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RESEARCH PAPER

Analysis of the Challenges faced by Secondary School Teachers during the Conduction of Online Classes

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ABSTRACT

This study aimed to explore the online teaching experiences and challenges faced by secondary school teachers in Chakwal district. From 154 selected secondary and higher secondary schools, a sample of 321 male teachers participated. Using a validated questionnaire with 17 closed-ended items, the research analyzed teachers' experiences, primarily focusing on IT skills and online teaching. Responses were gathered through zone meetings and personal school visits, later analyzed using SPSS and various statistical methods. The findings emphasized that IT-skilled teachers, whether through diplomas or training, effectively conducted online classes. Conversely, teachers lacking IT skills encountered difficulties transitioning to online teaching. A majority of these non-IT-skilled teachers advocated for frequent refresher courses and in-service training in new educational technologies to address these challenges.

KEYWORDS: ACR, EST, HRMIS, PER, QAED, SIS

Introduction

For almost a century, there have been few noticeable changes to the way people are taught. Many people believe that the traditional model of education will continue to include pupils submitting to the authority of a single professor. Most modern classes still employ this method of instruction, despite substantial technology developments and the introduction of new pedagogical principles. It seems that the tremendous speed of change brought forth by these breakthroughs is now threatening to shatter the educator bubble that has allowed them to flourish in the face of technological disruption.

The globe is both contracting and growing in size. With the advent of modern means of instantaneous and asynchronous communication, our global community is rapidly contracting. However, we are better equipped to see the world in its whole because to the deluge of information at our fingertips. The proliferation of knowledge and the ease with which people may share and receive information throughout the world have both increased the urgency with which educators must adapt their methods. Most teachers may be opposed to change, but whether or not that resistance will be overcome is a matter of when, not if. In other words, it is our responsibility to train the youth of today for a future that does not yet exist, with technologies and occupations that have not yet been dreamed of.

The constant development of new technologies necessitates a revision of the current educational system. It has to be able to pick up knowledge whenever and anywhere it can (Wolfinger, 2016). Online courses have been offered by a growing number of universities throughout the world in the previous two decades. However, few

educational institutions now employ online learning, and even fewer have faculty members who are familiar with its principles. MOOCs, or Massive Open Online Courses, have democratized online education for the academy. To effectively motivate students in online courses, instructors must have a firm grasp of how to stimulate their mental, emotional, and behavioral states (Hartnett and Louwrens, 2015). Students in the midst of an educational crisis, such as the shift to a new platform, call for extra social support in order to maintain focus and keep them motivated (Eccles et al., 1993; Harter, Whitesell, & Kowalski, 1992; Midgley, Anderman, & Hicks, 1995; Roeser & Eccles, 1998).

Online learning is often seen as a choice or an alternative to more conventional forms of education, but during the recent Coronavirus epidemic, it emerged as a necessary component for the continued operation of educational institutions such as schools and universities]. The students' perspectives on this kind of instruction might evolve as a result of this paradigm shift, and such shifts could be distinct from the students' perspectives that were discovered in research conducted before the epidemic. As a result, during the course of this study, we endeavored to demonstrate the presence of such shifts. Online learning has been shown in previous research to have various advantages for students, including student-centeredness, more flexibility, and an improvement in students' ability to communicate with one another. (Abou El-Seoud,2014)

School information System and Human Resource Management System of SED

The School Education Department of Punjab (SED Punjab) has introduced the SIS (School Information System) app for controlling all of an employee's actions. It contains an employee's whole history, including their personal biography, academic record, and professional record, and it is updated regularly. This application first be evaluated for the management of causal leave (CL). The online attendance module for the school teachers is available via this app and was introduced in September 2019.Similary, this application has more features like transfer posting of a teacher electronically and when compared this system to the manual system, transferring or posting of a teacher is made simpler with the use of this software application is a great initiative of the department to overcome the hurdles of a teacher, very interesting point is that transfer/posting orders are electronically generated, joining/ relieving is also made electronically through QR code. In addition to the School Information System (SIS), a further online variation is also known as HRMS has been released. This web variant is responsible for maintaining every entry in the scanned document forms. In November of 2021, an online ACR module will be introduced to HRMS. An individual employee will be able to use this module to submit an electronic application for the ACR. Both applications of SED, SIS (School Information System) and HRMS (Human Resource Management System) are synchronized. The whole work experience of an employee may be accessed with the push of a button thanks to the digitization of the record.

Initiative of Training on 21st century digital skills by SED Punjab in June 2022

In June 2022, an initiative of training on 21st century digital skills by SED Punjab have been taken. It was 8 days training that was conducted in district's QAED to train the SST (Computer Science) and EST (Computer Science). This training was comprised of 2 stages, 1st stage consists of 3 days and these 3 days the training was on campus and in the 2nd stage the training consisted of 5 days and these 5 days the training was on online mode.

In this training the SSTs and ESTs were trained with the new software and applications of Microsoft that will help in conduction of online classes. All the teachers of SED Punjab are provided access to the applications of Microsoft by using the their CNIC no as login in view of pandemic of COVID-19. In first phase the SSTs (Computer Science)

and ESTs (Computer Science) were trained and after this all the teachers of public sector school will train by these SSTs and ESTs. This is good initiative of SED.

Literature Review

Universities have long been connected with the phenomenon of virtual transformation (Kopp et al., 2019; Leszczyski et al., 2018). Since the skills to use ICT in all facets of life are steadily increasing, universities must be prepared to help capability experts face challenges and offer solutions (Bond et al., 2018; Sandkuhl & Lehmann, 2017), making virtual transformation in higher education a hot topic that some educators should worry about. This shift demonstrates that hybrid approaches to control may accommodate the changes necessitated by emerging technology and ongoing pandemics (AbadSegura et al., 2020). In the context of higher education, digital transformation may be thought of as the total of all the digital approaches needed to manage the transformation process, which in turn allows educational institutions to make the most possible use of digital technology. The evidence for this is extensive (Koppetal., 2019). Proper strategic planning, trust-building, process-thinking, mobilizing, and empowering all involved events, individuals, teams, and organizations are all essential parts of this procedure (Cameron & inexperienced, 2019).

According to Hiltz and Turo ff's (2005) analysis, the current shift will have far-reaching effects on the nature and purpose of higher education over the next half-century. There are several "mega-universities" all over the world, therefore there are a plethora of locally, nationally, and internationally focused online and hybrid programs that use digital technology to enhance constructivism, learner-centricity, and collaborative education. Universities all throughout the nation might use this new approach to education. According to the study's authors, "online knowledge acquisition" is a novel social process that competes with traditional face-to-face schools, but is seen negatively owing to the prevalent "alternative approaches" mentality. Improvements in schooling that would normally take years owing to variations in administration were made quickly and in limited quantities after the Covid-19 epidemic. Online knowledge's image as a disruptive technology has been elevated to "messiah" status in a matter of days because to this (Strielkowski, 2020).

Scope of online education in Pakistan

According to the 2019 Human Development Report, Pakistan is ranked 152 on the Human Development Index, which places it below the average of 0.9 for all of the countries in the world (HDI). To Pakistan's dismay, it has fallen behind its regional neighbors in important education indicators such as literacy, the overall enrollment ratio, and investment in education. Pakistan's peers in the area include Afghanistan, Bangladesh, and Iran. Literacy rates in Pakistan are much lower than those in its surrounding countries, with just 57% of the population being able to read and write.

It is concerning that 22.7% of pupils do not graduate from primary school, which takes place at a pivotal developmental period for academic achievement (third highest in the region after Bangladesh and Nepal). There were 172,500 elementary schools during the 2017–18 school year, with a total of 522,400 teachers, 467,000 middle schools during that same time period, with a total of 448,100 teachers, and 31,400 high schools during that same time period, with a total of 4,610 teachers. There are 5,800 universities and other advanced educational facilities that employ a total of 123,200 teachers, while 3,700 specialized educational facilities, such as technical and vocational schools, employ a total of 18,200 teachers. There are also 3,700 specialized educational facilities that include vocational and technical schools. According to the findings of the Economic Survey, there are 211 public universities in the United States with a total of 51,500 teaching staff members, and there are 659 private degree-granting schools with a total

of 41,233 employees. There were 1.86 million students enrolled in schools around the country for the 2018-2019 academic year. According to the Pakistan Economic Survey 2018–19, there will be a total of 53.6 million students enrolled in K-12 institutions and higher education institutions in Pakistan in the academic year 2018–19. In order to meet the demands of these students, Pakistan will require an estimated 56, 3300 teachers.

Online training is accessible in Pakistan, encompassing a broad variety of non-academic topics such as preparation for competitive tests, improvement of technology skills, and other non-academic fields of study. This industry, along with the entire online education sector in Pakistan, is expanding at a fast rate, and it is anticipated that the total number of users will reach 102 million by the year 2020. People are now able to get instruction on the internet in addition to the conventional forms of education. In addition to academic study, it also includes activities that are not required by the school, such as preparation for standardized examinations or the acquisition of new technical skills. The number of students in Pakistan who are enrolled in online classes is showing no signs of slowing down. According to the findings of Pakistan's Digital Study 2020, there were 76.38 million people using the internet in Pakistan in January 2020. This number represents a 17% increase from the previous year and a 35% increase from the year before that.

Material and Methods

Research Design

This research is descriptive and a survey method is used to collect data. The purpose of this research is to investigate the computer related skills that are helpful for conducting online classes.

Population

The population of this study was 917 secondary school teachers from 154 boys' secondary and higher secondary schools of the district Chakwal.

Sample

The sample of the study was 321 (35%) secondary school teachers as per availability in the boys' secondary and higher secondary schools of public sector of District Chakwal by using simple random sampling technique.

Research Instrument

The researcher administered questionnaire to collect information from the teachers selected for the study. A perception scale used to measure teacher perceptions regarding computer skills that were helpful for online classes. The perception scale consisted of questionnaire, and the response for each item was assessed using a Dichotomous Scale with 2-points scale that is “Yes” and “No”.

Data Collection Procedure and Data Analysis

The researcher collected the responses of participants through zone meetings as well as through personal visits to the high and higher secondary schools via questionnaire.

The data collected from respondents was analyzed through different statistical techniques (including percentage, mean and standard deviation) on SPSS.

Results and Discussion

Table 1
Analysis of Challenges that school teachers usually experienced while conducting online classes against qualification (N=321)

		Yes		No	
	Qualification	*f*	%age	*f*	%age
I have lack of ICT knowledge.	Bachelors	0	0	0	0
	Masters	27	14.59	158	85.41
	M.Phil.	25	18.38	111	81.62
	PhD	0	0	0	0
	Total	52		269	

The table 4.1 shows that the respondents had M.Phil qualification and in which 18.38% marked this statement yes and only 81.62% marked no. This also shows that the respondents had Masters Qualification and in which 14.59% marked this statement yes and only 85.41% marked no. It means that the majority of the respondents did not have lack of ICT knowledge.

Table 2
Difficulty for first time teaching

		Yes		No	
	Qualification	*f*	%age	*f*	%age
I faced different difficulties while teaching some subjects first time online.	Bachelors	0	0	0	0
	Masters	167	90.27	18	9.73
	M.Phil.	102	75.00	34	25.00
	PhD	0	0	0	0
	Total	269		52	

This shows that the respondents had M.Phil qualification and in which 75.00% marked this statement yes and only 25.00% marked no. This also shows that the respondents had Masters qualification and in which 90.27% marked this statement yes and only 9.73% marked no. It means that the majority of the respondents faced different difficulties while teaching some subjects first time online.

Table 3
Effect of Online Teaching

		Yes		No	
	Qualification	*f*	%age	*f*	%age
Is the lack of resources like (computer, laptops, palmtops, tablets and android mobiles) effect the online teaching and learning process through online mode?	Bachelors	0	0	0	0
	Masters	167	90.27	18	9.73
	M.Phil.	102	75.00	34	25.00
	PhD	0	0	0	0
	Total	269		52	

This shows that the respondents had M.Phil qualification and in which 75.00% marked this statement yes and only 25.00% marked no. This also shows that the respondents had Masters qualification and in which 90.27% marked this statement yes and only 9.73% marked no. It means that the majority of the respondents had lack of resources like (computer, laptops, palmtops, tablets and android mobiles) effect the online teaching and learning process through online mode.

Table 4
Effect of Unstable Internet Connection

	Yes		No	
Qualification	*f*	%age	*f*	%age

Is unstable internet connection effect the online session?	Bachelors	0	0	0	0
	Masters	157	84.86	28	15.14
	M.Phil.	125	91.91	11	8.09
	PhD	0	0	0	0
	Total	282		33	

This shows that the respondents had M.Phil qualification and in which 91.91% marked this statement yes and only 8.09% marked no. This also shows that the respondents had Masters qualification and in which 84.86% marked this statement yes and only 15.14% marked no.It means that the majority of the respondents thought that unstable internet connection effect the online session.

Table 5
Cost of resources

		Yes		No	
	Qualification	*f*	%age	*f*	%age
Is not too costly in terms of resources?	Bachelors	0	0	0	0
	Masters	119	64.32	66	35.68
	M.Phil.	80	58.82	56	41.18
	PhD	0	0	0	0
	Total	199		122	

This shows that the respondents had M.Phil qualification and in which 58.52% marked this statement yes and only 41.18% marked no. This also shows that the respondents had Masters qualification and in which 64.32% marked this statement yes and only 35.68% marked no.It means that the majority of the respondents marked yes that the online classes were too costly in terms of resources.

Table 6
Technical Support for online classes

		Yes		No	
	Qualification	*f*	%age	*f*	%age
Is technical support for technical problem from technical staff while conducting online classes sufficient?	Bachelors	0	0	0	0
	Masters	83	44.86	102	55.14
	M.Phil.	68	50.00	8	50.00
	PhD	0	0	0	0
	Total	151		170	

This shows that the respondents had M.Phil qualification and in which 50.00% marked this statement yes and only 50.00% marked no. This also shows that the respondents had Masters qualification and in which 44.86% marked this statement yes and only 55.14% marked no. It means that the majority of the respondents don't had technical support for the technical problem for the technical staff while conducting online classes.

Table 7
Non-Effectiveness of online classes

		Yes		No	
	Qualification	*F*	%age	*f*	%age
Is the reason of non-effectiveness of online classes the slackness of technical staff?	Bachelors	0	0	0	0
	Masters	84	45.41	101	54.59
	M.Phil.	76	55.88	60	44.12
	PhD	0	0	0	0
	Total	160		161	

This shows that the respondents had M.Phil qualification and in which 55.88% marked this statement yes and only 44.12% marked no. This also shows that the

respondents had Masters Qualification and in which 45.41% marked this statement yes and only 54.59% marked no. It means that the 50% respondents thought that the reason of non- effectiveness of online classes was the slackness of technical staff.

Table 8
Availability of Computer labs in schools

		Yes		No	
	Qualification	*F*	%age	*f*	%age
Do you think that the sustained computer labs of schools are also a reason of failure of online classes?	Bachelors	0	0	0	0
	Masters	75	40.54	110	59.46
	M.Phil.	81	59.56	55	40.44
	PhD	0	0	0	0
	Total	156		165	

This shows that the respondents had M.Phil qualification and in which 59.56% marked this statement yes and only 40.44% marked no. This also shows that the respondents had Masters qualification and in which 40.54% marked this statement yes and only 59.46% marked no.It means that the 50 % respondents argued that the sustained computer labs of the public schools were also a reason of failure of online classes.

Table 9
Heavy workload of classes

		Yes		No	
	Qualification	*F*	%age	*f*	%age
Is the work load of online classes is heavy?	Bachelors	0	0	0	0
	Masters	153	82.70	32	17.30
	M.Phil.	117	86.03	19	13.97
	PhD	0	0	0	0
	Total	270		51	

This shows that the respondents had M.Phil qualification and in which 86.03% marked this statement yes and only 13.97% marked no. This also shows that the respondents had Masters qualification and in which 82.70% marked this statement yes and only 17.30% marked no.It means that the majority of the respondents argued that the work load of online classes was heavy.

Table 10
Attitude of the Staff

		Yes		No	
	Qualification	*F*	%age	*f*	%age
Is the attitude of staff is negative towards e- teaching and learning?	Bachelors	0	0	0	0
	Masters	59	31.89	126	68.11
	M.Phil.	72	52.94	64	47.06
	PhD	0	0	0	0
	Total	131		190	

This shows that the respondents had M.Phil qualification and in which 52.94% marked this statement yes and only 47.06% marked no. This also shows that the respondents had Masters qualification and in which 31.89% marked this statement yes and 68.11% marked no.It means that the majority of the respondents argued that the attitude of the staff was not negative towards e-teaching and learning.

Table 11
Level of interaction of the students

		Yes		No	
	Qualification	*f*	%age	*f*	%age

Is level of interactions with students in the online classes lower than in traditional on campus classes?	Bachelors	0	0	0	0
	Masters	91	49.19	94	50.81
	M.Phil.	58	42.65	78	57.35
	PhD	0	0	0	0
	Total	149		172	

This shows that the respondents had M.Phil qualification and in which 42.65% marked this statement yes and only 57.35% marked no. This also shows that the respondents had Masters qualification and in which 49.19% marked this statement yes and only 50.81% marked no.It means that the majority of the respondents argued that the interaction with the students in the online classes was not lower than in traditional on campus classes.

Table 12
Appropriateness for practical classes

		Yes		No	
	Qualification	*f*	%age	*f*	%age
Are online classes appropriate for practical classes.?	Bachelors	0	0	0	0
	Masters	93	50.27	92	49.73
	M.Phil.	55	40.44	81	59.56
	PhD	0	0	0	0
	Total	148		173	

This shows that the respondents had M.Phil qualification and in which 40.44% marked this statement yes and only 59.56% marked no. This also shows that the respondents had Masters qualification and in which 50.27% marked this statement yes and 49.73% marked no.It means that the majority of the respondents argued that the online classes were not appropriate for practical classes.

Table 13
Consumption of Time

		Yes		No	
	Qualification	*f*	%age	*f*	%age
Is the preparation for online class is time consuming?	Bachelors	0	0	0	0
	Masters	104	56.22	81	43.78
	M.Phil.	107	78.68	29	21.32
	PhD	0	0	0	0
	Total	211		110	

This shows that the respondents had M.Phil qualification and in which 78.68% marked this statement yes and only 21.32% marked no. This also shows that the respondents had Masters qualification and in which 56.22% marked this statement yes and 43.78% marked no.It means that the majority of the respondents argued that the preparation for online classes is time consuming.

Table 14
Motivation of the students

		Yes		No	
	Qualification	*F*	%age	*f*	%age
Is it difficult to motivate students in the online environment than in traditional settings?	Bachelors	0	0	0	0
	Masters	62	33.51	123	66.49
	M.Phil.	56	41.18	80	58.82
	PhD	0	0	0	0
	Total	118		203	

This shows that the respondents had M.Phil qualification and in which 41.18% marked this statement yes and 58.82% marked no. This also shows that the respondents had Masters qualification and in which 33.51% marked this statement yes and 66.49% marked no.It means that the majority of the respondents argued that it is not difficult to motivate the students in the online environment than in traditional settings.

Table 15
Sustainability of home environment

		Yes		No	
	Qualification	*f*	%age	*f*	%age
Is the home environment suitable to conduct online classes in the presence of other family members?	Bachelors	0	0	0	0
	Masters	38	20.54	147	79.46
	M.Phil.	31	22.79	105	77.21
	PhD	0	0	0	0
	Total	69		252	

This shows that the respondents had M.Phil qualification and in which 22.79% marked this statement yes and 77.21% marked no. This also shows that the respondents had Masters qualification and in which 20.54% marked this statement yes and 79.46% marked no.It means that the majority of the respondents argued that it is not suitable to conduct online classes in the presence of the other family members.

Table 16
Distraction form family

		Yes		No	
	Qualification	*f*	%age	*f*	%age
Am I distracted from my family members while online sessions?	Bachelors	0	0	0	0
	Masters	131	70.81	54	29.19
	M.Phil.	121	88.97	15	11.03
	PhD	0	0	0	0
	Total	252		69	

This shows that the respondents had M.Phil qualification and in which 88.97% marked this statement yes and only 11.03% marked no. This also shows that the respondents had Masters qualification and in which 70.81% marked this statement yes and only 29.19% marked no.It means that the majority of the respondents did not distracted from family members while online sessions.

Table 17
Quick feedback of the student

		Yes		No	
	Qualification	*f*	%age	*f*	%age
Is the student quick feedback in online classes is difficult to determine as compared to traditional on campus classes?	Bachelors	0	0	0	0
	Masters	153	82.70	32	17.30
	M.Phil.	102	75.00	34	25.00
	PhD	0	0	0	0
	Total	255		66	

This shows that the respondents had M.Phil qualification and in which 75.00% marked this statement yes and only 25.00% marked no. This also shows that the respondents had Masters Qualification and in which 82.70% marked this statement yes and only 17.30% marked no.It means that the majority of the respondents argued that quick feedback in online classes is difficult to determine as compared to traditional on campus classes

Table 18
Analysis of Challenges that school teachers usually experienced while conducting online classes against experience (N=321)

		Yes		No	
	Experience	*f*	%age	*f*	%age
I have lack of ICT knowledge.	1-5	13	11.71	98	88.29
	6-10	25	20.83	95	79.17
	11- above	14	15.56	76	84.44
	Total	52		269	

This shows that the respondents had variant experience slots. This also reveals that the respondents that had 1-5 years experience in which 11.71% marked this statement yes and 88.29% marked with no. This also shows that the respondents had 6-10 years years experience in which 20.83% marked this statement yes and 79.17% marked with no. It can also reveal that the respondents that had 11 and above years experience and in which 15.56% marked this statement yes and 84.44% marked with no. It means that the majority of the respondents argued with no lack of ICT knowledge.

Table 19
First time online teaching difficulties

		Yes		No	
	Experience	*f*	%age	*f*	%age
I faced different difficulties while teaching some subjects first time online.	1-5	94	84.68	17	15.32
	6-10	96	80.00	24	20.00
	11- above	79	87.78	11	12.22
	Total	269		52	

This shows that the respondents had varient experience slots. This also reveals that the respondents that had 1-5 years experience in which 84.68% marked this statement yes and 15.32% marked with no. This also shows that the respondents had 6-10 years years experience in which 80.00% marked this statement yes and 20.00% marked with no.It can also reveal that the respondents that had 11 and above years experience and in which 87.78% marked this statement yes and 12.22% marked with no. It means that the majority of the respondents faced different difficulties while teaching some subjects first time online.

Table 20
Lack of internet resources

		Yes		No	
	Experience	*f*	%age	*f*	%age
Is the lack of resources like (computer, laptops, palmtops, tablets and android mobiles) effect the online teaching and learning process through online mode?	1-5	47	42.34	64	57.66
	6-10	67	55.83	53	44.17
	11- above	55	61.11	35	38.89
	Total	169		172	

This shows that the respondents had varient experience slots. This also reveals that the respondents that had 1-5 years experience in which 42.34% marked this statement yes and 57.66% marked with no. This also shows that the respondents had 6-10 years years experience in which 55.83% marked this statement yes and 44.17% marked with no. It can also reveal that the respondents that had 11 and above years experience and in which 61.11% marked this statement yes and 38.89% marked with no. It means that the majority of the respondents argued that lack of resources like (computer, laptops, palmtops, tablets and android mobiles) effect the online teaching and learning process through online mode.

Table 21
Good internet connection

		Yes		No	
	Experience	*f*	%age	*f*	%age
Is unstable internet connection effect the online session?	1-5	101	90.99	10	9.01
	6-10	105	87.50	15	12.50
	11- above	76	84.44	14	15.56
	Total	282		39	

This shows that the respondents had varient experience slots. This also reveals that the respondents that had 1-5 years experience in which 90.99% marked this statement yes and 9.01% marked with no. This also shows that the respondents had 6-10 years years experience in which 87.50% marked this statement yes and 12.50% marked with no.It can also reveal that the respondents that had 11 and above years experience and in which 84.44% marked this statement yes and 15.56% marked with no. It means that the majority of the respondents argued that unstable internet connection effect the online session.

Table 22
Cost of resources

		Yes		No	
	Experience	*f*	%age	*f*	%age
Is not too costly in terms of resources?	1-5	74	66.67	37	33.33
	6-10	74	61.67	46	38.33
	11- above	51	56.67	39	43.33
	Total	199		122	

This shows that the respondents had varient experience slots. This also reveals that the respondents that had 1-5 years experience in which 66.67% marked this statement yes and 33.33% marked with no. This also shows that the respondents had 6-10 years years experience in which 61.67% marked this statement yes and 38.33% marked with no.It can also reveal that the respondents that had 11 and above years experience and in which 56.67% marked this statement yes and 43.33% marked with no. It means that the majority of the respondents argued that it is not costly in terms of resources.

Table 23
Technical staff support

		Yes		No	
	Experience	*F*	%age	*f*	%age
Is technical support for technical problem from technical staff while conducting online classes sufficient?	1-5	66	59.46	45	40.54
	6-10	50	41.67	70	58.33
	11- above	35	38.89	55	61.11
	Total	151		170	

This shows that the respondents had varient experience slots. This also reveals that the respondents that had 1-5 years experience in which 59.46% marked this statement yes and 40.54% marked with no. This also shows that the respondents had 6-10 years years experience in which 41.67% marked this statement yes and 58.33% marked with no.It can also reveal that the respondents that had 11 and above years experience and in which 38.89% marked this statement yes and 61.11% marked with no. It means that the majority of the respondents argued that technical support for technical problem from technical staff while conducting online classes was not sufficient.

Table 24
Slackness of technical team

		Yes		No	
	Experience	*F*	%age	*f*	%age
Is the reason of non-effectiveness of online classes the slackness of technical staff?	1-5	57	51.35	54	48.64
	6-10	60	50.00	60	50.00
	11- above	43	47.78	47	52.22
	Total	160		161	

This shows that the respondents had variant experience slots. This also reveals that the respondents that had 1-5 years experience in which 51.35% marked this statement yes and 48.64% marked with no. This also shows that the respondents had 6-10 years years experience in which 50.00% marked this statement yes and 50.00% marked with no. It can also reveal that the respondents that had 11 and above years experience and in which 47.78% marked this statement yes and 52.22% marked with no. It means that the majority of the respondents argued that the reason of non-effectiveness of online classes the was not the slackness of technical staff.

Table 25
Reason of failure for online classes

		Yes		No	
	Experience	*f*	%age	*f*	%age
Do you think that the sustained computer labs of schools are also a reason of failure of online classes?	1-5	63	56.76	48	43.24
	6-10	48	40.00	72	60.00
	11- above	45	50.00	45	50.00
	Total	156		165	

This shows that the respondents had varient experience slots. This also reveals that the respondents that had 1-5 years experience in which 56.76% marked this statement yes and 43.24% marked with no. This also shows that the respondents had 6-10 years years experience in which 40.00% marked this statement yes and 60.00% marked with no.It can also reveal that the respondents that had 11 and above years' experience and in which 50.00% marked this statement yes and 50.00% marked with no. It means that the majority of the respondents argued that the sustained computer labs of schools were not a reason of failure of online classes?

Table 26
Heavy workload for the classes

		Yes		No	
	Experience	*f*	%age	*f*	%age
Is the work load of online classes is heavy?	1-5	93	83.78	18	16.22
	6-10	102	85.00	18	15.00
	11- above	75	83.33	15	16.67
	Total	270		51	

This shows that the respondents had varient experience slots. This also reveals that the respondents that had 1-5 years experience in which 83.78% marked this statement yes and 16.22% marked with no. This also shows that the respondents had 6-10 years years experience in which 85.00% marked this statement yes and 15.00% marked with no.It can also reveal that the respondents that had 11 and above years experience and in which 83.33% marked this statement yes and 16.67% marked with no. It means that the majority of the respondents argued that the work load of online classes is heavy.

Table 27
Attitude towards online learning

		Yes		No	
Is the attitude of staff is negative towards e- teaching and learning?	Experience	*f*	%age	*f*	%age
	1-5	55	49.55	56	50.45
	6-10	39	32.50	81	67.50
	11- above	37	41.11	53	58.89
	Total	131		190	

This shows that the respondents had variant experience slots. This also reveals that the respondents that had 1-5 years' experience in which 49.55% marked this statement yes and 50.45% marked with no. This also shows that the respondents had 6-10 years years experience in which 32.50% marked this statement yes and 67.50% marked with no. It can also reveal that the respondents that had 11 and above years' experience and in which 41.11% marked this statement yes and 58.89% marked with no. It means that the majority of the respondents argued that the attitude of staff is not negative towards e- teaching and learning

Table 28
Traditional and modern classroom learning

		Yes		No	
Is level of interactions with students in the online classes lower than in traditional on campus classes?	Experience	*f*	%age	*f*	%age
	1-5	57	51.35	54	48.65
	6-10	54	45.00	66	55.00
	11- above	38	42.22	52	57.78
	Total	149		172	

This shows that the respondents had varient experience slots. This also reveals that the respondents that had 1-5 years experience in which 51.35% marked this statement yes and 48.65% marked with no. This also shows that the respondents had 6-10 years years experience in which 45.00% marked this statement yes and 55.00% marked with no.It can also reveal that the respondents that had 11 and above years experience and in which 42.22% marked this statement yes and 57.78% marked with no. It means that the majority of the respondents argued that the level of interactions with students in the online classes is not lower than in traditional on campus classes.

Table 29
Online practical classes

		Yes		No	
Are online classes appropriate for practical classes.?	Experience	*F*	%age	*f*	%age
	1-5	47	42.34	64	57.66
	6-10	63	52.50	57	47.50
	11- above	38	42.22	52	57.78
	Total	148		173	

This shows that the respondents had varient experience slots. This also reveals that the respondents that had 1-5 years experience in which 42.34% marked this statement yes and 57.66% marked with no. This also shows that the respondents had 6-10 years years experience in which 52.50% marked this statement yes and 47.50% marked with no.It can also reveal that the respondents that had 11 and above years experience and in which 42.22% marked this statement yes and 57.78% marked with no. It means that the majority of the respondents argued that online classes are not appropriate for practical classes.?

Table 30
Time consumption of online classes

		Yes		No	
	Experience	*F*	%age	*f*	%age
Is the preparation for online class is time consuming?	1-5	73	65.77	38	34.23
	6-10	71	59.17	49	40.83
	11- above	67	74.44	23	25.56
	Total	211		110	

This shows that the respondents had varient experience slots. This also reveals that the respondents that had 1-5 years experience in which 65.77% marked this statement yes and 34.23% marked with no. This also shows that the respondents had 6-10 years years experience in which 59.17% marked this statement yes and 40.83% marked with no.It can also reveal that the respondents that had 11 and above years experience and in which 74.44% marked this statement yes and 25.56% marked with no. It means that the majority of the respondents argued that preparation for online class is time consuming.

Table 31
Motivation of students for online classes

		Yes		No	
	Experience	*f*	%age	*f*	%age
Is it difficult to motivate students in the online environment than in traditional settings?	1-5	43	38.74	68	61.26
	6-10	35	29.17	85	70.83
	11- above	40	44.44	50	55.56
	Total	118		203	

This shows that the respondents had varient experience slots. This also reveals that the respondents that had 1-5 years experience in which 38.74% marked this statement yes and 61.26% marked with no. This also shows that the respondents had 6-10 years years experience in which 29.17% marked this statement yes and 70.83% marked with no.It can also reveal that the respondents that had 11 and above years experience and in which 44.44% marked this statement yes and 55.56% marked with no. It means that the majority of the respondents argued that it is difficult to motivate students in the online environment than in

Table 32
Suitability of online classes at home

		Yes		No	
	Experience	*f*	%age	*f*	%age
Is the home environment suitable to conduct online classes in the presence of other family members?	1-5	18	16.22	93	83.78
	6-10	31	25.83	89	74.17
	11- above	20	22.22	70	77.78
	Total	69		252	

This shows that the respondents had varient experience slots. This also reveals that the respondents that had 1-5 years experience in which 16.22% marked this statement yes and 83.78% marked with no. This also shows that the respondents had 6-10 years years experience in which 25.83% marked this statement yes and 74.17% marked with no.It can also reveal that the respondents that had 11 and above years experience and in which 22.22% marked this statement yes and 77.78% marked with no. It means that the majority of the respondents argued home environment is not suitable to conduct online classes in the presence of other family members?

Table 33
Distraction regarding online classes

	Yes	No

Am I distracted from my family members while online sessions?	Experience	*f*	%age	*f*	%age
	1-5	90	81.08	21	18.92
	6-10	81	67.50	39	32.50
	11- above	81	90.00	9	10.00
	Total	252		69	

This shows that the respondents had varient experience slots. This also reveals that the respondents that had 1-5 years experience in which 81.08% marked this statement yes and 18.92% marked with no. This also shows that the respondents had 6-10 years years experience in which 67.50% marked this statement yes and 32.50% marked with no.It can also reveal that the respondents that had 11 and above years experience and in which 90.00% marked this statement yes and 10.00% marked with no. It means that the majority of the respondents were distracted from family members while online sessions.

Table 34
Response of the learners

		Yes		No	
Is the student quick feedback in online classes is difficult to determine as compared to traditional on campus classes?	Experience	*f*	%age	*f*	%age
	1-5	87	78.38	24	21.62
	6-10	98	81.67	22	18.33
	11- above	70	77.78	20	22.22
	Total	255		66	

The table shows that the respondents had variant experience slots. This also reveals that the respondents that had 1-5 years' experience in which 78.38% marked this statement yes and 21.62% marked with no. This also shows that the respondents had 6-10 years' experience in which 81.67% marked this statement yes and 18.33% marked with no.It can also reveal that the respondents that had 11 and above years' experience and in which 77.78% marked this statement yes and 22.22% marked with no. It means that the majority of the respondents argued that student quick feedback in online classes is difficult to determine as compared to traditional on campus classes.

Discussion

Major area of the study was concerned with teacher's computer skills. The topic under investigation was "Analysis of the Challenges Faced by Secondary School Teachers during the Conduction of Online Classes". The objective of the study was to assess the effectiveness of pre-service and in-service trainings for computer skills ,to determine the problems that seems hindrances in the way of conduction of online classes, to investigate the provision of computer related skills through in service courses ,to explore the challenges that school teachers usually face while conducting online classes, to explore the future prospects in order to overcome challenges and strengthen computer skills generally required by secondary school teachers to carry out online classes whenever needed.

The goal of this study was to help prepare effective and competent teachers who can keep up with new trends and technologies. Furthermore, it was hoped that it would prepare future teachers to overcome the major issues that have been identified as the root cause of the non-conduction of online classes.

Findings

- The table 01 describes challenges that school teachers usually experienced while conducting online classes against qualification. It contained 17 items to be examine. 55.76% respondent responded with yes and 44.23% respondents

responded with no. It means that 56% secondary school teachers faced different challenges during online classes.it can also deduced that majority of the teachers were not prepare for those challenges.

- The table 02 describes challenges that school teachers usually experienced while conducting online classes against experience. It contained 17 items to be examined. It shows 83.92% respondent responded with yes and 16.07% respondents responded with no. It means that 84% secondary school teachers faced different challenges during conduction of online classes.

Conclusion

The objective of current study was "to analyze the challenges that school teachers usually face while conducting online classes", from analysis it was found that 55% secondary school teachers faced different challenges during conduction of online classes. The findings emphasized that IT-skilled teachers, whether through diplomas or training, effectively conducted online classes. Conversely, teachers lacking IT skills encountered difficulties transitioning to online teaching. A majority of these non-IT-skilled teachers advocated for frequent refresher courses and in-service training in new educational technologies to address these challenges.

Recommendations

- In this study, majority of the secondary school teachers suggested that in-service trainings and refresher courses regarding new technologies may be conducted for smooth operation.
- A module in school information system (SIS) like learning management system (LMS) for students may be built by the SED Punjab. Throughout the year, schools may use a variety of online tools and educational technology platforms to deliver lessons and communicate with student's parents.

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