

A Study on Relationship between Digital Collaboration and Motivation**Jayashree Mahanti**

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ABSTRACT

Collaborative learning is considered as the modern technique for learning. In the 21st century collaborative learning is taking the forefront place. It is believed that the ability of collaborative learning can enhance the motivation of the learner. And when the learner is motivated that will eventually foster learners' academic achievement. The present study was conducted to understand the relationship between the Digital Collaboration and the Motivation to learn. The researcher has taken 60 students who have participated in an E-learning programme. Where some collaborative activities have been provided with the class contents. Simple random sampling technique is used for selecting the sample. Two self-made questionnaires were prepared to measure digital collaboration and motivation of the learners. Mean, S.D, Correlation is used as the statistical techniques. The result shows that there is a significant relationship exists between digital collaboration and motivation.

Keywords: *Digital Collaboration, Motivation, E-learning, Correlation, Rationale of the study***INTRODUCTION**

Collaboration is a technique that help an individual to work in a group and achieve something in a group. Collaborative learning ensures social development, collaborative learning enhances various soft skills of a learner. Collaborative learning can boost positive mindset and enhance productivity. Collaborative learning is new method of teaching learning system where a small group of participants help each other to accumulate some lessons. Collaborative learning is student-centred approach that successfully engages every student in a learning platform [1]. Collaborative Learning is an umbrella term where students work combinedly to achieve a certain goal [2]. Collaborative learning is sharing a bunch of information within a group [3]. Collaborative learning skills became necessary as it foster the skill of social interaction which help an individual to build rapport and that helped to achieve a great career. Collaborative learning is solving a problem together where a strong communication is established between students [4,5]. The Collaborative Learning is the significant and effective tool for the change in the existing education system [6]. Collaborative learning is considered as the new paradigm of the modern education system [7]. According to Delucchi [8], collaborative learning environments are stress-free that motivates the learner and enhances the learning. Collaborative learning includes cooperation hence it sometimes used as cooperative learning in some situation but there is a difference between this two, as cooperative learning is most structured one and collaborative learning is less structured [9]. Whereas Collaborative Learning skills are considered as the skills which provides the ability to work in a group successfully. And these skills are very much essential in the 21st century learning. Digital collaboration is that when the techniques of collaboration have been implemented in the online mode of learning. Where there is no chance or less chances of face-to face interaction exists then digital collaboration takes place. Digital collaboration is that when the interaction between the peers made through the electronic media, like through smartphone, laptops and any other smart devices. In digital collaboration internet connectivity plays a vital role.

Motivation is a vivacious element in any form of learning. Motivation provides decisive guidance to do certain kind of work. Motivation helps to instigate how seriously to do a work. Motivation helps to sustain the constructive approach to education [10]. Motivation is the criteria that influences a person to complete a certain type of task [11]. There are some internal and external factors that affected students' motivation; hence a focus should be given on how to increase the motivation. Strong Motivation enhances discipline, that as consequence fosters the ultimate academic gain. Tiauw and Tung [12] has mentioned that interaction with the peers in an educational setting plays a vital role in fostering motivation.

Collaborative learning ensures students engagement and the engagement of students ensures their motivation in learning, collaboration ensures activeness and that also promotes motivation among the learners. Thus, in online environment digital collaboration plays the same role. For this reason, the present research is conducted with a view to observe what is the Relationship between Digital Collaboration and Motivation.

Literature Review:

Previous researchers like Treisman [13] stated that cooperative learning increased attendance and fosters motivation in learning. Anderson & Palmer [14] have found that cooperative learning can enhance the motivation of the learner. Dörnyei [15] have mentioned that collaboration is strongly linked with motivation and affect each other. Johnson et al. [1] considered collaborative learning as an important factor in enhancing student's motivation and engagement in the teaching learning process. Farnandez et al. [16] have claimed that various collaborative activities in the classroom can significantly affect the motivation of the learner. Moreover it was found that collaborative learning makes learning easy and interesting thus, very much related with motivation [17]. In the words of Babapour et al. [18] collaborative learning is very useful to reduce anxiety in the classroom thus modify the learning environment. Collaborative learning has a strong influence in enhancing the intrinsic motivation of the learner [19,20]. Collaborative learning technique includes peer learning and also influence the motivation of the learner [21].

Objectives of the study:

The following objectives drove the investigator to conduct the present research:

1. To identify the relationship between digital collaboration and motivation of the learners.
2. To find out the relationship between digital collaboration and motivation in Male and Female learners.
3. To find out the relationship between digital collaboration and motivation in Rural and Urban learners.

Hypothesis of the study:

H01: There is no significant relationship between digital collaboration skills and motivation of the learners.

H02: There is no significant relationship between digital collaboration and motivation in Male learners.

H03: There is no significant relationship between digital collaboration and motivation in Female learners.

H04: There is no significant relationship between digital collaboration and motivation in Rural learners.

H05: There is no significant relationship between digital collaboration and motivation in Urban learners.

Delimitation:

The present study has its own boundaries those are termed as delimitation. So, this research is delimited in the following context

- i) The study is conducted in Purulia district of West Bengal.
- ii) The study focused to see the relationship between digital collaboration and motivation only.
- iii) The study has been conducted upon the students of education stream.
- iv) Only undergraduate students are taken as the sample of the study.

Research Method:

Quasi experimental approach is used to complete the study. The pre-test post-test experimental group design has been followed in this research.

Variable of the Study:

This study contains one dependent variable, one Independent Variable, and two demographic Variables, the variables are described below:

Dependent Variable: Motivation Independent Variable: Digital Collaboration Demographic Variables: Gender, Location

Population of the study:

Population is derived from the Universe from which the whole criteria of the research can be matched. Population is the main field from which the samples are derived, it includes the complete and vast area out of which we can select the sample. In the present research, all the undergraduate students who studied in Semester III and Semester IV can be considered as the population of the present study.

Sample and Sampling of the study:

We cannot include all the population in the study there are some barriers so some proportion of the population has been selected that are termed as the sample. The simple random technique of sample selection is used for the study. 60 students of undergraduate course who studied in semester III and semester V in B.A. education course are taken as the sample of the study. The samples belong to 18-22 age group, who are mostly matured students. Upon them the investigation is administered and the data has been collected.

Tools of the study:

Tools are the instruments that help to measure the intended outcome. Every research needs some instrument which can be used to apply among the samples. In the present study two tools have been used. For digital collaboration, digital collaboration questionnaire used for collecting the data. The reliability of the scale is 0.80. For Motivation, Motivation in learning questionnaire is used for collecting the data, the reliability of the scale is 0.86.

Data collection:

The data is collected upon the 3rd and 5th semester students of B.A. Education course. The questionnaire on digital collaboration and motivation has been administered on the students and students has submitted the filled in questionnaires. Three introductory classes were taken describing about the mode of treatment. After that, the students were requested to participate in an online programme where some pre-recorded video materials are provided to the students, there are a collaborative task after every class. Students has to attend the class and complete the task with their peers. This is how four classes has been provided to the students on an interval of four days. The total treatment took almost 16 days and after completion of the treatment the students again have to fulfill the previous questionnaire as the post test.

Analysis:

Objective 1: To identify the relationship between digital collaboration and motivation of the learners.

H01: There is no significant relationship between digital collaboration and motivation of the learners.

To understand the pattern of relationship correlation has been used in the present study Table: 1

Descriptive data for Digital Collaboration and Motivation

Variable	N	Mean	S.D
Digital Collaboration	60	105.78	10.108
Motivation	60	99.50	8.562

Table: 2

Correlation between Digital Collaboration and Motivation

Test	Variable	Pearson Correlation
Post test	Digital Collaboration	0.77
	Motivation	

From table 2 it is found that the product moment correlation value is 0.77 that indicates there is strong positive correlation between the digital collaboration and motivation. That signifies if digital collaboration increases among the learners, then motivation will also increase. Thus, Motivation and digital collaboration are strongly correlated in the present E-learning setting. Thus, the H01 is rejected.

Table 3.

Descriptive value of digital collaboration and motivation on the basis of demographic variables

Variable	Demographic Variable		N	Mean	S.D
Digital Collaboration	Gender	Male	17	105.47	11.86
		Female	43	105.91	9.48
	Location	Rural	44	106.20	9.64
		Urban	16	104.63	11.59
Motivation	Gender	Male	17	100.59	11.16
		Female	43	99.07	7.41
	Location	Rural	44	99.18	7.792
		Urban	16	100.38	10.64

Objective: 2 To find out the relationship between digital collaboration and motivation in Male and Female learners.

H02: There is no significant relationship between digital collaboration and motivation in Male learners.

Table: 4

Correlation between Digital Collaboration and Motivation Based on Male students

Gender	Test	Variable	Spearman Correlation
Male	Post test	Digital Collaboration	0.75
		Motivation	

To find out the relation between digital collaboration and motivation rank difference correlation is applied as (N < 30). From Table 4 it is found that in male students the correlation value between the digital collaboration and motivation is 0.75. That ensures there is a strong positive correlation between digital collaboration and motivation in the male students. Thus, the H02 is vetoed.

H03: There is no significant relationship between digital collaboration and motivation in Female learners.

Table: 5

Correlation between digital collaboration and Motivation based on Female students

Gender	Test	Variable	Pearson Correlation
Female	Post test	Digital Collaboration	0.75
		Motivation	

To find out the relation between digital collaboration and motivation product moment correlation is applied as ($N>30$). From Table 5 it is found that in female students the correlation value between the digital collaboration and motivation is 0.75. That ensures there is a strong positive correlation between digital collaboration and motivation in the female students. Thus, the H03 is rejected.

Objective: 3 To find out the relationship between digital collaboration and motivation in Rural and Urban learners.

H04: There is no significant relationship between digital collaboration and motivation in Rural learners.

Table: 6

Correlation between Digital Collaboration and Motivation based on Urban Students

Location	Test	Variable	Spearman Correlation
Urban	Post test	Digital collaboration	0.85
		Motivation	

To find out the relation between digital collaboration and motivation rank difference correlation is applied as ($N<30$). From Table 4 it is found that in urban students the correlation value between the digital collaboration and motivation is 0.85. That ensures there is a very strong positive correlation between digital collaboration and motivation in the urban students. Thus, the H04 is unacceptable.

H05: There is no significant relationship between digital collaboration and motivation in Urban learners.

Table: 7

Correlation between Digital Collaboration and Motivation based on Rural Students

Location	Test	Variable	Pearson Correlation
Rural	Post test	Digital collaboration	0.70
		Motivation	

To find out the relation between Digital collaboration and motivation product moment correlation is applied as ($N>30$). From Table 7 it is found that in rural students the correlation value between the Digital collaboration and motivation is 0.70. That ensures there is a strong positive correlation between Digital collaboration and motivation in the rural students. Thus, the H05 is rejected.

Findings of the study:

1. There is significant positive correlation is found between the Digital collaboration and motivation.
2. There is significant positive correlation is found between the Digital collaboration and motivation of the learners based on their Gender.
3. There is a significant positive correlation is existed between the Digital collaboration and motivation based on their locality.

DISCUSSION:

The main aim of the current study was to examine the relationship between the digital collaboration and motivation of the learners. It is eventually found that the relationship between digital collaboration and motivation is quite significant. The relationship is seemingly strong and there is positive relation on the basis of gender and location, but it is found that, in urban are the relationship between digital collaboration and motivation is stronger than the rural areas. It denotes that if digital collaboration in an online learning environment will strongly influence the motivation of the learners in that online learning platform. The results are corroborated with Gopinathan et al. [22] they also found that digital collaboration positively correlated with student engagement as well as motivation. Tran, [23] also identified that cooperative learning enhanced learning motivation in higher education.

CONCLUSION:

Collaborative learning advances the motivation of the learner. Thus, the present study also proves the previous research done on this field that collaborative learning that is infused with interactive approaches can enhance the motivation of the learners. In E-learning platforms digital collaboration plays very important role. Regular collaborative

task can enhance participation of the learners that directly linked with the motivation. So, it is well proved in the present research that digital collaboration can play a very significant role in motivating a person to learn so digital collaboration should be given enough emphasis in digital learning platform.

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