

## Learning Motivation and Academic Performance of the Learners: A Constructivist Approach

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#### ABSTRACT

Pupils have a new set of learning modality in which virtual learning space is encouraged and being motivated on the virtual class is a big factor. This study dealt to find out the relationship between the pupils learning motivation and academic performance in a constructivist virtual space. Constructivist virtual space is a learning environment that allows learners to have the power of choice as to what helps the learners understand well the lesson and to keep them motivated to do a certain task. The subject of the study were the 30 Grade 6 pupils who were enrolled in Laguindingan Central School. This study used two types of adaptive instruments and these are: motivated strategies for learning questionnaire (MSLQ) consist of four domains with six items each which are the self-efficacy, intrinsic-value, cognitive strategy uses and self-regulation, and student alternative learning environment survey (SALES) that contains 10 items. The study will be utilized the qualitative and quantitative research. Data were analyzed and organized through descriptive analysis, mean interval and Pearson correlation. Analysis showed that the majority of the pupils are motivated in a constructivist virtual space. Moreover, there is no significant relationship between pupils learning motivation and academic performance in a constructivist virtual space with r-value is 0.243 is inside the critical value  $\pm$  .361 and probability-value 0.1952 is greater than 0.05 level of significance. Based on the results, this study concluded that pupils are capable of keeping themselves motivated however, it implies that pupils can be motivated in the Science subject but it does not guarantee a good academic performance. For further study, research the other motivational aspects that can be associated with the progress of their academic performance and put emphasis into molding their motivation to attain more reliable result.

Keywords: motivation, constructivist, approach

#### INTRODUCTION

Constructivist learning space is most likely defined as a place of learning, wherein variety of learning tools are provided to the pupils to make it more conducive for them to learn. A space that incorporates collaborative learning in such a way that would help them learns with the use of different material. Basically, students become attentive to class and eager to learn depends on its learning space whether in an environment, tools and teaching process. The most common problem in grade-schoolers are their attention span in digesting the knowledge being taught to them in an hour, it becomes harder in a subject that demands absolute longer time to explicate the lesson better and one of it is the Science subject. Apparently, it become



way harder in a virtual class wherein pupils are given the freedom to learn in a setting they are most likely into, their interest of choice is encouraged.

Furthermore, children these days are exposed to technology that would most likely their learning of choice but there might be some instances that they would play online game than participate in a virtual class. So, finding the relationship between pupils learning motivation and academic performance could be a help to create an innovative way to lure the pupil's attention which is very helpful for both teachers and students and that is the constructivist virtual space. Constructivism is the theory that says learners construct knowledge rather than just passively take in information. As people experience the world and reflect upon those experiences, they build their own representations and incorporate new information into their pre-existing knowledge or schemas (Ubcatt, 2021).Thus, allowing pupils to learn on their own pace and their choice of environment of where they think they would learn better would serve as their learning motivation to continue and become attentive to the class.

Constructivist learning environment has been considered helpful to enhance students' participation in learning activities and to assist the students to construct the knowledge. Gunduz defined that constructivism belongs to the teaching and learning approach in which it is based on the cognition in learning as the result of mental construction. They add that constructivism means how knowledge is gotten and how the participants may actively be involved in classroom activities. Thus, teachers' role in transmitting the knowledge and guiding the students to construct the knowledge becomes the crucial discussion in education. Thus, in an online setting constructivist classroom means constructivist virtual space, hence involving pupils in virtual activities are big factor to keep the pupils motivated. (Gunduz, 2015). In implementing the constructivist learning space as learning motivation in the flexible blended learning modality, pupils will possibly have better results in performing tasks and activities in the Science subject. Moreover, creating an environment that pupils are most at ease will keep the pupils motivated and strive hard because they believe that as a learner itself their opinions and different ways of understanding are valid for constructivist learning space promotes student centered approach because it engages pupils to be participative by means of allowing them in a learning modality to learn at their own pace and power of choice.

#### METHODOLOGY

The researcher selected Laguindingan Central School located in Poblacion Laguindingan Misamis Oriental as the chosen school in conducting the study. The respondents were the Grade 6 pupils in the Science subject. Thus, in gathering the data the researcher first asked for a permission to the head of the school. Survey questionnaires was then administered to the Grade 6 pupils in a certain section. The conduct of the study was the time of the distribution of the modules and retrieval of module after a week. There are two (2) types of adaptive instruments used in this study, these are: (1) motivated strategies for learning questionnaire and (2) student alternative learning environment that was distributed in order to gather information that determined the factors of learning motivation that influenced the pupils' academic performance. Afterwards, the researcher explained the implication and purpose of the study to the teacher to inform the pupils. After the short explanation, the researcher then started collecting data through survey questionnaires distributed to the chosen respondents, it was a purposive sampling since only a certain section in Grade 6 was chosen as respondents because of the pandemic. Further, the researcher asked permission to the school head and



Table 2. Grades, descriptors and remarks of pupils

teacher to get the final grade in Science to the chosen respondents to correlate the relationshi p between the results of the study and their academic performance as to determine the effectiveness of the study. The results of the data gathered was used to support the study. The data gathered was tallied through Pearson correlation, descriptive statistical and weighted mean interval.

| alternative learning environment survey.GradeDescriptorRemarksDegreeMean Interval<br>ScoreInterpretation91-100AdvancedPassed54.24-5.00Very High85-90ProficientPassed43.43-4.23High80-84Approaching to<br>ProficiencyPassed32.62-3.42Medium80-84ProficiencyPassed | rable 1. Mean interval scores of motivation strategies and learning questionnane and student |                        |                | ····· ································ |                |         |  |
|--|--|------------------------|----------------|--|----------------|---------|--|
| DegreeMean Interval<br>ScoreInterpretation91-100AdvancedPassed54.24-5.00Very High85-90ProficientPassed43.43-4.23High80-84Approaching to<br>ProficiencyPassed32.62-3.42Medium80-84ProficiencyPassed   | alternative learning environment survey.   |                        |                | Grade                                  | Descriptor     | Remarks |  |
| 54.24-5.00Very High85-90ProficientPassed43.43-4.23HighApproaching to<br>ProficiencyPassed32.62-3.42Medium80-84Proficiency  | Degree   | Mean Interval<br>Score | Interpretation | 91-100                                 | Advanced       | Passed  |  |
| 4 3.43-4.23 High 80-84 Approaching to Passed 3 2.62- 3.42 Medium   | 5  | 4.24-5.00              | Very High      | 85-90                                  | Proficient     | Passed  |  |
| 3 2.62- 3.42 Medium Proficiency Passed   | 4  | 3.43-4.23              | High           | 80-84                                  | Approaching to | Passed  |  |
|  | 3  | 2.62-3.42              | Medium         | 00-04                                  | Proficiency    | 1 00000 |  |
| 2 1.81-2.61 Low 75-79 Developing Passed  | 2  | 1.81-2.61              | Low            | 75-79                                  | Developing     | Passed  |  |
| 1 1.00- 1.80 Very Low 75 Below Beginning Failed  | 1  | 1.00- 1.80             | Very Low       | 75 Below                               | Beginning      | Failed  |  |

# Table 1 Mean Interval ecores of motivation strategies and learning questionnaire and student

### **RESULTS AND DISCUSSION**

#### The pupils' learning motivation in a constructivist virtual space

Table 3 presents the pupils' learning motivation in a constructivist virtual space in terms of self-efficacy, intrinsic-value, cognitive strategy use, self-regulation and learning environment. The results showed that the overall mean of the factors of self-efficacy, intrinsic-value, cognitive strategy use, self-regulation and learning environment are the following: selfefficacy overall mean (M = 3.58), intrinsic-value (M = 4.17), cognitive strategy use (M =3.55), learning environment (M = 3.63) with the remarks of agree and for the self-regulation overall mean (M = 3.21) which means the remarks found neither. The results showed that majority of the pupils are motivated in a constructivist virtual space in terms of their selfefficacy. Pupils believe on their capacity to attain a certain task, also half of the pupils are motivated to get the good grades based on their own capability to do the task which is the intrinsic-value, meanwhile their usage of their cognitive strategy has agreed as the high rate. Moreover, prior to their self-regulation majority revealed neither know in which pupils assess their works to monitor their progress in their science subject, and overall agreed on learning environment that depicts the teaching style suitable to the attainment of the lesson and their interest.

| Table 3. Descrip | otive Statistic-mean for the pupil | I's learning motivation in a constructivist virt | ual |
|------------------|------------------------------------|--|-----|
| space            |                                    |  |     |

| Factors                | Overall Mean | Remarks |
|------------------------|--------------|---------|
| Self-efficacy          | 3.58         | Agree   |
| Intrinsic-value        | 4.17         | Agree   |
| Cognitive strategy use | 3.55         | Agree   |
| Self-regulation        | 3.21         | Neither |
| Learning environment   | 3.63         | Agree   |



#### Pupils' academic performance in science

Figure 1 shows the pupils' academic performance in Science showed that all the pupils passed in their Science subject and majority are proficient in terms of the academic performance in Science in a constructivist virtual space. Moreover, there's also 26.67% (0.27) who are approaching to proficiency and these are the pupils that are uncertain on their motivation on the class and only 6.67% (0.07) of the pupils who are developing and coping on the constructivist virtual space and 16.67 (0.17) are advanced in terms of their performance on their Science subject. It means that no one got 74 below grades, 2 pupils got 75-79 grades, 8 pupils got 80-84 grades, 15 pupils are proficient which means they've got 85-89 grades and 5 pupils got 90 above grades. Thus, the table entails that majority passed and has a good performance shown in terms of their academic performance in a constructivist virtual space.



# Relationship between the pupils' learning motivation and their academic performance in Science

Findings showed on the Pearson correlation for two samples result for the relationship between the pupils learning motivation and the academic performance in a constructivist virtual space that the correlation coefficient r is 0.243 is inside the critical value  $\pm$  .361 and probability-value 0.1952 is greater than 0.05 level of significance. However, it also shows that there are positive correlation between pupils learning motivation and academic performance but has a low rate because the survey was conducted only during distribution and retrieval of self-learning module. Hence, there are instances that the survey was answered by the parents, and was not able to comprehend all the statements written on the survey because pupils are distracted by many things at home.

Thus, it resulted on an implication that there is no significant relationship between the pupils learning motivation and academic performance but there is a positive relationship but with a low rate because of not having a hundred percent sure reliable survey results. As argued by



Ricarda Steinmayr et., al (2019) achievement motivation is not a single construct but rather subsumes a variety of different constructs like ability self-concepts, task values, goals, and achievement motives. Thus, the pupils may acquire motivation in terms of their self-efficacy, intrinsic-value, cognitive strategy use, self-regulation and learning environment in a higher rate, if the survey results are one hundred percent reliable and answered by the pupils along with understanding each statement. However, as the result of this study shows as it is that it does not guarantee that it could affect the pupils' academic performance, it does not indicate the assurance that the pupils will results good performance in a constructivist virtual space, hence the null hypothesis is not rejected.

|                        | Academic Performance |         |                 |
|------------------------|----------------------|---------|-----------------|
| Learning Motivation    | r-value              | p-value | Remarks         |
| Self-Efficacy          | 0.0051               | 0.9786  | Not Significant |
| Intrinsic-Value        | 0.0525               | 0.7831  | Not Significant |
| Cognitive Strategy Use | 0.2067               | 0.2732  | Not Significant |
| Self-Regulation        | 0.5677               | 0.0011  | **Significant   |
| Learning Environment   | 0.2373               | 0.2067  | Not Significant |

#### Table 4. Pearson Correlation test for the relationship between the pupils' learning motivation and the academic performance in a constructivist virtual space.

### CONCLUSION AND RECCOMENDATIONS

- 1. The results showed that majority of the pupils are motivated in a constructivist virtual space in terms of their self-efficacy. Pupils believe on their capacity to attain a certain task, also half of the pupils are motivated to get the good grades based on their own capability to do the task which is the intrinsic-value, meanwhile their usage of their cognitive strategy has agreed as the high rate. Moreover, prior to their self-regulation majority revealed neither know in which pupils assess their works to monitor their progress in their science subject, and overall agreed on learning environment that depicts the teaching style suitable to the attainment of the lesson and their interest.
- 2. Pupils learning motivation was not a significant predictor to pupils' academic performance. Those further shows, that it has low rate of correlation that varies different attributes; survey results are not as hundred percent reliable because it was conducted through distribution of module and the tendency will be parents can answer questionnaires and also not being able to comprehend the statement very well because of the distractions at home
- **3.** This leads to conclusion that pupils' learning motivation and academic performance are not significant predictors.



- **4.** Pupils are capable of keeping themselves motivated in terms of having the confidence to believe on their own capacity to do the task in various instructional materials and also have the ability to make their own strategy as to understand what is taught to them, just like keeping notes and putting their ideas onto their own word.
- 5. Moreover, pupils keep monitoring their progress on their certain task along with having a constructivist learning environment. Teacher allowed pupils to lead the class and let the pupils' express ideas along with making choice regarding their instructional materials on the Science subject. Thus, the teacher has a constructivist learning environment.
- 6. Pupils has a good academic performance in science subject in a constructivist virtual space. However, their motivation in terms of self-efficacy, intrinsic-value, cognitive strategy use, self-regulation and learning environment is not emphasize for it to be developed and become significant to the academic performance. Hence, only pupils have it innately but not totally molded and waken up by the teacher.
- 7. It is highly recommended that if researchers would like to pursue higher studies related to this, the researcher will put emphasis in molding their motivational aspects and see to it that the results gathered in the survey is a hundred percent certain to attain a more reliable result.

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