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KEYWORDS	ABSTRACT
Assessment, Technology, Tabs, Literacy Skills, Collaborative Learning, Tabs & Methods of Teaching	<p>This study was designed to explore effectiveness of using tabs in assessment at primary level in PEF schools of Lahore. The paradigm of the current study was social constructivism. Basic qualitative research methods were used for data collection and the analysis procedures. Open-ended interviews were conducted from twenty-five primary school teachers in Lahore. Purposive sampling technique was used for selection of participants. Qualitative data were analyzed through the arranged of data, coding, and emerged into the themes. It was evident from this research that using tabs in assessment has boosted performance of students. The results offered significant information about research issues as examined in particular context for specific purpose to produce desired outcomes. The result of the study showed that usage of innovative technology in assessment is productive and has a positive impact on student learning in English, Mathematics, and Urdu. Findings suggested that the number of tabs given to each school should be increased according to the student's strengths, as tabs motivate students and help in improving student learning.</p> <p> 2023 Journal of Social Research Development</p>
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## INTRODUCTION

Assessment is a common term that embraces series of methods used to get knowledge about student learning (observance, scores to performances/ assignments, pencil & paper exams) and construction of worthy decisions regarding the knowledge advancement (Rootman & Lutz, 2013). Assessment is a comprehensive and inclusive term. it is a very vast topic that incorporates all things ranging from state level aims to student learning outcomes and from standardized test to routine classroom tests (Hamhuis, Glas, & Meelissen, 2020). Assessment is information about the student's learning process.

Therefore, we want to remove gaps in teaching and learning, we need information about student's progress which provides clear picture of student's achievement (Nardi & Ranieri, 2018). One of the reasons why we need assessment is to see that whether students are gaining what we deliver or not because it is often noticed that students do not learn what teacher wants them to learn. That's why assessment is the fundamental process in effective instruction (Hamhuis, Glas, & Meelissen, 2020). No matter how cautiously we design and execute the instructional process, we cannot forecast what our students learn with any certitude (Louis, Jacquemotte & Hilty (2020). Only the assessment can help us to investigate whether the instructional activities that we designed to engage the students are helpful in achieving the intended learning outcome. Thus, assessment acts as a bridge between teaching and learning.

Assessment of learning or assessment for learning is most valuable as it provides us with information about students and suggests us ways to improve learning process. People have different views about formative assessment some people think that that the term formative assessment applies day to day student-teacher interactions while others consider it as weekly, monthly tests (Pruet, Ang & Farzin, 2016). Louis, Jacquemotte and Hilty (2020), stated formative assessment in this way that is useful for classroom practice, if we admit that any assessment can be formatively used. Hereafter, he found most suitable three key processes in learning; where the learner is right now, where learner needs to be, how to get there (Dündar & Akçayir, 2014). It is also very important to reflect upon respective roles of student, teacher and peers in this regard. Therefore, today is the age of technology (Birgin & Catlioglu, 2009). Technology also plays a vital role in education. The integration of technology in education helps teachers to assess students and motivate students for learning. Barry (2014), steered an investigation to see whether the application of technology for Tablet PCs in an educational and learning environment can potentially contribute more to the learning intentions of the teachers and students than the substitute to not at all computer technology or else notepad technology (Nardi & Ranieri, 2018). The results of Barry (2014) research showed that the tablet PC also accompanying the software offered many improvements that learners used, so that they had a more efficient, effective or combined way to learn.

### Significance & Problem Statement

The supplementary level of data would be providing the powerful forthcoming into the crash and significance of effectiveness of assessment through tabs at the primary level. Student's assessment is very vital to make the teaching-learning process more effective and efficient. There are number of ways to assess students, one of way is the use of Tabs to assess the student's learning outcomes. In this connection, the statement of problem is designed to explore the "effectiveness of assessment through tabs at primary level" to attain desired outcomes and how do the teachers use Tabs for assessment of concerned students?

### Objectives & Questions

- ✓ To probe the different ways of using Tabs for the student assessment in the primary level.
- ✓ To explore the benefits of using Tabs for the teachers in the primary level school context.
- ✓ How do the Tabs use for the student's assessment in the primary level schooling context?
- ✓ What are the benefits of using the Tabs for the teachers in primary level school context?

## LITERATURE REVIEW

Learning is a process that changes gradually. Throughout the centuries, learning has not coincided with the use of technologies and tools of the time, and the newly acquired patterns of learning and behavior of students have not been passably considered by instructors (Hamhuis, Glas, & Meelissen, 2020). In recent years, e-learning has apparently become more prominent in the modern society as technological advances took place (Nardi & Ranieri, 2018). However, in abundance of available e-learning services, it is difficult to define one that helps with memory retention, monitors the activity and progress of students and, in general, guides students in path to your initial learning goal (Louis, Jacquemotte & Hilty, 2020), Respectively innovative technology reorganizes the status quo in the school and provide skill to renovate schooling setting (Kristensen, Olesen, Pedersen & Grøntved, 2022). In addition, the technology as well supports in sanctioning the learner-centered education performs additional than improving the instruction approaches, which are reinforced via dissimilar developing philosophers and through the policymakers for primary youthful schooling (Fabian, & MacLean, 2014). In this connection, desired educational innovation takes a specially position for the execution of the concepts shaped by learning disciplines and the progress of these executions in the particular contexts (Lim & Morris, 2009; Şimşek., 2009; Peşman & Özdemir, 2012; Shantakumari & Sajith, 2015).

Modern Internet-based instruction methods have expelled traditional position and period barriers and have given learners gain access to knowledge every time and anywhere they need (Yiğit & Özden, 1999; Shantakumari & Sajith, 2015). So, the student be able to get data and material with no subordinate on period and location has got the web and Internet a vital portion of the instruction. Lehner and Nosekabel (2002), expressed that innovative devices ought to be utilized to a positive in direction for discovering and education to be supplementary efficient. Nevertheless, he moreover emphasizes that information and technology tools along with multimedia tools cannot certify whole achievement of instruction and education (Shantakumari & Sajith, 2015). The goal of learning is, ultimately, to master certain skill that can be carried out automatically, without conscious attention to the task (Hamhuis, Glas, & Meelissen, 2020). However, to better understand learning process, it is essential to assess students time-by-time. Assessment and instruction both focus on student and are integral to each other (Nardi & Ranieri, 2018). Teacher needs to plan his instruction according to the student needs and must use a variety of techniques to assess whether students are ready to learn a or not (Pruet, Ang & Farzin, 2016). One of the important parts of the planning process is students' continuous assessment. For measuring students' achievement in learning, number of techniques are used to assess students.

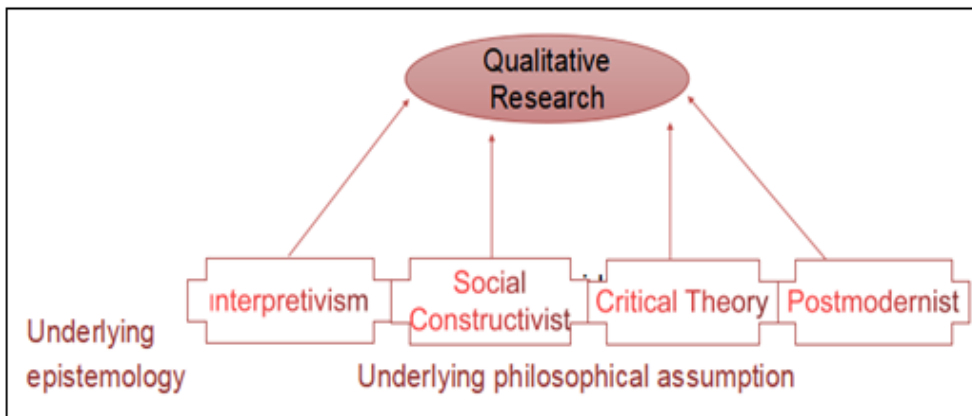
More occasions for cooperative work were acknowledged, in lecturers and pupils communicated at the similar panes and that combined the effort might be recorded and re-played for future review (Chen, Cheng, Chang, Zheng & Huang, 2014). So, the use of tabs in this aspect is very significant. In this perspective Government of Punjab took initiative and provide Tabs to public sector schools for checking student performance in schools (Ak & Güvendi, 2010). For this purpose, monitoring and evaluation assistants are employed by Punjab information & technology board to evaluate student performance (Günes & Agurwal, 2011). These MEA's are retired army personnel who visit schools

every month and assess student learning through Tabs (Birgin & Catlioglu, 2009; Hamhuis, Glas, & Meelissen, 2020). Besides this, MEA monitor teacher attendance, facilitation, school situation and availability of necessary facilities (NMSIP, 2017). There is the use of technology in almost every aspect of life. In this regard, all the 44 PEF schools running under the supervision of University of Education in partnership with Tele Taleem were provided with Tabs (Dünder & Akçayir, 2014). Two tabs were given to each school. The purpose of giving tabs was formative assessment of students and to focus the literacy and numeracy in early grades (0,1,2,3). Test of early grade students is taken on tabs, for this purpose their in-house applications in tabs developed by Tele Taleem. Tabs contain data of all students.

## RESEARCH METHODOLOGY

Nowell, (2017), suggests that it is proper to select that paradigm whose assumptions are best met by phenomenon being investigated. The basic assumptions guiding interpretative paradigm are that knowledge is socially constructed by the people active in the research process and the researchers should attempt to understand the complex world of lived experience from the point of view of those who live it (Schwandt, 2007).

Figure 1 Philosophical Assumption



## Research Design

This study is qualitative in nature. Method that was used to understand effectiveness of assessment through tabs at primary level is one-to-one interview. In this connection, one of the advantages of qualitative methods in the form of interviews is that it becomes a vibrant conversation that can take different directions.

## Population & Sample

The population of this study was consisted of teachers of public sector schools of Lahore. The total population was 44 primary schools using tablets in assessment at primary level. The participants of the study were consisted of 25 public schools of Lahore in which teachers were using tablets for student's assessment. In this connection, the purposive sampling technique was used for the selection of the participant.

### Instrument & Data collection

Open-ended questionnaire was developed to explore the “effectiveness of assessment through tabs at primary level”. “The individual interview is a process of data collection in which the researcher asks questions and records responses of a single participant in the study at the same time” (Creswell, 2008, p. 226; Yin, 2012 & DeMontmoll, 2018). The individual interview methods were adequate for this study because the study investigates the effectiveness of the assessment through tabs at the primary level. In this study, open-ended questionnaire was used that allow the participants to be flexible and open with their answers. The tracking probes were also used, they help to obtain more in-depth information. Creswell (2008), described the probes as “secondary questions under each question the researcher asks for more information or to expand or clarify information”. Interviews of all teachers were recorded. After the interview sessions, the audio recordings of the interviews were thus transcribed.

### Data Analysis

The data analysis looked for specific recurring themes and common responses. The transcribed interviews of each personal interview were listened to, reviewed and analyzed to become familiar with the data. The following ideas, words or common statements were highlighted. Creswell (2008), emphasized the need for a “preliminary exploratory analysis” which consists of obtaining a general sense of the data, making annotations and deciding if there is enough data (Creswell, 2008; Yin, 2012 & DeMontmoll, 2018). In this connection, transcripts from individual interviews provided the raw data for the analysis. The transcripts of the interview were carefully reviewed once again to develop themes.

## RESULTS OF STUDY

The data analysis carried out was organized into ten different themes. The findings of the study were as follows:

Figure 2 Developed Themes



### Motivate Students

Based on the study, using tabs for student assessment encouraged students to attend class regularly and show interest in both the teaching-learning process and classroom activities through effective motivation.

### **Enhance Literacy Skills**

The study found that the usage of tabs significantly helps early-grade kids enhance their reading comprehension and literacy skills that are vital in improving their capabilities towards desired and leading outcomes.

### **Enhance Computational Skills**

The study also revealed that tabs enhance students' computational skills and help them develop better concepts of addition, subtraction, multiplication as well as technical capabilities as required for desired success.

### **Builds Vocabulary**

The study originated that the use of tabs builds students' vocabulary through sounds of alphabet, pronunciation, and by learning new words that are significant for building memory regarding the new vocabularies.

### **Increases Enrolment Rate**

An increase in enrollment rate is also founded as an effect of assessment through tabs. A significant increasing in the number of students can be seen since teachers started to use tabs in classrooms for particular purposes.

### **Prepare Students for LND Test**

The most important use of tabs in student assessment found by study was the use of tabs to prepare 3-grade students for the LND (literacy and numeracy drive) test. Thus, an MEA (monitoring and evaluation assistant) from PEF comes to school to take this test every month to check the students' desired progress.

### **Build Concrete Concepts**

The study also revealed that the usage of tabs helps students visualize many abstract scientific and mathematical occurrences, which helps pupils develop tangible conceptions in their minds to build the concrete concepts.

### **Time Management**

The result of this study explored that Tabs also help teachers to save time. When teachers use tabs, they do not need to draw pictures on boards or make charts that saves them time and help in desired time management.

### **Poor Tab Management**

It was also revealed through study that there is no proper management of tabs. In this connection, some teachers keep tabs for their personal use and do not give tabs for use in classes for attain desired leading outcomes.

## **DISCUSSION**

It is widely reported that use of information and communication technologies in education plays an important role in development of a knowledgeable society. As technology becomes more accessible globally, education systems are also subject to revolution (Chen, Cheng, Chang, Zheng & Huang, 2014). The research was instituted to probe the answers to the questions that how teachers use tabs in student assessment and what are the benefits of using tabs for teachers. The study was conducted

by taking interviews with primary school teachers. Different themes were generated based on the data collected through interviews with teachers (Ak & Gvendi, 2010). "The individual interview is a process of data collection in qualitative research in which the researcher asks the questions and records the responses of a single participant in the study at the same time" (Creswell, 2008, p. 226). It originated in the study that the use of the tabs motivates students to come to school and improves their learning, this is supported by the results of the study conducted by Barry (2014), also found that the use of tabs helps students in their learning. He conducted a study to see whether the usage of the Tablet in the learning and educational atmosphere can hypothetically subsidize the learning intentions of the teachers and students than the alternative to notepad technology or no computer technology entirely.

The results of research, showed that Tabs and accompanying software offered many improvements that students used so that they had a more efficient or combined way to learn. Henderson and Yeow (2012) while describing the positive effects of the devices on learning argue that motivation results when students can access fun learning content and take control of their learning process. Another finding from the study is the need to improve the pupils' computational and literacy skills. Several studies confirm the findings of this one. This study's findings are in line with several others. A study by Kristensen et al (2022), showed that the tablets are particularly beneficial for fostering early literacy in students, which is the cornerstone of all academics. The development of all literacy skills will be based on acquisition of early reading skills (Birgin & Catlioglu, 2009). From a very young age, the kids start to lay this foundation and apply the learned skills to reading. According to the studies, initial reading and reading proficiency are among the best predictors of the later reading and academic success (Fabian, & MacLean, 2014). As per the research, assessment through tabs also increases pupils' vocabulary. As well, employing tabs dramatically increases the enrolment rate of pupils. It revealed that employing tabs allowed for completion of roll call and encouraged students to attend class.

The preparation of pupils for the LND (literacy and numeracy drive) test is the tab's most significant use. All of schools regularly use tabs designed for LND preparation. In addition to teaching pupils how to pass test, preparation for it helps them gain confidence and learn how to use contemporary technologies (Darling & Rothman2, 2011). The study revealed that tabs can be used to help pupils build tangible notions. When students engage a variety of senses during the learning process, such as sight and hearing, they learn more effectively. As the students view or watch a certain image or procedure, notions become more evident (Kristensen et al., 2022). Teachers who use tabs can better manage their time. Teachers can save time by not having to sketch illustrations or create manual A.V. aids. Barry (2014) also discovered that using tablet computer and technology helped students learn by utilizing various forms of multimedia, such as the images, audio, and animations (Gnes & Agurwal, 2011). Teacher needs to plan his instruction according to student needs and use variety of techniques to assess whether students are ready to learn a or not (Pruet, Ang & Farzin, 2016). Louis et al. (2020), use of mobile devices should support teachers and students in engaging in the modern activities that boost teaching and learning rather than replacing traditional teaching techniques that rely on teachers.

## CONCLUSION

Everything has both advantages and disadvantages. Like everything else, the research identified harmful uses for tabs. The study probed the issue of teachers exploiting tabs for their own purposes. They keep tabs on themselves 24/7. Their SIM cards have been placed inside tabs. Some teachers have not used tabs for the students' education. The findings also clearly stated that most of the areas where schools are located are less settled and have fewer residents who have access to technology. The study's overall findings demonstrate that the usage of the tabs during student assessment helps pupils learn. The number of the tabs given to each school would be increased according to student's strength as tabs motivate students and improves student's learning. Tabs must be used in all classes on daily basis to clarify the student's concepts and to assess the achievement of students. Teachers would familiarize students with the use of technology by giving tabs to students for independent use. The administration of the school would keep proper check and balance about the use of tabs and should not allow teachers to take tabs along themselves and keep it for personal purposes. In this connection, teachers would be updated about the upcoming apps and features of the tabs for the efficient use of tabs.

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