

## Assessing the Utilization Of Modern Technologies in the Public Secondary School Teachers at Karachi in Sindh

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### Abstract

*Technology integration and technology-based practices in the daily routines in school management can be integral part to achieving significant improvements in teaching and learning. It further transforms classrooms with digital learning tools and enhances, learning experiences, and supports the learner in the innovation of contents. This study explored the utilization of modern technologies to managing secondary public schools in Karachi. The quantitative research design was used and three research questionnaires were utilized and validated by experts' opinions. The data was collected through stratified random sampling technique from (35) teachers belong from 05, different public secondary schools which located at sadder town Karachi in Sindh. The Pearson Product Moment Correlation was maintained to analysis the reliability which is value are 0.73. Mean and standard deviation were used to get answered from the research questions. The study findings showed that there is low utilization of modern technologies and no proper attention and due weightage was given in this component at public secondary schools in Karachi. It was also recommended that IT equipped Lab should be constructed with regular funding were allocated by the concerned authorities to enhance the proper utilization of modern technologies in public secondary schools in Karachi. Moreover, it was also recommended that teachers should effectively play their proper role to provide maximum opportunities to students and modify contents with latest teaching techniques and focus be given on proper delivery in the classroom teaching and learning.*

**Keywords:** Utilization, Modern technology, public school, Secondary teachers

### Introduction

Education plays the key role to developing, socialization and helping men and women how to live, grow happily and understanding others feelings and problems. It also guides the nation how to adopting different types of learning. It focuses to help in personality developing generally and specifically psychologically traits of learning of the individual or groups. In this context the efforts of Ngos and the Government of Pakistan have been appreciated to focus on teachers' professional development through ten professional grades for teachers' recruitment and training (NPSTP, 2009). The serious efforts of USAID by introducing their two major phases, the Pre-service Teacher Education Programmed (Pre-STEP) and another Pakistan Reading Project (PRP) to improve the reading skills and implement the quality of teacher education with the help of different plan of action which workout by institutions. The National Education Policy, (2017) states "Education in Pakistan is only armor or instrument that can be used for affective and immediate national development" It further explains that the nation who is clear in terms the objectives and philosophy that can easily plan its expenditure in education for two years or five years. Ojoawo (2015) the postulate acknowledged that Education increases the responsibilities to develop the human resources. Akangbou (2011) claims the type of services provided with many objectives and vision. The rapid growth and development of the nation Education provides basic education knowledge to be a good citizen.

According to the Education policy of Pakistan (EPP, 2009). The secondary education is given after basic education such as the public, private and poly technical institutions. The education plays pivotal role in the society to develop the economic position of the country. The true success, survival of any nation depends on education competition with developing countries. The employees' productivity as well as the satisfaction results of their educational institutes, (Olanyan, 2019). Halidu (2015), the study observed that the continuous results of training and the development staff needs in-service trainings for achieving organizational success in different departments. It has defined that continuous training for the teachers and staff can increases the employee skills and motivation for doing a particular job on the bases of knowledge and vocational purposes.

The Secondary Education is crucial phase of education and learning in Pakistan which helps students to decide or planning their future planning. The secondary education starts after completing schooling in the process of learning. It develops multiple skills and competencies of the learners in different areas. The National Educational Policy Framework (NEP, 2018), Secondary education is given after basic education in public and private schools in Pakistan. The Secondary school education objectives of should provide maximum opportunities to the learner to acquire required knowledge and skills for the nation development in all walks of life. It enlightens the learners to promote

love and build a firm foundation for further education and training. It develops high level manpower training, opportunities and career counseling through different programmed in Education (NEP & Oshia,2018). described that this goal can be achieved, if three major stakeholders, parents, teachers and students realized their roles and responsibilities in the entire process of learning and up-to-date with their practices. The separate studies reported some factors in which they have mentioned the effective role of supporting staff to arranging training programs for the betterment and prosperity of the teachers (Cowden and Karodia, 2014)

Today, technology has conquered all field of life and involved in everyday problems of education, history, politics, philosophy and psychology (Demir, 2016). It has been proved that Information communication technology (ICT) become an indicator to provide quality of educational and practices generally, the learning processes, has transformed education and leadership management processes fastly (Cetin, 2016). It has changed the nature of teaching and learning and demands innovate and latest management policies and practices for long term planning the effective uses of technological tools have become efficient by collecting fees and providing quick responses to students in different situation to maintain security system and enhancing student teaching and learning, maintains students' attendance and create discipline and improved communication and interactions among the employees. The utilization of technology has widened the higher learning and thinking of many institutions to compete one another to maintain their standards and reputations (Zandvliet, 2014). focused that different application of technologies has been supporting education in all walks of life, nummerious schools are adopting this technological changes.The computer technologies have innovated educational process in spite of that many challenges. Moreover, the theoretical models of technologies presented new avenues for the learners, with different factors,(Kingdom-Aaron, 2019).

### **Research Objectives**

The study specifically based on the following specific objectives:

**RO1:** To explore at what extent modern technologies were utilize in the managing public secondary school teachers at Saddar town Karachi in Sindh.

**RO2:** To identify the problems related with usage modern technologies of public secondary school teachers at Saddar town Karachi in Sindh.

**RO3:** To investigate possible strategies are required to support the utilization of technologies in the public secondary school teachers at Saddar town Karachi in Sindh.

### **Research Questions**

The study was consisted of three research questions:which are given under:

**RQ1.** How modern technologies utilized by public secondary school teachers at Saddar town Karachi in Sindh?

**RQ2.** What problemes are related with usage of modern technologies in public secondary school teachers at Saddar town Karachi in Sindh?

**RQ3.**What possible strategies are required to support the utilization of technologies in public secondary school teachers at Saddar town Karachi in Sindh?

### **Methods**

The quantitative research design was adopted and three research questionnaires were used for validation and experts' opinions were included in order to modify the instrument on utilization of Modern Technologies.

**Sampling:** The study data collected through stratified random sampling technique from (35) teachers and from (05), different public secondary schools and (07) teachers were selected from each public secondary schools which were located at sadder town Karachi in Sindh.

**Research Instrument:** Instrument questionnaire was on "Utilization of Modern technologies at public secondary Schools at Saddar town in Karachi Sindh" constructed by the researcher. It was constisted of on 4 point Lickared scale of strongly Agree (SA), (A) Agree, disagree (D) and strongly Disagree (SD) with corresponding values of 4, 3, 2, and 1 respectively. The instrument was validated by experts subjected to pilot testing ,the value of Cronbach Alpha and coefficient are 0.73. Moreover, mean and standard deviation were checked in the answers of the research questions. The values of mean was 2.50 which is accepted, while the values of mean below 2.50 have been rejected.

### **Results**

**Research Question 1:** How modern technologies utilized by public secondary school teachers at Saddar town Karachi in Sindh?

**Table1.**

*Mean and the standard deviation of responses How modern technologies utilized by public secondary school teachers*

S/N	Items / descriptions	$\bar{X}$	St.D	Decision
01	The school administration can utilize modern technology effectively.	2.39	0.61	Low
02	The school administrators are aware about the importance of modern technologies.	2.58	0.64	Moderate
03	The school administrators used technology frequently in overall office work/ process.	2.11	0.53	Low
04	The modern technologies sufficiently utilization in the school where I work?	2.96	0.85	Moderate
05	There is close connection between school administration, modern technology and school community in their daily routine.	2.39	0.62	Low
06	They use modern technological gadgets that aid prompt reply to emergencies.	2.39	0.61	Low
07	Technological gadgets are useful for providing security and control of the school.	2.30	0.59	Low
08	The school management my school uses technological gadgets for information management.	2.42	0.61	Low
09	The school management I work uses technological gadgets for comprehensive reporting.	2.52	0.64	Moderate
10	The school management collects extra fees from students to provide comuter/ technical assistance	3.99	1.08	High
	Grand/Mean	2.48	0.62	Low

**Table-1** the table result showed that to How modern technologies utilized by public secondary school teachers at Saddar town Karachi in Sindh is low. The mean result is 2.48. The area where school management technologies is to collect fees from students.

**Research Question II:** What problemes are related with usage of modern technologies in public secondary school teachers at Saddar town Karachi in Sindh?

**Table 2:**

*Mean and standard deviation of respondents related with the use of modern technologies*

S/N	Items / Descriptions	$\bar{X}$	St.D	Decision
01	Lack of education related to use modern technologies	1.97	0.32	Major
02	Price related with accommodation	1.79	0.32	Major
03	Lack of awareness regarding available facilities.	1.12	0.42	Minor
04	Approach regarding the usage of different provisions.	2.00	0.64	Major
05	Insufficient utilize of the provision.	1.33	0.30	Minor
	Grand/Mean	1.50	0.44	

**Table 2-** The results show that lack of knowledge, the accommodation price, lack of awareness, poor approaches regarding the usage of provisions which are major issues that are related with the ustilization of modern technologies while managing at public secondary school teachers Karachi in Sindh.

**Research Question III:** What possible strategies are required to support the utilization of technologies in public secondary school teachers at Saddar town Karachi in Sindh?

**Table 3:**

*Mean and the standard deviation of responses on related supporting strategies are required for utilization of modern technologies*

S/ N	Statement	$\bar{X}$	St.D	Decision
01	In-service coaching of administration and staff.	1.87	1.02	Major
02	Government and other agencies facilities of funds.	2.09	1.10	Major
03	Having the good approach towards the utilization of modern technologies	1.16	0.89	Minor
04	Approved practices and policies will provide a platform for proper usage of modern technologies.	1.89	1.02	Major
	Grand/Mean	1.83	1.01	

**Table 3:** revealed that in-service training of the public secondary school teachers, provision of funds by NGOS agencies. The modifications and implementing of the practices and policies can be utilization of modern technologies in public secondary school teachers at Karachi in Sindh.

### Discussion

The study results findings are supporting the adaption of modern technologies in secondary schools in developing and underdeveloped countries. The area where school management need to concentrate is to utilizes modern technologies from where high fees have been collected from students. This practice creates the financial burden for the students and parents at secondary level. Moreover, the results also revealed through utilization of modern technologies, can overcome the major challenges in the field of education, e.g., quality of teaching and learning, innovative teaching techniques, develop the positive attitude of the learners towards technologies to managing the conducive classroom environment. The lack of financially resources and non-serious attitudes of the teachers are major stabling challenges that we need to address for utilization of modern technologies in the management at secondary school levels.

The study also suggests that a strong and valid mechanism should be built to provide continuous training both students and teachers on regular bases. The purpose of such mechanism is to enhance and strengthen teachers' skills and knowledge of modern technologies. It is also necessary to develop positive attitude with the use of modern technologies. The in-service training of the public secondary school teachers should provide by Government, and NGOS to actively work at secondary level. In this context the concerned authorities should play their role to bring innovations and modifications in their laws and policies which promote the use of modern technologies in the public secondary school teachers at Karachi in Sindh. However, future guidelines should be provided to implement the policy guideline. It is also suggested that in order to creating interactive and learning classroom the usage the modern technologies should be implemented by school management at secondary school level in sadder town Karachi.

### Recommendations

1. It is recommended that the proper utilization of modern technology must ensure by teachers with latest learning tools and techniques at the secondary school level at Saddar town in Karachi.
2. It is also recommended that the school management tale bold steps to re-design an appropriate learning models and provide in-service trainings to their teachers at secondary school levels.
3. Teachers should alter their teaching approaches to transform their classroom into an-interactive classrooms with student-centered learning approaches at secondary school levels.
4. It is also recommended a separate fund should be generated by school authority to upgrade the computer laboratories with latest ICTs resources like multimedia projectors, smart board and memory devices.
5. Teachers must be aware themselves about the ICTs tools and techniques and to implement them into classroom teaching and learning at secondary school levels.
6. It is also recommended that the school management should arrange the re-fresher courses for their teachers' to develop their skills and create competition among them at secondary school levels.

### **Conclusion**

The study implications recommended that the concern authorities should take strong measures to implement the proper utilization of modern technologies at secondary, higher secondary and college levels to promoting teachers' expertise and subject-based knowledge comprehensively. In this context the concerned authorities should take pragmatic decisions to implement the usage of modern technologies at secondary school levels. The proper utilization of modern technology can overcome the major problems of both learners and teachers. The strong machoism should be developed which provide necessary support to both teachers and learners. There are certain reasons like, the lack of proper facilities, poor funding and lack of motivations are some challenges which associated with the use of modern technologies at secondary levels. This study suggests that the concerned authorities should provide supportive facilities and create a conducive an environment to implementation the utilization of ICTs at secondary school levels. In order to overcome this issue, the related workshops, training sessions, related material on ICT and pedagogical information must be provided to the teachers at public secondary schools at Saddar town in Karachi. results and discussion.

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