



# INTERACTIVE LEARNING AIDS ON CRITICAL THINKING SKILLS AND MOTIVATION OF STUDENTS IN SOCIAL SCIENCE EDUCATION

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## ABSTRACT

*This study would like to determine the relationship of interactive learning aids to the critical thinking skills and motivation of students in social science education. Specifically, it sought to identify the level of interactive learning aids in social science education in terms of multimedia presentation, educational games, print based aids and real-life objects, level of students critical thinking skills in social science education in terms of; creativity, curiosity, inference, decision making, level of students motivation in terms of; intrinsic and extrinsic and the relationship between interactive learning aids to students' critical thinking skills and motivation of students.*

*It involved one hundred sixty-five students from Laguna University, using a descriptive method. The findings reveal that the level of utilizing interactive learning aids in social science education in terms of multimedia presentation, educational games, print based aids and real-life objects was very high, same with the level of students critical thinking skills in terms ; creativity, curiosity, inference, decision making alongside with the level of students motivation in terms of intrinsic and extrinsic which means the teacher from Laguna University utilized these kind of interactive learning aids that helps to enhance the students critical thinking skills and motivation in social science education.*

*The study confirmed a significant relationship between interactive learning aids to the critical thinking skills and motivation of students. The correlations means that each type of interactive learning aid is positively associated with students' critical thinking skills and motivation across various dimensions. The statistically significant relationships imply that incorporating these interactive aids into the learning environment can potentially enhance students' critical thinking abilities and motivation. The teacher may use this study to serve as a basis in teaching and learning process in social science education in which they may improve their learning materials for teaching since there's a lot of digital platforms that can be used for teaching. Also, through this study they will determine which learning aids might be connected to the learning style to be able to effectively synergize the students during the discussion.*

**KEYWORDS:** *interactive learning aids; critical thinking skills; motivation of students*

## 1. INTRODUCTION

An effective instructional method is essential to students' development. Children are more likely to become distracted at this age, so it may be challenging to get their attention focused on learning. This is the point at which various teaching aids enter the scene. It facilitates attentive learning and increases study focus in pupils. The many forms of instructional aids facilitate the improvement of students' comprehension and help to maximize their education.

Students might become bored with lengthy lectures and have more possibilities to get distracted. Nonetheless, using efficient methods of instruction will increase the kids' attention spans. Different teaching approaches are suited for different kinds of teaching tools. With proper teaching techniques, teachers can help their students grasp the vast majority of the topics found in their textbooks. Teaching aids help students learn in a variety of ways, to get their pupils to listen attentively in an engaging way when teachers employ a variety of teaching tools. Teaching aids are an essential piece of equipment in a classroom. Among many other benefits, using teaching aids can help students become more effective readers, differentiate instruction, explain or reinforce concepts, and lessen boredom or anxiety by presenting the subject in an entertaining way. Teaching aids

also engage students' senses in other ways because there is no limit to how they can be used to improve the instruction. Teachers have noticed a severe lack of reading comprehension proficiency in today's children. Teachers can close the achievement gap and raise their pupils' reading comprehension skills by utilizing instructional aids.

### 1.1 Statement of the Problem

Specifically, this study seeks to answer the following question:

1. What is the level of interactive learning aids in social science education in terms of:
  - 1.1 multimedia presentation;
  - 1.2 educational games;
  - 1.3 Print-based aids; and,
  - 1.4 Real-life objects?
2. What is the level of student's critical thinking skills in social science education in terms of:
  - 2.1 Creativity;
  - 2.2 Curiosity;
  - 2.3 Inference; and,
  - 2.4 Decision making?
3. What is the level of student's motivation in social science education in terms of:



- 3.1 Intrinsic; and,
- 3.2 Extrinsic?
- 4. Is there a significant relationship between interactive learning aids and students' critical thinking skills?
- 5. Is there a significant relationship between interactive learning aids and students' motivation?

**2. METHODOLOGY**

The research design in this study was quantitative in the relationship of interactive learning aids on students critical thinking skills and motivation in social science education.

One kind of research methodology that seeks to characterize a particular occurrence is descriptive study design. Descriptive research design is more than just collecting and analyzing data;

it also includes an aspect of interpreting the importance and meaning of the described. as stated by Hassan (2024)

**3. RESULTS AND DISCUSSION**

This chapter present, analyzes and interprets the data gathered that showed significant relationship between the level of utilizing interactive learning aid and students critical thinking skills also the relationship between the level of utilizing interactive learning aid and the student's motivation.

**Level of Interactive Learning Aids**

Level of utilizing interactive learning aid in social science include multimedia presentation, educational games, print based aid and real-life objects and was determine by mean and standard deviation.

**Table 1 Level of Interactive Learning Aids in Social Science Education in Terms of Multimedia Presentation**

Indicators	Mean	SD	Remarks
The teacher used different types of technological display like power point presentations, word documents and other online platform.	4.70	0.57	Strongly Agree
The teacher explains clearly the instructions in every activity.	4.61	0.63	Strongly Agree
Pictures are presented in every presentation.	4.46	0.70	Strongly Agree
The teacher uses video clips in every discussion.	4.33	0.88	Strongly Agree
The teacher uses audio-visual aids for the class presentation.	4.38	0.80	Strongly Agree

Overall Mean = 4.50

Standard Deviation = 0.74

Verbal Interpretation = Very High

Table 1 show the level of utilizing interactive learning aids in social science education in terms of media presentation. Teachers strongly agree that they utilized different types of technological displays like power point presentations, word documents, and other online platforms in teaching social science M= 4.70) and they use of video clips in every discussion

(M= 4.33)

The overall mean score for all indicators combined is 4.50, with a standard deviation of 0.74 with a verbal interpretation of a "very high". These methods are well-received and contribute significantly to the educational experience in the social science classroom.

**Table 2 Level of Interactive Learning Aids in Social Science Education in Terms of Educational Games**

Indicators	Mean	SD	Remarks
The teacher provides educational games that are related to the lesson.	4.18	1.01	Agree
The teacher prepares some game-based activities in the lesson, to make the learning more fun.	4.28	0.96	Strongly Agree
The teacher uses interactive learning games that boost your confidence to participate in the class.	4.41	0.96	Strongly Agree
The teacher uses educational games that helps you to improve your memory and concentration to the topic.	4.41	0.90	Strongly Agree
Using game-based aids makes you learn new concept and skills.	4.55	0.71	Strongly Agree

Overall Mean = 4.36

Standard Deviation = 0.92

Verbal Interpretation = Very High

Table 2 show the level of utilizing interactive learning aids in social science education in terms of educational games. Students strongly agree that they their teacher use game-based aids that makes them learn new concept and skills in teaching social science M=4.55) and they use educational games that is related to the lesson (M= 4.18)

The overall mean score for all indicators combined is 4.36, with a standard deviation of 0.92 with a verbal interpretation of a very high. These methods are well-received and contribute significantly to the educational experience in the social science classroom.



**Table 3 Level of Interactive Learning Aids in Social Science Education in Terms of 1.3 Print based aids**

Indicators	Mean	SD	Remarks
The printed-out materials help you to understand the lesson.	4.55	0.68	Strongly Agree
The teacher provides hand-outs that can motivate the students to stay focused on the task at hand.	4.45	0.81	Strongly Agree
The printed-out materials help you to interact with your teacher and your classmates.	4.41	0.79	Strongly Agree
The printed-out materials improve your memory and concentration to the topic.	4.60	0.70	Strongly Agree
The printed-out materials help to understand the concepts and makes learning actual.	4.56	0.73	Strongly Agree

Overall Mean = 4.51  
 Standard Deviation = 0.75  
 Verbal Interpretation = Very High

Table 3 show the level of utilizing interactive learning aids in social science education in terms of print-based aids. Students strongly agree that their teacher use printed-out materials help

to understand the concepts and makes learning actual in teaching social science (M=4.56) and printed-out materials helps the students interact to teacher and classmates (M= 4.41)

**Table 4 Level of Interactive Learning Aids in Social Science Education in Terms of Real-life Objects**

Indicators	Mean	SD	Remarks
Seeing the real objects related to the lesson helps you to interact with your teacher.	4.56	0.67	Strongly Agree
Doing the activity in actual process makes the learning more engaging.	4.59	0.63	Strongly Agree
Actual objects build student interest.	4.65	0.59	Strongly Agree
Actual materials enhance visual and retention skills.	4.61	0.61	Strongly Agree
Solid objects expand the scope of what can be learned.	4.59	0.66	Strongly Agree

Overall Mean = 4.60  
 Standard Deviation = 0.63  
 Verbal Interpretation = Very High

Table 4 show the level of utilizing interactive learning aids in social science education in terms of real-life objects. Students strongly agree that whenever they see actual objects, it builds their interest in teaching social science (M=4.65) and seeing the real objects related to the lesson helps you to interact with your teacher. (M= 4.56) The overall mean score for all indicators combined is 4.60, with a standard deviation of 0.63 with a verbal interpretation of a very high. These methods are well-

received and contribute significantly to the educational experience in the social science classroom.

**Level of Students Critical Thinking Skills**

Level of students critical thinking skills include creativity, curiosity, inference and decision making and was determine by mean and standard deviation.

**Table 5 Level of Students Critical Thinking Skills in Social Science Education in Terms of Creativity**

Indicators	Mean	SD	Remarks
The multimedia presentations help to build the creativity of the students.	4.68	0.62	Strongly Agree
Students create a meaningful and engaging arts media from multimedia presentations.	4.68	0.61	Strongly Agree
Learning activities allow students to explore their creativity in relevant, interesting and worthwhile ways.	4.65	0.62	Strongly Agree
Encourages the student to share their ideas and thoughts about the topic.	4.69	0.64	Strongly Agree
Using interactive learning aids makes you more productive and motivated.	4.62	0.67	Strongly Agree

Overall Mean = 4.67  
 Standard Deviation = 0.63  
 Verbal Interpretation = Very High

Table 5 reveal the level of students critical thinking skill in terms of creativity. Students strongly agree that they encourage to share their ideas and thought about the topic (M= 4.69). They also feel productive and motivated when teachers utilized interactive learning aid (M=4.62)

The overall mean score for all indicators combined is 4.67, with a standard deviation of 0.63, indicating a very high level of students' critical thinking skills in social science education through creativity. These means that utilizing multimedia



presentations and interactive learning aids effectively stimulate students' creativity and contribute significantly to their critical

thinking abilities in the social science subject.

**Table 6 Level of Students Critical Thinking Skills in Social Science Education in Terms of Curiosity**

Indicators	Mean	SD	Remarks
Learning aids makes you more excited if there are pictures and videos in the lesson.	4.66	0.62	Strongly Agree
Learning aids helps you to focus on the lesson to learn new concept from these learning materials.	4.55	0.68	Strongly Agree
Learning aids gives interesting ideas that leads to more engaging environment inside the classroom.	4.53	0.69	Strongly Agree
Cooperation helps you to survive in a changing learning environment in a way that there are new concepts and ideas provided by the teacher.	4.59	0.64	Strongly Agree
Eagerness makes you more interested in the topic and be involved in the process or in the activity	4.64	0.64	Strongly Agree

Overall Mean = 4.60  
 Standard Deviation = 0.66  
 Verbal Interpretation = Very High

Table 6 reveal the level of students critical thinking skill in terms of curiosity. Students strongly agree that Learning aids makes you more excited if there are pictures and videos in the lesson (M= 4.66). Learning aids gives interesting ideas that leads to more engaging environment inside the classroom. (M=4.53) The overall mean score for all indicators combined is 4.60, with a standard deviation of 0.66, indicating a very high

level of students' critical thinking skills in social science education through curiosity. These means that utilizing multimedia presentations and interactive learning aids effectively stimulate students' curiosity and contribute significantly to their critical thinking abilities in the social science subject.

**Table 7 Level of Students Critical Thinking Skills in Social Science Education in Terms of Inference**

Indicators	Mean	SD	Remarks
The teacher provides focus question about the topic or about the picture before starting the discussion by inserting them in their power point presentations.	4.62	0.67	Strongly Agree
The students are interested if there are new platform and concepts that was used by the teacher.	4.62	0.66	Strongly Agree
Learning aids provide the easy way to understand complex concepts, by showing pictures or diagrams.	4.61	0.67	Strongly Agree
The teacher uses multimedia presentations by showing video clips to make the learning more interesting to the students.	4.63	0.65	Strongly Agree
Learning aids help to deepen the student's comprehension of verbal, written and social information.	4.63	0.61	Strongly Agree

Overall Mean = 4.62  
 Standard Deviation = 0.65  
 Verbal Interpretation = Very High

Table 7 reveal the level of students critical thinking skill in terms of inference. Students strongly agree that the teacher uses multimedia presentations by showing video clips to make the learning more interesting to the students and it helps to deepen the student's comprehension of verbal, written and social information. (M= 4.63). Learning aids provide the easy way to understand complex concepts, by showing pictures or diagrams. (M=4.61)

The overall mean score for all indicators combined is 4.62, with a standard deviation of 0.65, indicating a very high level of students' critical thinking skills in social science education through curiosity. These means that utilizing multimedia presentations and interactive learning aids effectively stimulate students' inference and contribute significantly to their critical thinking abilities in the social science subject.

Table 8 reveal the level of students critical thinking skill in terms of decision making. Students strongly agree that helps the learners to think critically about a text and engage with it academically results in (M= 4.70). While watching videos that is related to the topic or in your life experiences gives an impact to your decisions in life resulted to (M=4.61)

The overall mean score for all indicators combined is 4.65, with a standard deviation of 0.58, indicating a very high level of students' critical thinking skills in social science education through decision making. These means that utilizing multimedia presentations and interactive learning aids effectively stimulate students' decision making and contribute significantly to their critical thinking abilities in the social science subject.



**Table 8 Level of Students Critical Thinking Skills in Social Science Education in Terms of Decision Making**

Indicators	Mean	SD	Remarks
By using the different interactive learning aids helps you to decide in a particular situation after understanding the lesson.	4.64	0.62	Strongly Agree
Watching videos that is related to the topic or in your life experiences gives an impact to your decisions in life.	4.64	0.55	Strongly Agree
The students were able to apply the lesson learned in school in their everyday life.	4.65	0.59	Strongly Agree
Used the necessary information from your lesson in school in decision making process.	4.64	0.57	Strongly Agree
Helps the learners to think critically about a text and engage wit it academically.	4.70	0.58	Strongly Agree

Overall Mean = 4.65

Standard Deviation = 0.58

Verbal Interpretation = Very High

Students must acquire abilities in critical thinking, open-mindedness, good judgement, reason, problem solving, and solution identification in order to display responsible decision making. They must think about other people in addition to themselves when making decisions. Being aware of how your decisions impact other people as well as yourself is crucial.

**Level of Students Student’s Motivation**

Level of students’ motivation in social science include intrinsic and extrinsic motivation and was determined by mean and

standard deviation.

Table 9 outlines the level of students' motivation in social science education, in terms of intrinsic motivation. Students strongly agree that they increase their engagement inside the classroom, feel motivated to involve themselves in the learning process (M= 4.64,). On the other hand, internal forces of motivation enhance the creativity and innovation of the student (M=4.56) The overall mean score of 4.60, with a standard deviation of 0.66, indicating a very high level of intrinsic motivation among students in social science education.

**Table 9 Level of Student’s Motivation in Social Science Education in Terms of Intrinsic**

Indicators	Mean	SD	Remarks
The students to increased their engagement inside the classroom who are motivated and would like their selves in the learning process.	4.64	0.67	Strongly Agree
The students have an inner standard of academic achievement and execute better performances on tasks.	4.58	0.69	Strongly Agree
The students are more persistent in the face of challenges and setbacks.	4.59	0.67	Strongly Agree
The inside forces of motivation have been shown to enhance creativity and innovation of the student.	4.56	0.65	Strongly Agree
The students who are willing to do things tend to experience greater psychological well-being with their learning.	4.63	0.62	Strongly Agree

Overall Mean = 4.60

Standard Deviation = 0.66

Verbal Interpretation = Very High

These means that fostering intrinsic motivation is essential for promoting student engagement, academic achievement, persistence, creativity, and psychological well-being in the social science classroom. Also, when a student is motivated by

internal reasons, they undertake a task because it is enjoyable or engaging. They are motivated by intrinsic enjoyment, which pushes them to complete a task regardless of the potential repercussions.

**Table 10 Level of Student’s Motivation in Social Science Education in Terms of Extrinsic.**

Indicators	Mean	SD	Remarks
The outside forces of motivation influence the students and their productivity level by providing a target or goal.	4.68	0.60	Strongly Agree
The students receive monetary rewards, promotions, trophies and psychological satisfaction once they complete the task.	4.54	0.76	Strongly Agree
The students survive in challenging situations from the activity because it is their desire to chase after goals or dreams.	4.63	0.69	Strongly Agree
External motivation for the students can be tangible and intangible as according to their preferences and needs.	4.67	0.60	Strongly Agree
The students complete the task because they will a receive a reward or prize from the teacher.	4.56	0.81	Strongly Agree

Overall Mean = 4.62

Standard Deviation = 0.70

Verbal Interpretation = Very High



Table 10 outlines the level of students' motivation in social science education, in terms of extrinsic motivation. Students strongly agree that the outside forces of motivation influence the students and their productivity level by providing a target or goal (M= 4.63,).

On the other hand, the students receive monetary rewards, promotions, trophies and psychological satisfaction once they complete the task. (M=4.56)  
 The overall mean score of 4.62, with a standard deviation of

0.70, indicating a very high level of extrinsic motivation among students in social science education. These means that fostering extrinsic motivation is essential for promoting student engagement, academic achievement, persistence, creativity, and psychological well-being in the social science classroom. Extrinsic motivation is the desire to perform an action in order to obtain benefits or stay out of trouble. Put another way, we are driven by an activity's instrumental value; it serves as a means to an aim. There are individuals who are inherently more driven by external incentives.

**Table 11 Significant Relationship between Interactive Learning Aids and Students' Critical Thinking Skills**

Interactive Learning aids		Critical Thinking Skills			
		Creativity	Curiosity	Inference	Decision Making
Multimedia Presentation	Pearson Correlation	.530**	.539**	.514**	.495**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	N	165	165	165	165
Educational Games	Pearson Correlation	.488**	.482**	.540**	.464**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	N	165	165	165	165
Print based aids	Pearson Correlation	.502**	.520**	.514**	.522**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	N	165	165	165	165
Real-life objects	Pearson Correlation	.589**	.495**	.550**	.420**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	N	165	165	165	165

Note: \*\*  $p < .05$  is significant

Table 11 shows the significant relationship between the level of utilizing the interactive learning aids such as multimedia presentation, educational games, print based aids real-life objects and the students critical thinking skill in terms of creativity, curiosity, inference and decision making. Pearson Correlation coefficients range from .420 to .589 indicating moderate to strong positive correlations. The ( $p=0.000 < 0.05$ ) level of significance.

The correlations means that each type of interactive learning aid is positively associated with students' critical thinking skills across various dimensions. The statistically significant

relationships imply that incorporating these interactive aids into the learning environment can potentially enhance students' critical thinking abilities.

Table 12 shows the significant relationship between the level of utilizing the interactive learning aids such as multimedia presentation, educational games, print based aids real-life objects and the student's motivation in terms of intrinsic and extrinsic. Pearson Correlation coefficients range from .425 to .503 indicating moderate to strong positive correlations. The ( $p=0.000 < 0.05$ ) level of significance.

**Table 12 Significant Relationship between Interactive Learning Aids and Students' Motivation**

Interactive Learning aids		Motivation	
		Intrinsic	Extrinsic
Multimedia Presentation	Pearson Correlation	.435**	.430**
	Sig. (2-tailed)	0.000	0.000
	N	165	165
Educational Games	Pearson Correlation	.425**	.483**
	Sig. (2-tailed)	0.000	0.000
	N	165	165
Print based aids	Pearson Correlation	.491**	.485**
	Sig. (2-tailed)	0.000	0.000
	N	165	165
Real-life objects	Pearson Correlation	.503**	.471**
	Sig. (2-tailed)	0.000	0.000
	N	165	165

Note: \*\*  $p < .05$ . is significant



The correlations means that each type of interactive learning aid is positively associated with students' motivation in doing his or her assigned tasked. The statistically significant relationships imply that incorporating these interactive aids into the learning environment can potentially enhance students' motivation. Furthermore, interactive learning aids have been demonstrated to improve learning results by increasing student engagement, a critical component. In order to learn well at the university level, students must be engaged in class discussions, group projects, and technology learning.

#### 4. CONCLUSION AND RECOMMENDATIONS

In relation with the above-mentioned findings, the following conclusions were drawn:

Based on the data gathered the result finding shows the relationship between the level of utilizing the interactive learning aids such as multimedia presentation, educational games, print based aids real-life objects and the students critical thinking skill in terms of creativity, curiosity, inference and decision making indicates a moderate to strong positive correlations. The relationship between the level of utilizing the interactive learning aids such as multimedia presentation, educational games, print based aids real-life objects and the student's motivation in terms of intrinsic and extrinsic also indicates a moderate to strong positive correlations. It means that each type of interactive learning aid is positively associated with students' critical thinking skills and motivation across various dimensions. The relationship implies that incorporating these interactive learning aids into the learning environment can potentially enhance students' critical thinking abilities and motivation.

Therefore, the interactive learning aids has relationship to the students critical thinking skills and motivation in social science education.

The following were recommended based on the findings of the study:

1. The teachers may keep on using the interactive learning aids in teaching social science as what resulted in the study, but they may improve their learning materials for teaching since there's a of lot online platforms that can be used for teaching.
2. University officials and college heads may frequently conduct seminars and training to improve the skills of the teachers in using digitized learning materials in teaching since we have so many students who are well versed in digital platforms.
3. Teachers may refer to this study to determine which interactive learning aids might be connected to their learning style to be able to effectively synergize with their classmates and teachers during class discussion.

#### REFERENCE

1. Hassan, A. (2024). *Introduction to descriptive research design*. SurveyPoint. Retrieved from <https://surveypoint.ai/blog/2023/09/04/introduction-to-descriptive-design-research/>