?

II. METHODS

The quasi-experimental research method was used in the study. Experimental research utilizing parallel group design was utilized. Parallel group design includes two or more groups which were used at the same time only one single variable was manipulated or changed.

The experimental group was valued while the parallel group served as the control for comparative purposes. This is an experimental study involving two groups of respondents. There were two comparable groups which were identified as experimental and control group.

Since the research was concerned on the comparative analysis of the utilization of audio-video instructional materials and traditional method in enhancing the performance of learners in social studies, the experimental research using two-group design was the most appropriate method.

To assess the performance of the learners in social studies using audio-video instructional materials, the researcher formulated a teacher-made fifty items test and was administered to the participants before the start of 15 days experimentation.

The fifty-item test was validated by the coordinator of Social Studies in Grade Six Department, Master Teacher in Social Studies and overall coordinator in Social Studies in Nagpayong Elementary School and was pretested to the Grade 7 learners. The competencies of the two topics were aligned to the teacher-made test.

The researcher prepared a table of specification to determine the test item placement and the different levels and categories of cognitive domains as specified in Benjamin Blooms Taxonomy, i. e. (a) knowledge (b) comprehension (c) application (d) analysis (e) synthesis and (f) evaluation questions.

The participants of the study were the two sections of grade six learners in Nagpayong Elementary School during the school year 2020-2021. Grade 6 section 23 was considered as the experimental group while the other section Grade 6 section 24 was considered as the control group. The control group was taught using the traditional method while the experimental group was exposed to audio video instructional materials.

This study used purposive sampling, a sampling technique that targeted a particular group of people or rely on the judgment of the researcher when it comes to selecting the group that are to be studied.

Therefore, the researcher selected two sections that have closely similar groups in terms of mental ability where grades range from 75-85 and these sections are heterogeneous in compositions, out of five sections under his classes, toss coin method was used by the researcher.

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III. RESULTS

1) *Problem1. Performances of the Control and Experimental Groups in the Pretest*

Table 1 Pretest Scores of the Control and Experimental groups

Scores	Control Group		Scores	Experimental Group	
	Frequency	Percentage		Frequency	Percentage
26-30	1	2.22	26-30	3	6.67
21-25	8	17.78	21-25	6	13.34
16-20	15	33.33	16-20	16	35.56
11-15	13	28.89	11-15	13	28.89
6-10	5	11.11	6-10	7	15.56
1-5	3	6.67	1-5	0	0
Total	45	100.00	Total	45	100.00
MEAN	15.56		MEAN	16.33	
SD	5.43		SD	5.12	
As reflected in Table1 the mean of the control group was 15.56 with a standard deviation of 5.43 while the mean of the experimental group was 16.33 slightly higher than the control group and standard deviation of 5.12. Both groups had scores that clustered around the mean.					

2) *Problem2. The Significant Difference in the Performance of the Control and Experimental Groups in the Pretest*

Table2 Difference in the Pretest scores of the Control and Experimental Groups

	Control Group	Experimental Group
Mean	15.56	16.33
Standard Deviation	5.43	5.12
Computed t-value	0.68	
Critical Value$_{(88,.05)}$	1.660	
Decision	Accept the null hypothesis-No Significant Difference	

As exhibited on Table 2, the computed t-value of the pretest scores of the control and experimental groups was 0.68. This is lower than the critical value of 1.660 at 5% significance level. The t- test was used to determine the difference between the mean scores of the control and experimental groups. Based from the result shown on the table the t-value was less than the critical value. With these result the null hypothesis was accepted which means that there is no significant difference between the pretest scores of the two groups.

3) *Problem3. Performance of the Control and Experimental Groups in the Posttests*

Table 3. Post test Scores of the Control and Experimental Groups

Scores	Control Group		Scores	Experimental Group	
	Frequency	Percentage		Frequency	Percentage
41-45			41-45	9	20.00
36-40			36-40	28	62.22
31-35	1	2.22	31-35	5	11.11
26-30	10	22.22	26-30	3	6.67
21-25	15	33.33	21-25		
16-20	11	24.44	16-20		
11-15	8	17.78	11-15		
TOTAL	45	100.00	TOTAL	45	100.00
MEAN	21.33			37.78	
SD	5.63			9.37	

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The results in the posttest indicate that the mean score of the experimental group was higher than the control group, with the mean score of 37.78 against the 21.33 of the control group as reflected in Table 3.
The experimental group gained 16.45 more than the control group on the posttest. The use of Audio Video Instructional Materials had an impact on the performance of the students on the experimental group.

4) Problem4. The Significant Difference in the Performance of the Control and Experimental Groups in the Posttests

Table 4 Differences on the Posttest scores of the Control and Experimental Groups

	Control Group	Experimental Group
Mean	21.33	37.78
Standard Deviation	5.63	9.37
Computed t-value	10.01	
Critical Value$_{(98,.05}$	1.660	
Decision	Reject – Significant Difference	

Table 4 showed that the t-value of 10.01 was higher than the critical value of 1.660 at 5% significance level. Since the computed t-value was higher than the critical value, the null hypothesis was rejected which means that there is a significant difference between the posttest scores of the control and experimental groups.

5) Problem 5. The Significant Difference Between the Performances of the Two Groups in the Pretest and Posttest

Table 5 Difference Between the Pretest and Posttest Scores of the Control and Experimental Groups

	Control Group	Experimental Group
Mean of Difference	5.29	21.18
Computed t-value	8.67	31.75
Critical value$_{(44,.05)}$	1.679	1.679
Decision	Reject the null hypothesis - Significant Difference	Reject the null hypothesis - Significant Difference

As revealed on Table 5, the mean difference of the pretest and posttest scores of the control group was 5.29 while the mean difference of the experimental group was 21.18. These results showed that the experimental group gained more increase of scores as compared to the mean increase of the control group.
The t-value of the control group was 5.29, which is higher than the critical value of 1.679 at 5% significance level. On the other hand, the t-value of the experimental group was 31.75 also higher than the critical value of 1.679 at 5% significance level.
There was a significant difference from the pretest to posttest scores of both the control and experimental groups.

IV. DISCUSSION

The present study was anchored on the different research that were reviewed in the introduction since it was dealt on the use of multimedia technology in teaching. The views of the researchers on their studies are interconnected so with the present study. Effective use of audio-video aids substitutes and break monotonous learning environment. Using audio-visuals as a method in teaching stimulates thinking and improves learning environment in the classroom. The effective use of these kind of instructional materials enhances the interests of learners in classroom discussions and improve a keen observation on the part of the learners.
The role of multimedia is now significant which was recognized and experienced by different researchers. Most of the relevant studies pointed out that those audio-visual materials could make language input more comprehensible, and could thus, it facilitates foreign language study, especially the activity of listening comprehension. Based on the different reviewed literature, learners, and teachers, both have a positive perception on the use of multimedia in the classroom. Learners' perception on using audio-video was positive because by using is their listening comprehension became better and they were more interested to learn the skill and the language and suggested that learners find audio-visual sessions useful and relevant when it has some direct relation to the course content.

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Researchers assert that people learn more deeply from words and pictures than from words alone, which refers to the multimedia principle. Multimedia is defined as the combination of text and pictures; and suggests that multimedia learning occurs when we build mental representations from these words and pictures. The words can be spoken or written, and the pictures can be any form of graphical imagery including illustrations, photos, animation, or video.
In relation to the study, the utilization of audio-video instructional materials is assumed to encourage the learners to be interested in social studies subject thereby developing their performance.

The findings of the study are as follows:

1) The mean of the control group in the pretest was 15.56 with a standard deviation of 5.43 while the mean of the experimental group was 16.33 which was slightly higher than that of the control group and a standard deviation of 5.12.
2) There was no significant difference between the pretest scores of the control and experimental groups since the t-value 0.68 was less than the critical value of 1.660 at 5% significance level
3) The mean score of the experimental group was 37.73 and 21.33 for the control group. The experimental group gained 16.45 more than the control group on the posttest. The use of audio-video instructional materials had an impact on the performance of the students on the experimental group.
4) There is a significant difference between the posttest scores of the control and experimental groups since the t-value of 10.01 was higher than the critical value of 1.660 at 5% significance level.
5) The difference between the pretest and the posttest scores of both the control and experimental groups were both significant since the t-value of both groups 5.29 and 21.18 respectively were both greater than the critical value 1.679 at 5% significance level.

Based on the findings of the study the following conclusions were drawn:

a) The mean score of the experimental group was slightly higher than the mean score of the control group.
b) The two groups were good sample of the study since performance of the two groups in the pretest were not significantly difference.
c) The performances of the control and experimental groups in the posttest was higher than the pretest performance.
d) The performance of the experimental group was significantly higher than that of the control group in the posttest.
e) Both the Traditional Method and the Use of Audio-video Instructional Materials were effective teaching approaches in teaching Social Studies.

The study will be beneficial to the following:

- *Curriculum Planners* - This study can be a support to establish a curriculum integrating the use of educational media.
- *School Administrators* - The administrators can benefit from this study having to consider that teachers will be more effective if they use educational media in teaching. Thus, their performance will reflect their leadership skills in managing people.
- *Social Studies Teachers* - They will enable themselves to vary their teaching strategies utilizing audio video instructional materials according to the needs of the learners
- *Learners* - The results of the study will enable the learnerss to get more interested in history because of their exposure to audio-video instructional materials
- *Parents* - They will be aware of their duties and responsibilities in the education of their children and in guiding them in utilizing technology
- *Future Researchers* - This can be a springboard for other researchers to explore more about the utilization of audio video instructional materials in teaching.

REFERENCES

[1] Farhan, M., Aslam, M., Jabbar, S., & Khalid, S. (2018). Multimedia based qualitative assessment methodology in eLearning: Student teacher engagement analysis. Multimedia Tools and Applications, 77(4), 4909-4923. doi:http://dx.doi.org/10.1007/s11042-016-4212-6
[2] Gorghiu, G., Gorghiu, L. M., & Pascale, L. (2018). ENRICHING THE ICT COMPETENCES OF UNIVERSITY STUDENTS - A KEY FACTOR FOR THEIR SUCCESS AS FUTURE TEACHERS. Journal of Science and Arts, 18(1), 183-190. Retrieved from https://search.proquest.com/docview/2026327145?accountid=139285
[3] Halim, H. A., Krishnasami, A., Aziz, Y. H., Sulaiman, N. S., & Kamaluddin, A. (2018). Investigation on student accessing information for ICT- learning approaches. Global Business and Management Research, 10(3), 473. Retrieved from https://search.proquest.com/docview/2159615915?accountid=139285 HYPERLINK "https://search.proquest.com/docview/2159615915?accountid=139285\"\

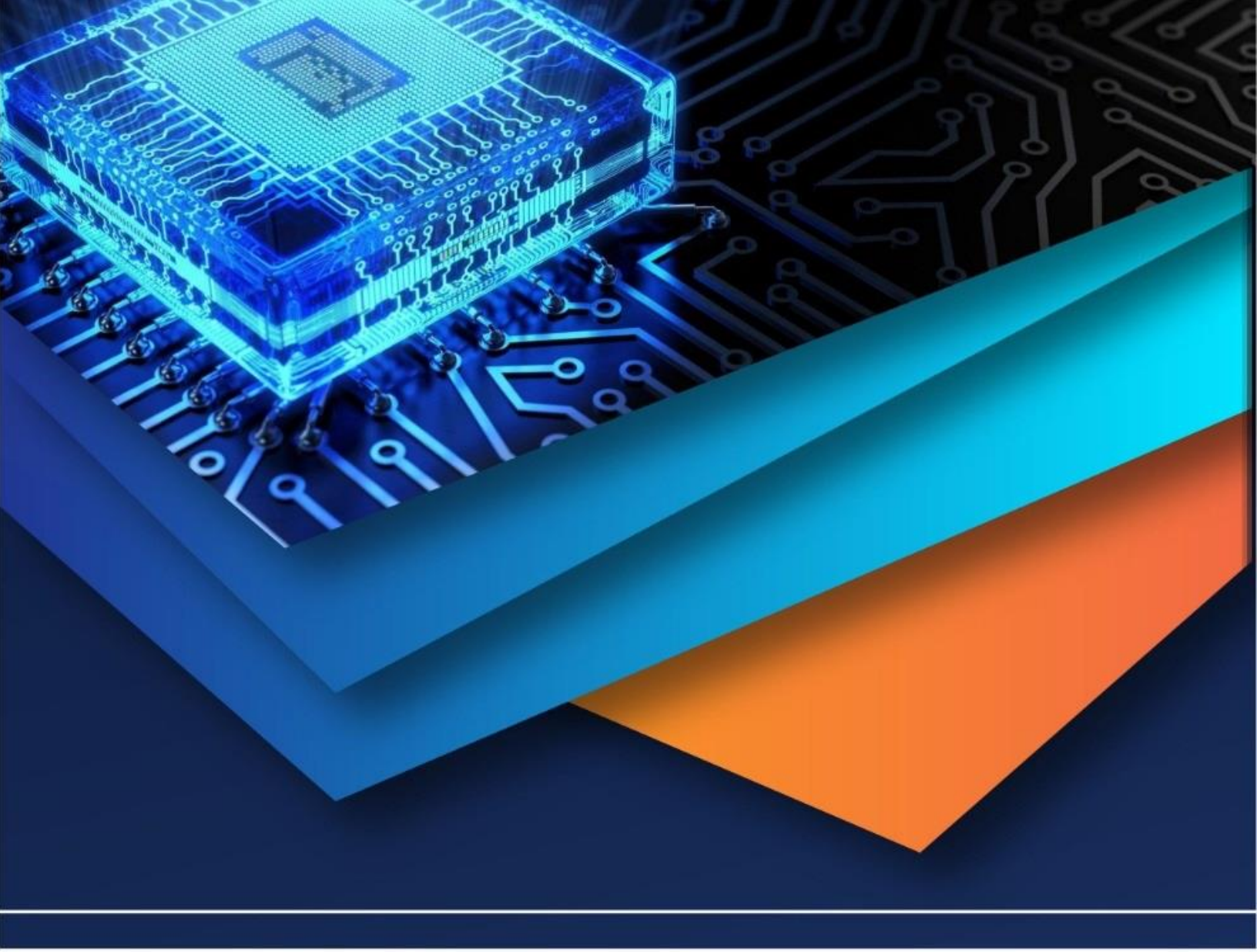
[4] I Gede, P. S., & AA Gede, Y. P. (2018). The effect of the instructional media based on lecture video and slide synchronization system on statistics learning achievement. Paper presented at the , 42doi:http://dx.doi.org/10.1051/shsconf/20184200073 Retrieved from https://search.proquest.com/docview/2038292832?accountid=139285

[5] Liang, W. (2019). Scene art design based on human-computer interaction and multimedia information system: An interactive perspective. Multimedia Tools and Applications, , 1. doi:http://dx.doi.org/10.1007/s11042-018-7070-6

[6] Mesfin, G., Ghinea, G., Tor-Morten Grønli, & Wu-Yuin Hwang. (2018). Enhanced agility of E-learning adoption in high schools. Journal of Educational Technology & Society, 21(4), 157-170. Retrieved from https://search.proquest.com/docview/2147869089?accountid=139285

[7] Reyna, J., & Meier, P. (2018). Using the learner-generated digital media (LGDM) framework in tertiary science education: A pilot study. Education Sciences, 8(3), 106. doi:http://dx.doi.org/10.3390/educsci8030106

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