ATTITUDE TOWARDS VIRTUAL, FLIPPED CLASSROOMS AMONG SCHOOL TEACHERS IN THIRUVALLUR

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Abstract

Virtual Classroom is a social media platform that connects G Suite services, such as Calendar, Google Docs, and Gmail. Classroom helps you teach lessons, distribute assignments, communicate, and remain organized while saving time andpaper. GAFE which includes Virtual Calendars, Virtual Spreadsheets, Virtual Docs, and a variety of many applications that colleges and schools can use, has already had a significant impact on education. The study's major goal was to see whether there was a substantial difference in educators' attitudes toward Virtual Classroom,Flipped Classroom. This work was examined to ascertain the opinion of teachers working in various schools in Thiruvallur and their attitude towards online teaching. The findings revealed no significant difference in the attitude of teachers towards online teaching in the context of their gender and type of institution, whereas the marital status of teachers was found to have a significant impact. A significant correlation was found between age (negative relation), familiarity with online learning tool(s), and the attitude of teachers toward online teaching. The results of the study brought forward the need for imparting training to teachers and better communication between teachers and Information Technology staff for developing a positive attitude amongst teachers for persuasive online teaching.

Keywords: Online Teaching, Attitude of Teachers, Virtual Classroom, Flipped Classroom

Introduction

Virtual Classroom is a social media platform that connects your G Suite for Classroom account to all of your G Suite services, such as Calendar, Virtual Docs, and Gmail. Classroom helps you teach lessons, distribute assignments, communicate, and remain organized while saving time and paper. GAFE which includes Virtual Calendars, Virtual Spreadsheets, Virtual Docs, and a variety of many applications that colleges and schools can use, has already had a significant impact on education. Now, Virtual is adding Virtual Classroom, a feature in the classroom application that aims to consolidate trainers' use of these Virtual tools through a single interface. The goal of Virtual Classroom is to make it easier for students and teachers to communicate without using paper and to streamline the educational process. Teachers may use Classroom to run courses, assign homework, organize seminars, create folders, and monitor work at the correct time. One

of the finest benefits is that Classroom was connected properly with all other Virtual apps, allowing teachers and students to communicate information instantly rather than having to jump through hoops to submit assignments This also streamlines other app functionalities; for instance, creating duplicate files for students in Virtual Docs and it will no longer recommend the use of the sinister "Doctopus" method even in the Flipped Classroom.

India is a developing country, having a big economic and digital divide amongst nationals. Regardless of the Digital India initiatives of the Government, a large part of the population does not have access to smart gadgets. In the Virtual, flipped classroom lack of trust between teacher and learner and also it requires self-discipline and diminished social interaction. Not only teacher's, even from parents and educational experts is in dilemma about offering online teaching for primary to high school level. When we consider about student's future, online teaching and learning is plays a vital role throughout the globe. Yet, virtual ,flipped classroom is a good thing as in today's age of technology. Online learning allows students to grow and improve their learning and location-wise online education is much more accessible.

Review of Related Literature

Basher (2017) investigated the effects of Google Classroom on primary teachers' instructional efficiency. To configure the Google classroom on the research sample, the researcher used an experimental strategy. The intervention class learned using Google Classroom whereas the instructions were given traditionally. When Google Classroom was employed, the findings demonstrate that there were substantial variations between the control and experimental groups. When contrasted to traditional teaching methods, college students' learning efficiency improved at all levels, including preparation, implementation, assessment, and academic success.

(Al-Maroof and Al-Emran 2018) According to a survey performed in Oman to analyze the PEOU and PU. It was greatly impacted the performance expectancy, which in turn controlled the real use of Google classrooms. This research provided higher education decision-makers with a better grasp of the success of their students' use of Google Classroom. It was thought that it would aid in determining the level of adoption of the described earlier technologies among pupils.

In Pakistan, a study was done to analyze instructors' perceptions of Google Classroom's efficiency (Abid Azhar and Iqbal 2018). A qualitative study method was used to conduct the investigation. The study's sample included Twelve tertiary education teachers who had utilized Google Course for a minimum 1 semester in their class and were conducted in a semi-structured interview style Teachers regard it as merely a facilitation tool for document management and basic classroom administration, with no substantial impact on teaching approaches, according to the findings. According to the teachers'replies, the inadequacy of a user-friendly design is the primary cause of its inefficiency. More research may be done if the students' viewpoint is considered.

Virtual Classroom

Virtual classroom is an online teaching learning environment for teachers and students and both are engaged with the content material through online. Students and teachers share information to communicate and collaborate through online mode. In the virtual classroom, learners to access quality teachers anywhere for their convenience. Teachers and students can interact through video conferencing, real-time chat text, Interactive online whiteboard etc.,. In the conventional classroom, the student needs to able to see and hear the teacher and other students directly and have a good view of the whiteboard with their own learning materials. In the virtual classroom, the student can see and hear the teacher and their peers via the audio/video stream. By using online whiteboard teacher to explain ideas visually and work through exercises collaboratively.

Flipped Classroom

To "flip a classroom" is to reverse the traditional classroom. A flipped classroom requires the students to watch a video at home regarding the knowledge of lesson and complete their homework in class the following day. The Flipped classroom encompasses any use of technology, including the internet to leverage the learning in the classroom, so teachers can spend more time interacting with the students instead of lecturing. This is most commonly done by videos created by the teacher which the students can view outside the classroom. Instead of students listening to a lecture in the class and doing their assignments at home, students can watch video lectures in their home and complete their assignments and activities in the class rooms.

School Teachers

A school teacher is a person who teaches students to acquire knowledge and involved with the social, emotional, intellectual, physical and moral development of the students in their class.

Significance of the Study

This study is conducted to know how far teachers enable themselves to aim at success and how skilfully they get over the task also to know how far teachers acquire technical knowledge and experience of the task from the new virtual platform and to know the remedial measures has to be given for those teachers who have lower attitude.

Statement of the Problem

The area of the study selected by the investigator is "Attitude towards virtual, flipped classrooms among school teachers in Thiruvallur.

Definition of Terms

Attitude - An attitude is a positive, negative, or mixed evaluation of an object expressed at some level of intensity. It is an expression of a favourable or unfavourable evaluation of a person, place, thing, or event.

Virtual Classroom - A virtual classroom is an online learning environment. The environment can be web-based and accessed through a portal or software-based and require a downloadable executable file

Flipped Classroom - A flipped classroom is a type of blended learning where students are introduced to content at home and practice working through it at school in a different teaching -learning environment.

School Teachers – A person whose job is teaching in a school.

Objectives of the Study

1. To study the attitude of teachers towards virtual classroom, flipped classroom.
2. To study whether is any difference on Gender, Designation, Marital status, Type of Institution, Willingness.
3. To study whether there is any relationship in the attitude of teachers based on virtual, flipped classrooms.

Hypotheses of the study

1. There will be no significant difference between the teachers based on Gender.
2. There will no significant difference between the teachers based on Marital status.
3. There will be no significant difference between the attitude of teachers belonging to the group based on Type of Institutions.
4. There will be no significant difference between the attitude of teachers belonging to the group based on Willingness.
5. There will be no significant relationship between the attitude of teachers belonging to different group based on Designation.

Method of the study

To ascertain the teacher's attitude towards online education, an online survey was conducted using a questionnaire as a data collection tool to study the attitude towards virtual, flipped classroom among school teachers in Thiruvallur.

The validity of the Tool

The validity of the tool was 0.896 and found to be a very good validity.

The Reliability of the Tool

Investigator calculated test-retest reliability of the attitude assessment scale. The reliability of the 20 statements was 0.803 and found to be good reliability.

Variables used in the study

Demographic Variables: Gender, Marital Status, Institution, Willingness, Designation

Independent Variables: Virtual classroom, Flipped Classroom

Sample

The population of this study is school teachers and the samples are School Teachers working in Thiruvallur and the sample size is 299. Random sampling technique was employed in this study.

Testing the Hypotheses

Hypothesis 1

There will be no significant difference between the teachers based on Gender in their Attitude

Table 1: **Mean and Standard Deviation of Teachers' Attitude with respect to Gender**

Gender	N	Mean	S.D.	't' value	Remarks at 1% level
Male	158	62.39	10.48	3.03	S
Female	141	58.70	10.54		

(At 1% level of significance, the table value of 't' is 2.59)

It is inferred from the above table that the calculated 't' value is higher than the table value (2.59) at a 1% level of significance for attitude of teachers. So, there is a significant difference between Male and Female teachers' attitude towards virtual, flipped classrooms where Male teachers are better than Female. Hence, the null-hypothesis is not accepted.

Hypothesis 2

There will no significant difference between the teachers based on Marital status

Table 2: Mean and Standard Deviation of Teachers' Attitude with respect to Marital Status

Marital Status	N	Mean	S.D.	't' value	Remarks at 5% level
Unmarried	54	57.00	10.68	1.707	NS
Married	245	59.71	10.53		

(At 5% level of significance, the table value of 't' is 1.96)

It is inferred from the above table that the calculated 't' value is lesser than the table value (1.96) at a 5% level of significance for attitude of teachers. So, there is no significant difference between Married and Unmarried teachers' attitude towards virtual, flipped classrooms. Hence, the null-hypothesis is accepted.

Hypothesis 3

There will be no significant difference between the attitude of teachers belonging to the group based on Type of Institutions**.**

Table 3: Mean and Standard Deviation of Teachers' Attitude with respect to Type of Institution.

Type of Institution	N	Mean	S.D.	't' value	Remarks at 5% level
Government	191	59.63	10.49	0.884	NS
Self Finance	108	58.50	10.79		

(At 5% level of significance, the table value of 't' is 1.96)

It is inferred from the above table that the calculated 't' value is lesser than the table value (1.96) at a 5% level of significance for attitude of teachers. So, there is no significant difference between Government and Self Finance teachers' attitude towards virtual, flipped classrooms. Hence, the null-hypothesis is accepted.

Hypothesis 4

There will be no significant difference between the attitude of teachers belonging to the group based on Willingness.

Table 4: Mean and Standard Deviation of Teachers' Attitude with respect to Willingness

Willingness	N	Mean	S.D.	't' value	Remarks at 1% level
Yes	165	63.582	9.924	8.867	S
No	134	53.851	8.801		

(At 1%level of significance, the table value of 't' is 2.59)

It is inferred from the above table that the calculated 't' value is higher than the table value (2.59) at a 1% level of significance for attitude of teachers. So, there is a significant difference between Willingness and Unwillingness towards virtual, flipped classrooms. Hence, the null-hypothesis is not accepted.

Hypothesis 5

There will be no significant relationship between the attitude of teachers belonging to different group based on Designation

Table 5: Mean and Standard Deviation of Teachers' Attitude with respect Designation

Variation's source	Sum of	Df	MS	F-value
Between groups	140.637	2	70.3186	0.6247
Within groups	33314.79	296	112.55	
Total	33455.43	298		

The summary of one-way ANOVA of an attitude of teachers towards online teaching during emergent *Coronavirus* pandemic about their designation viz., MGT, TGT, PGT tabulated above shows that the *F- value* obtained is less than the critical value of significance at 0.05 level. Hence, it is concluded that there is no significant relationship between teachers' attitude towards virtual, flipped classroom about their designation.

Results and Findings

It is inferred from the table 1 that the calculated 't' value is higher than the table value (2.59) at a 1% level of significance for attitude of teachers. So, there is a significant difference between Male and Female teachers' attitude towards virtual, flipped classrooms where Male teachers are better than Female. Hence, the null-hypothesis is not accepted.

It is inferred from the table 2 that the calculated 't' value is lesser than the table value (1.96) at a 5% level of significance for attitude of teachers. So, there is no significant difference between Married and Unmarried teachers' attitude towards virtual, flipped classrooms. Hence, the null-hypothesis is accepted.

It is inferred from the table 3 that the calculated 't' value is lesser than the table value (1.96) at a 5% level of significance for attitude of teachers. So, there is no significant difference between Government and Self Finance teachers' attitude towards virtual, flipped classrooms. Hence, the null-hypothesis is accepted.

It is inferred from the table 4 that the calculated 't' value is higher than the table value (2.59) at a 1% level of significance for attitude of teachers. So, there is a significant difference between Willingness and Unwillingness towards virtual, flipped classrooms. Hence, the null-hypothesis is not accepted.

It is inferred from the table 5 that the calculated *F- value* is less than the critical value of significance at 0.05 level. It is concluded that there is no significant relationship between teachers' attitude towards virtual, flipped classroom about their designation. Hence, the null-hypothesis is accepted.

Conclusion

Ultimately it is concluded that, the attitude of teachers towards Virtual, Flipped Classrooms found negligible in the context of their Marital Status, Type of Institution and Designation whereas the Male teachers were found to have a strong impact and Willing to go for more Virtual, Flipped Classrooms.

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