

DIGITIZED EDUCATION AS TEACHING MODALITIES AS RELATED TO TEACHERS' PERFORMANCE IN PRIVATE AND PUBLIC SCHOOLS IN PILA, LAGUNA

Angela Marie T. Martinez

angela.martinez@sapc.edu.ph

Private School Teacher , San Antonio de Padua College Natl High-Way Santa Clara Sur,Pila,Laguna,Philippines

Abstract

The objective of this study was to determine the teachers' performance in Digitized Education in Private and Public Schools in Pila, Laguna and their performance at school through different teaching modalities. It sought to answer three basic questions.

What is the extent of digitized education using different modalities as to Online teaching and learning, Modular Teaching/Learning, Flexible and Blended Teaching and Learning?; What is the level of teachers' performance in terms of IPCRF (Individual Performance Commitment Review Form) and COT (Classroom Observation Tool)?; Is there a significant relationship between digitized education as to teaching modalities and teachers' performance?

The following finding in importance were sequentially obtained as to the extent of the digitized education using modular teaching/ learning, the respondents recognized high extent of it as they were informative, relevant and timely to every lesson which was also effective on students' performance.

Flexible and Blended Teaching and Learning to which the respondent recognized very high extent of it as the teachers were flexible in every teaching modality and were computer literate with students' engagement and comprehension were well measured. There was a significant relationship between digitized education as to teaching modalities and teachers' performance in terms of Individual Performance Commitment Review Form and Classroom Observation Tool. It was concluded therefore that there was significant relationship between Digitized education and Teachers' performance so hypothesis was rejected. The following recommendations were hereby offered, maintenance of the quality deliverance of academic institutions in different modalities in a Digitized Education; the teachers must be thoroughly exposed to relevant and actual trainings for them to perform well in a Digitized education;

Keywords: Teacher Performance, Teaching Modalities, Digitized Education

1. Main text

Introduction

The teacher's performance is a teacher's demonstrated impact on students' learning as established through student achievement test scores, observed pedagogical practices, employer or student surveys. The teacher's performance may vary depending on their ability to adapt to changes in working environment, methods of teaching, students' abilities and certain academic /non- academic standard set by their institution.

The effects of the pandemic have affected and continue to affect education methods everyday. The education methods are not immune to the pandemic periods we are facing so teachers must know how to adapt their methods in such a way that teaching modalities which serves as an alternative to the traditional face to face classes. First is the Online Teaching or Learning which is a flexible learning mode that is electronic based and which uses available online classrooms for the delivery of instruction. Learning materials are in digital format such as webcast, podcast, videos, audio, and other open educational resources or OERS. We have also the Offline flexible learning mode that does not use internet connectivity at all. Learning is done through printed modules or uses digital forms such as video and audio placed in a storage devices. Then a combination of online and offline modes with a limited face to face is the Blended type of flexible learning, wherein Online technology will be used for delivering lessons, while other classroom activities will be done offline using printed modules, video tapes, storage devices and learning packets and for some higher education institutions and state universities and colleges will offer a limited face to face classes for some particular courses and activities.

Theoretical Framework

Learning theory is meant to explain and help us understand how people learn. It involves multiple disciplines, including psychology, sociology, neuroscience and of course education. Its guiding principles include readiness, exercise, effect, primacy, recency, intensity and freedom. There are different learning theories which are popular which plays an important role in teaching and learning some of these are the following: Behaviorism in the Classroom which is the rewards and punishments, it is lecture- based and highly structured wherein responsibility for student learning rests squarely with the teacher (Skinner February 13, 2020).

Cognitivism where learning is the process of connecting symbols in a meaningful and memorable way, it also provides opportunities for the testing of hypotheses. Social Learning Theory which is the collaborative learning and Group Work. Social Constructivism which involves Journaling, Experiential Activities, Personal Focus with Collaborative and Cooperative Learning, (Wilhelm Wundt 1879, Leipzig, Germany).

Multiple Intelligences which is the delivery of instruction via multiple mediums, which is student-centered classroom that has authentic assessment and is Self-Directed Learning and last is the Brain-Based Learning which provides opportunities for group learning and is also a community- based learning with regular environmental changes and multi-sensory environment (Howard Gardner ,1983). The following theory serves us a guide for teachers when teaching in whatever modality they are using. Each of these theories of learning will definitely be used by the teacher in the student's learning process. One example is the learning theory of Behaviorism in the Classroom which uses the rewards and punishment which is mainly used every day in class during recitations, tests and other classroom activities whether it is Online, Offline and Blended teaching modality.

The Person-Environment Fit Theory is also used to develop the survey for investigation. It is the degree of fit or match between you and your work environment. The theory behind person-environment fit is that everyone has a work environment with which they are most compatible, (Jacquelynne Eccles and Midgley, 1989; Eccles et al., 1993).

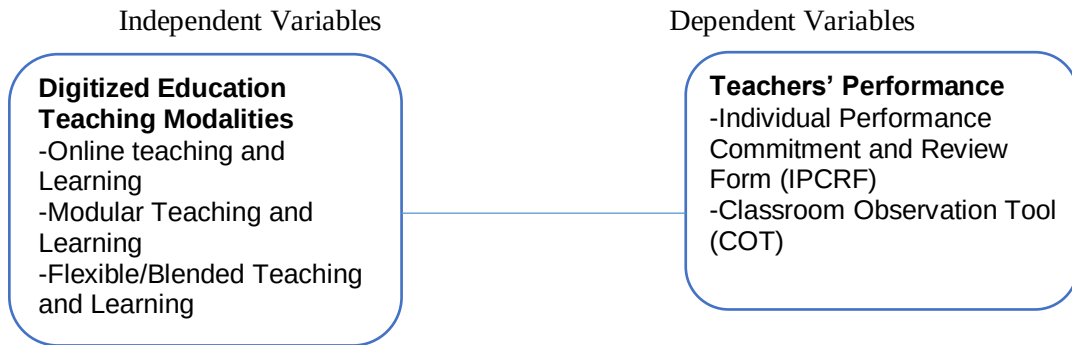


Figure 1. Research Paradigm of the study.

The conceptual framework of this study is presented to give view of the work to be done. The conceptual model of this study was presented in the form of paradigm conceptualized as guide of the study. There are two frames shown which represent the independent and dependent variables. The Independent variables which were the Digitized Education and different teaching modalities like Online Teaching, Modular and Blended Teaching had a great relation with the Teachers' Performance which could be measured with the IPCRF and COT which were the Dependent Variables of the study.

The processes are the strategies to be used such as generating data through the use of questionnaire and documentary analysis. The possible output or the dependent variable is the Teachers' Performance in terms of Individual Performance Commitment Review Form and Classroom Observation Tool that will be based on the result of their performance.

Statement of the Problem

This research focused more on the teachers of different private and public schools in Pila, Laguna and their performance at school through different teaching modalities. To determine which they performed best. It also aimed to identify strengths and weaknesses, advantages and disadvantages of each teaching modality used in this present time.

It sought to answer the following question:

1. What is the extent of the digitized education using different modalities as to?

- 1.1 Online Teaching/ Learning
- 1.2 Modular Teaching/ Learning
- 1.3 Flexible and Blended Teaching and Learning

2. What is the level of teachers' performance in terms of?

- 2.1 IPCRF (Individual Performance Commitment and Review Form)
- 2.2 COT (Classroom Observation Tool)

3. Is there a significant relationship between digitized education as to teaching modalities and teachers' performance?

Research Methodology

This chapter presented the research design, sampling technique, research procedure, research instrument and statistical treatment of data. It is in this chapter where the step-by-step procedures of gathering data and analysis were conducted. The descriptive method was used to determine the teachers performance on Digitized Education of private and public schools in Pila, Laguna. Steven (2010) defined Descriptive Method in research as to develop, test instruments and methods. It explored phenomena in real life situations and used a survey method. Common data gathering methods used were questionnaire, interview and observation. The appropriate research design was used in addressing the parameters in the study. Quantitative research for statistical conclusions collected actionable insights were essential. It is necessary for the growth of any school or institution wherein hard numerical data and analysis proved to be highly effective when making decisions and insights about the future success of the study. The subjects of this study were the teachers from St. Therese School of Arts and Sciences, San Antonio de Padua College, South Greenville School and Don Manuel Rivera Memorial National High School in Pila, Laguna. Eighty Nine teachers from elementary, Junior High School, Senior High School and College were used as the respondents in this research to assess and evaluate teachers' performance.

Results and Discussion

Teacher's performance differs with regards to their ability to adapt with the working environment and methods of teaching as well as the changes that may occur. With the advent of pandemic, digitized education has become one of the alternative teaching modalities to the traditional face to face classes. In this study, the extent of the digitized education using different modalities was described as to online teaching/ learning, modular teaching/ learning and flexible and blended teaching and learning which was determined by the weighted mean and standard deviation.

Table 2. Extent of the Digitized Teaching modalities as to Online Teaching and Learning

STATEMENT	Mean	SD	Remarks
There is the availability of resources like internet connection, laptop, desktop, tablet or cellphone.	4.60	0.60	Strongly Agree
It is effective on students' performance and readiness.	4.31	0.65	Strongly Agree
Accurate test results, grades of students in every activity or lesson are observed.	4.28	0.69	Strongly Agree
Teachers are ready and productive in every lesson and activity.	4.55	0.59	Strongly Agree
There is an impact in students' self-esteem, technological literacy and academic performance.	4.39	0.39	Strongly Agree
Grand Mean	4.43		Strongly Agree
Interpretation	Very High		

The result above revealed that the extent of the digitized education using different modalities was described as to online teaching/ learning was at Very High Extent supported by the grand (M=4.43). This meant that online teaching and learning as perceived by the respondents was at a Very High Extent.

Presented in the Table 2 that the respondents strongly agreed that there was availability of resources like internet connection, laptop, desktop, tablet or cellphone which attained the highest (M=4.60, SD=0.60).

Similarly, they strongly agreed that accurate test results, grades of students in every activity or lesson were observed bearing the least ($M= 4.28$, $SD=0.69$). This further meant that respondents recognized High Extent of online teaching and learning as there were available resources which also provided accurate results of students' assessments.

Synthesizing the above findings established linkages with the ancillary write-ups and concluding inferences of the past research personalities of foreign and local origins in the persons of Cellini(2021), Taylor (2020), Carillo (2020) upon their studies that the pandemic pushed millions of college students around the world into virtual learning. As the new academic year begins, many colleges in the U.S. are poised to bring students back to campus, but a large amount of uncertainty remains. A number of studies have assessed online versus in – person learning at the college level in recent years. A key concern in this literature is that students typically self-select into online or in –person programs or courses, confounding estimates of student outcomes. Educators have traditionally expressed skepticism about the prospects of reproducing outcomes equivalent to traditional face to face instruction by means of online distance learning according to Paul Van Portfliet and Michael Anderson.

The result below revealed that the extent of the digitized education using different modalities as described as modular teaching/ learning was at Very High Extent supported by the grand ($M=4.05$). This meant that online teaching and learning as perceived by the respondents was at a Very High Extent.

Table 3. Extent of Digitized Teaching Modalities as to Modular Teaching and Learning

STATEMENT	Mean	SD	Remarks
The modular contents are informative, relevant and timely to every lesson.	4.28	0.68	Strongly Agree
Modular teaching is effective on student's performance.	3.77	0.91	Agree
Accurate results and grades of students in every activity or lesson are reflected.	3.94	0.86	Agree
Readiness and productiveness of teachers in every lesson and activity are manifested.	4.16	0.77	Agree
There is an impact on students' cognitive abilities, academic performance and total well-being.	4.09	0.72	Agree
Grand Mean	4.05		Agree

Interpretation

High

Presented in the table 3 that the respondents strongly agreed that the modular contents were informative, relevant and timely to every lesson which attained the highest ($M=4.28$, $SD=0.68$). Similarly, they agreed that modular teaching was effective on student's performance bearing the least ($M= 3.77$, $SD=0.91$). This further meant that respondents recognized High Extent of modular teaching and learning as they were informative, relevant and timely to every lesson which was also effective on students' performance.

A cursory analysis of above data, tends to show the modular distance learning (MDL) is a self –learning module (SLM) is the primary tool in the teaching and learning process. Perceived Effectiveness of Self Learning

Modules in the Implementation of Modular Distance Learning in the Elementary Level, wherein The COVID-19 pandemic shifts the traditional classroom or face to face teaching and learning into distance learning Emerson Natividad, (2021).

The result below revealed that the extent of the digitized education using different modalities described as blended teaching/ learning was at Very High Extent supported by the grand (M=4.33). This meant that blended teaching and learning as perceived by the respondents were at Very High Extent. Presented in Table 4 that the respondents strongly agreed that the teachers were flexible in every teaching modality and are computer literate which attained the highest (M=4.53, SD=0.60). Similarly, they strongly agree that students' engagement and comprehension are well measured bearing the least (M= 4.25, SD=0.68). This further meant that respondents recognized High Extent of blended teaching and learning as the teachers were flexible in every teaching modality and were computer literate with students' engagement and comprehension were well measured.

Follow up responses to the query propounded to the Extent of the Digitized Teaching Modalities as to Flexible and Blended Teaching/ Learning wherein Blended learning has recently been considered a hot topic in education, especially for teachers and student to employ for the enhancement of the English language throughout the world. Therefore, the current paper yields to the related literature of the blended learning effects in teaching and learning on the four integrated skills of the English language. Blended

learning is more effective than face to face or online learning in terms of students' satisfaction and faculties' responses, time and instructors.

Table 4. Extent of the Digitized Teaching Modalities as to Flexible and Blended Teaching and Learning

STATEMENT	Mean	SD	Remarks
There is accessibility of resources like internet connection, laptop, desktop, tablet or cellphone.	4.43	0.64	Strongly Agree
The usability of classroom during face-to-face class and printed modules, videotapes, storage devices and learning packets during Offline or Modular mode.	4.32	0.67	Strongly Agree
The modular contents are informative, relevant and timely to every lesson.	4.45	0.62	Strongly Agree
The lessons and activities are properly prepared and discussed in online, offline or face to face mode of teaching.	4.45	0.60	Strongly Agree
The teachers are flexible in every teaching modality and computer literate.	4.53	0.60	Strongly Agree
Readiness and productiveness of teachers and students in every lesson and activity are manifested.	4.48	0.61	Strongly Agree
Accurate results and grades of students in every activity and lesson are reflected.	4.33	0.61	Strongly Agree
Students' engagement and comprehension are well measured.	4.25	0.68	Strongly Agree
There is accessibility of gathering learners' data for better understanding.	4.26	0.64	Strongly Agree

There is an impact on students' technical, social and mental development.	4.34	0.63	Strongly Agree
Grand Mean	4.33		Strongly Agree
Interpretation	Very High		

The result below revealed that the extent of teachers' performance in terms of Individual Performance Commitment Review Form using different modalities was at very high extent supported by the grand (M=4.51). This means IPCRF as perceived by the respondents was at a very high extent as to their performance.

Presented in table 5 that the respondents strongly agree that IPCRF makes teachers' aware of their performance which attained the highest (M=4.51, SD=0.64). Similarly, they strongly agree that it is done quarterly with proper guideline bearing the least (M= 4.43, SD=0.64). This further means that respondents recognized high extent of teachers' performance in terms of Individual Performance Commitment Review Form as it makes teachers aware of their performance and is done quarterly with proper guidelines.

Table 5. Level of Teachers' Performance in terms of IPCRF (Individual Performance Commitment Review Form)

STATEMENT	Mean	SD	Remarks
measures teacher's individual performance based on the criteria.	4.45	0.62	Strongly Agree
is done quarterly with proper guidelines.	4.43	0.64	Strongly Agree
makes teachers' aware of their performance.	4.51	0.64	Strongly Agree
evaluates teachers' accomplishments at the end of the semester/year as basis for promotions, professional development etc.	4.50	0.59	Strongly Agree
is very useful and productive in preparing intra and extra-curricular activities.	4.43	0.66	Strongly Agree
Grand Mean	4.47		Strongly Agree
Interpretation	Very High		

The following findings intensified further the importance of Individual Performance Commitment Review Form (IPCRF).in determining teachers' performance. The Individual Performance Commitment and Review Form Template is a rating scale based on the Civil Service Commission Memorandum Circular No.6 series of 2012 that sets the guidelines on the establishment and of the Strategic Performance Management System (SPMS) in all government agencies. LLego, (2012).It also shows what the teacher has been done for the school year.

The result below revealed that the extent of teachers performance in terms of classroom observation tool using different modalities was at Very High Extent supported by the grand (M=4.51). This meant COR as perceived by the respondents.

Presented in the Table 5 that the respondents strongly agreed that Classroom Observation Tool was very effective and productive in teaching and learning which attained the highest ($M=4.55$, $SD=0.59$). Similarly, they strongly agreed that it was done quarterly and with proper guidelines bearing the least ($M= 4.45$, $SD=0.68$). This further meant that the respondents recognized High Extent of teachers' performance in terms of classroom observation tool as it was very effective and productive in teaching and learning and was done quarterly and with proper guidelines.

**Table 6. Level of Teachers' Performance in terms of COT
(Classroom Observation Tool)**

STATEMENT	Mean	SD	Remarks
makes teachers familiar and aware of their performance.	4.51	0.64	Strongly Agree
is done quarterly and with proper guidelines.	4.45	0.68	Strongly Agree
is essential in teaching and learning process because it challenges the teacher to function well.	4.52	0.64	Strongly Agree
provides relevant feedback based on your interactions with students and your execution of teaching methods.	4.51	0.63	Strongly Agree
is done with professionalism, integrity, courtesy, objectivity and confidentiality.	4.53	0.66	Strongly Agree
is very effective and productive in teaching and learning.	4.55	0.59	Strongly Agree
Grand Mean	4.51		Strongly Agree
Interpretation	Very High		

From the above results possibly reinforced the findings of the past research personalities from local source as revealed by Katal and Imran (2022) that Classroom Observation Toolkit summarizes key principles related to classroom observation and provides guidance for developing high-quality observation instruments for the use in primary grades for developing high-quality observation instruments for use in primary grade reading interventions. Peer observation demands the teaching community to observe each other's teaching practice followed in classrooms and to learn from it.

Significant Relationship between Digitized Education and Teachers' Performance

The computed p-values were compared to the level of significance at 0.05 to determine the significant relationship between digitized education and teachers' performance.

Table 7. Significant Relationship between Digitized Education and Teachers' Performance

Variable		r-value	Degree of Correlation	p-value	Analysis
Online Teaching and Learning	IPCRF (Individual Performance Commitment and Review Form)	0.688	Strong	0.000	Significant
Modular Teaching and Learning		0.495	Moderate	0.000	Significant
Flexible and Blended Teaching		0.732	Strong	0.000	Significant

and Learning

Online Teaching and Learning		0.643	Strong	0.000	Significant
Modular Teaching and Learning	COT (Classroom Observation Tool)	0.428	Moderate	0.000	Significant
Flexible and Blended Teaching and Learning		0.710	Strong	0.000	Significant

Table 7 presented the relationship between digitized education and teachers' performance. At a glance, digitized education showed significant relationship to teachers' performance in terms of IPCRF (Individual Performance Commitment and Review Form). Online teaching/learning obtained a strong-significant correlation based on R-value (0.688) and p-value (0.000), flexible and blended teaching and learning also had strong correlation by gaining an r-value (0.732) and p-value (0.000) while modular teaching/learning attained a moderate-significant correlation denoted by the r-value (0.495) and p-value (0.000). All p-values were lower than 0.05 level of significance which affirmed the result of the analysis. This further implied that the extent of digitized education was in accordance with teacher's individual performance.

In addition, digitized education likewise showed significant relationship to teachers' performance in terms of COT (Classroom Observation Tool). Online teaching/learning obtained a strong-significant correlation based on r-value (0.643) and p-value (0.000), flexible and blended teaching and learning also has strong correlation by gaining an r-value (0.710) and p-value (0.000) while modular teaching/learning attained a moderate-significant correlation denoted by the r-value (0.428) and p-value (0.000). All p-values were lower than 0.05 level of significance which affirmed the result of the analysis. This meant that the extent of digitized education was associated with the evaluation of the teacher's performance during the classroom observation.

It is designed to capture a snapshot of a teacher's instruction during a single classroom observation visit.

In the literature reviewed, a great number of studies have aimed at determining whether computer-mediated education in the form of e-learning, blended learning is better than traditional face-to face teaching in relation to

for instance, learning outcome, satisfaction, student retention et cetera. Present and discussed were e-learning definitions of e-learning, hybrid learning and blended learning, comparing different online teaching formats with traditional on-campus /face to face teaching were also explored were the factors that affect students' learning experiences in different online formats in higher education, with particular emphasis on professional education and teacher training (Machi & Mc Evoy ,2016). In relation to the results and discussions of each statement of the problem mentioned above this literature supported the outcome of each survey question as to having result of Very High or High Extent of teachers' performance on different modalities in a Digitized Education.

Summary of Findings

The following findings in saliency were sequentially obtained: As to what is the extent of the digitized education using different modalities in online teaching/learning, the respondents recognized High Extent of it because there were available resources which also provide accurate results of students' assessments. As to the extent of digitized education using modular teaching/ learning, the respondents recognized High Extent of modular teaching and learning as they were informative, relevant and timely to every lesson which was also effective on students' performance. As to Flexible and Blended Teaching and Learning, the respondents recognized Very High Extent of it as the teachers were flexible in every teaching

modality and were computer literate, and the students' engagement and comprehension were well measured. With respect to the level of teachers' performance in terms of IPCRF (Individual Performance Commitment and Review Form), the respondents recognized Very High Extent of teacher's performance in terms of IPCRF as it made teachers aware of their performance and was done quarterly with proper guidelines. As to Teachers' Performance in terms of Classroom Observation Tool COR, the respondents recognized Very High Extent of teachers' performance in terms of classroom observation tool as it was very effective and productive in teaching and learning and is done quarterly and with proper guidelines. As to Significant Relationship between the Digitized Education and Teachers' Performance, The computed p-values were compared to the level of significance at 0.05 to determine the significant relationship between the digitized education and teachers' performance.

Digitized education showed *significant relationship* to teachers' performance in terms of IPCRF (Individual Performance Commitment and Review Form). It also likewise showed *significant relationship* to teachers' performance in terms of COT (Classroom Observation Tool), which then rejected the null hypothesis spelled out in advance as no significant relationships between the said variables.

Conclusion

There is no significant relationship between Digitized education and Teachers' Performance of different private and public schools in Pila, Laguna. It was concluded therefore, that there was significant relationship between Digitized education and Teachers' performance so hypothesis was rejected

Recommendations

From the above findings and conclusions, the following were hereby recommended for consideration:

1. The school may maintain the quality deliverance of academic instructions in different modalities in a Digitized Education by following proper guidelines on every teaching modality available.
2. The teachers may be thoroughly exposed to relevant and actual trainings for them to perform well in a Digitized education.
3. Furthermore, teachers may enhance their skills in terms of communication, computer literacy, management, interpersonal and intra-personal skills in teaching and learning in different modalities.
4. Teachers are advised to be more aware to Individual Performance Commitment Review Form and Classroom Observation Tool as measurement of their performance.
5. The teachers may be open to other issues and problems that can be encountered with Digitized Education and find alternative ways or solutions to it.

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