BLENDED LEARNING AS AN INSTRUCTIONAL METHOD FOR CHILDREN WITH INTELLECTUAL DISABILITIES IN PUNJAB, PAKISTAN

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ABSTRACT

Numerous innovative teaching and learning techniques, such as e-learning and online learning, have emerged as a result of science and technology's quick development. The digital age, the speedy progression of technology, and other web-based communication technologies have made it possible for educators to create perfect learning environments that might satisfy many students' requirements. Novelty in technology makes it possible for education to extend outside of the classroom and gives students easier access to a variety of educational resources. The study's aim was to explore the use of blended learning instructional methods for children with intellectual disabilities and to what extent teachers of children with intellectual disabilities know about blended learning instructional methods. The population of the study was all teachers of special education working in government and semi-government institutes of Punjab. A Snowball sampling technique was used. A questionnaire was developed as a tool for the study; it had three sections. Constructs were demographics, practices of teachers, and perceptions about blended learning. It was converted into Google Form, shared in the official group of semi-government special schools, and shared with government teachers of special education. The findings of the study were that the teachers had neither used online learning nor were interested in using it as an effective learning strategy for students with special needs. Without training and awareness, teachers were using online mode for that scenario to create some learning opportunities for intellectually delayed students. It was concluded that they were less attentive to the compulsion of interaction during online mode than in face-to-face mode. Different teaching strategies were used. Some teachers thought blended learning was the same as online learning, and teachers were somewhat aware of online modes. Positive feedback on instructional strategies and awareness of blended learning demonstrates that it may be an option for kids with intellectual disabilities.

INTRODUCTION

E-learning and blended learning are only two of the many new teaching and learning techniques that have emerged as a result of the quick advancements in science and technology. Teachers are devoting less time to traditional teaching methods and more time to exploring new teaching strategies in an effort to deliver course material. According to Ughade & Badre (2020), the rapidly evolving usage of technology and a variety of web-based communication tools have given educators worldwide a chance to research the best learning environments that can meet the demands of a wide range of learners. Innovation in technology makes it possible for education to extend outside of the classroom and gives students easier access to various educational resources. Through improved personalization, collaboration, and communication

made possible by learning technologies, blended learning techniques have given teachers, students, and the larger community the possibility to benefit from various learning platforms.

The fast acceptance of the internet over the past two decades has changed how people learn, live, and communicate with one another. E-learning has made education more available than ever. Beginning in 2020, COVID-19 has had a significant negative impact on academic achievement at educational institutions all across the world. Classes in the exercise had to be canceled because of the lockdowns that the government imposed to stop the COVID-19 virus's rapid spread. As a result of this halt, the paradigm switched to online education (e-learning). The genuine benefit of online education during this outbreak became evident in this way: it allowed people to focus on e-learning. Numerous e-media platforms were used for e-learning during COVID-19, including Google Meet, Zoom, and WebEx, to keep the educational process moving forward (Edy, 2020). The fact that online education activities played a significant role in delivering high-quality education during this pandemic is not particularly shocking (Lane & McAndrew, 2010).

The pace and diversity of learning methods that students can choose from in blended learning classrooms are flexible for both teachers and students. Different studies have shown that because blended learning incorporates multiple methods of instruction from a variety of perceptions, it shows to have an effective learning consequence for most students involved. By incorporating technology into classroom instruction, teachers are freed up to reach more students. Teachers can move within the stations or activities to interact with an individual or small group of students and check on progress. Because most students today are surrounded by technology in their everyday life, they often engage more easily with material when technology is incorporated into instructional settings. Blended learning incorporates a variety of instructional approaches, and learning activities can be tailored to address several learning styles (Walker-Morrison & Brussino, 2019).

To develop best practices in academia, it is important that teachers change with the changing needs of students. Blended learning is one of the most important educational formats that can enhance student learning, optimize the use of active learning strategies, and potentially improve student learning outcomes. Best Teachers must adapt to students' changing requirements in order to create best practices in education. Blended learning is one of the most significant educational models that can promote student learning, maximize the application of active learning techniques, and possibly boost student learning results. (Pizzi, 2014). Despite many studies on digital and online technologies, few studies have looked at how students with special needs learn using a blended learning approach (Gerich & Fellinger, 2012; Cuculick, 2014; Gregor, 2014; Hill, 2015; Oyewumi et al., 2015; Kozuh et al., 2015; Saunders, 2016; Toofaninejad et al., 2017). The use of digital and online technology by kids with special needs may help to somewhat alleviate some of the learning difficulties that they, their teachers, and their parents encounter. All participants in the learning process have frequently been advised to use new technologies with a community focus. However, according to Zavarki & Toofaninejad (2011) and Toofaninejad et al. (2017), these technologies may also be more beneficial for students with unique educational requirements. Since time immemorial, technology has played a significant part in teaching, but, until lately, this position has been more on the perimeter of education. For a minority of students or in specialized departments (typically in continuing education or extension), technology has mostly been employed to support conventional classroom instruction. But during the past ten to fifteen years, technology has increasingly impacted even university-level fundamental instructional activities (Bates, 2015).

Online learning provides easier scheduling and flexibility than conventional active learning. Even today, some people think online learning is superior to conventional learning. It allows teachers and students to choose flexible learning environments, timings, and schedules that suit everyone. Many students still preferred in-person instruction over online instruction, despite the latter being necessary at the time. Students who pursue their education online tend to be more self-disciplined and accountable for their

needs and course choices. With online education, students can even enroll in multiple courses at once. In Pakistan, a developing country, there are numerous problems with online education. These challenges include a lack of financial and administrative resources, inconsistent internet, power outages, and a lack of face-to-face interaction. Higher education institutions responded to these issues by utilizing innovative teaching techniques and a variety of online tools and strategies to improve student performance. Without a doubt, the quality of online training is lower than that of classroom-based instruction (Moore & Kearsley, 2011). Since dependable networking is essential for online learning, disruptions are sometimes brought on by network problems. However, the collaborative and participatory environment that online learning provides students encourages them to learn at their own speed. In general, there is no assurance that online learning will continue as smoothly as active learning.

The absence of self-direction and self-management abilities among many young pupils, particularly those in the lower grades, makes online learning difficult for them. Online learning was the best and only option for advancing one's education during the COVID-19 outbreak because of the government's lockdown policies. In the modern world, blended learning and the improvement of educational quality are interwoven. A successful combination of approaches, instructional models, and learning styles is called blended learning. Because Iran is still unfamiliar with this method, a feasibility assessment is now even more important. The results of this study demonstrated that, apart from two aspects, a blended learning approach may be used for all of the components. Men are better equipped than women to put this strategy into practice. The educational experience is consistent with managers' and teachers' perspectives on the use of blended learning. It is impossible for managers to use a hybrid approach (Shahbaig et al., 2020).The academic community was greatly warped by this pandemic. Nevertheless, many students continue to be dissatisfied with the online instruction provided by higher education institutions. According to Mumtaz et al. (2021), while some students believed that online education is better since it is less expensive, others said it was more challenging to follow the online instructions.

The Covid-19 pandemic provided an opportunity to explore research online and blended learning particularly pertinent. The systematic analysis also looks at educational games, computer-supported cooperative learning (CSCL), and computer-assisted instruction (CAI), which are primarily used in schools but have potential applications outside of the classroom. Online learning paled in comparison to blended learning. Games and CSCL followed blended learning in terms of effectiveness, with CAI coming in first. Children with "low ability" and second language learners performed particularly well. Students with special educational needs and/or disabilities performed marginally worse. The key benefit of digital technology might be the potential for increased work flexibility and learner autonomy, which promotes higher self-regulation. It is practical to employ blended learning as a teaching strategy for dementia care courses (Saifullah et al., 2020). Online and blended learning may replace traditional instruction, assuming it can be done effectively. This has implications for teachers (Topping et al., 2022).

Blended learning has been implemented by higher education institutions in Barbados as a tactic to raise student accomplishment and performance in the classroom. Even after implementing blended learning, students' poor performance and results continue. A teacher professional development program for local stakeholders was developed using the findings, with a focus on pedagogical best practices and procedures for establishing and maintaining a successfully blended learning environment. The research site may use the results to increase student engagement and academic success (Marshall, 2018). Blended learning will enhance their learning, according to the results of the feasibility survey report of the university of Nairobi students' perspectives. Ninety percent of survey participants said that their favorite method of learning was blended learning. They noted their technical competence as they assessed the adoption's disadvantages and benefits. Ninety percent of the students said they use their laptops for Internet access, among other activities. As technology develops, educators have a huge opportunity to use it to meet student

expectations, address learning obstacles and needs, and enhance learning outcomes. Technology should be chosen to meet needs and should be enhanced for high-quality training (Victoria & Wangia, 2011).

According to Adekola et al. (2017), the ideal blended learning program is a web-based training course supported by human contact and media. It maximizes the accomplishment of learning objectives by utilizing the greatest learning technology to suit each student's particular learning preferences. It is a kind of educational program that combines online learning with conventional classroom instruction. Traditional face-to-face learning techniques are combined with eLearning strategies to help students learn to their fullest capacity. Because each student is different and has different needs and learning styles, this educational program provides them with greater choices to proceed with their studies at their own pace. Blended learning classes offer flexibility for teachers in how they present material and for students in the pace and variety of the learning approaches they experience. Different studies have shown that because blended learning incorporates multiple methods of instruction from a variety of perceptions, it shows to have an effective learning consequence for most students involved. By incorporating technology into classroom instruction, teachers are freed up to reach more students. Teachers can move within the stations or activities to interact with an individual or small group of students and check on progress. Because most students today are surrounded by technology in their everyday life, they often engage more easily with material when technology is incorporated into instructional settings. Blended learning incorporates a variety of instructional approaches, and learning activities can be tailored to address several learning styles.

The questions that led to this study were related to how teachers interact with pupils who have intellectual disabilities. Which methods are they currently using? How well-versed they are in blended learning? The teaching strategies used by teachers of students with intellectual disabilities were also examined in this study. It makes a fair contribution to the provision of high-quality education to kids with intellectual disabilities through online schooling. The conclusion will offer suggestions for enhancing teaching methods for kids with intellectual disabilities. The objective of the study was to explore the current teaching practices used by teachers of children with intellectual disabilities from the perspective of blended learning instructions.

Significance of the Study

The rapid advancement of science and technology has led to the emergence of many novel teaching and learning methods, such as online and e-learning. The rapid advancement of technology, the digital age, and other web-based communication tools have enabled instructors to design ideal learning environments that might meet the needs of numerous pupils. Technology innovation allows for the extension of learning outside of the classroom and makes it simpler for students to access a wide range of educational resources.

Over the past two decades, the internet's rapid adoption has altered how people learn, live, and interact with one another. E-learning has made education more available than ever. Beginning in 2020, COVID-19 has had a significant negative impact on academic achievement at educational institutions all across the world. It was necessary to cancel classes for the exercise because of the government-imposed lockdowns put in place to slow the COVID-19 virus's rapid spread. This pause caused the paradigm shift to online education (e-learning.

Blended learning is a new phenomenon in the field of special education, especially for children with intellectual disabilities. This is the new exploration of blended learning as an instructional method for children with intellectual disabilities.

Research Questions

1. What are the current teaching objectives related to blended learning for children with intellectual disabilities?

2. What are the current teaching methods related to blended learning for children with intellectual disabilities?

3. What is the current teaching content delivered through blended learning for children with intellectual disabilities?

4. What are the current teaching evaluation methods related to blended learning for children with intellectual disabilities?

5. What are teachers' opinions and intentions related to blended learning for children with intellectual disabilities?

Theoretical Framework

Tyler's method has four phases in the model: (i) to determine the objectives (ii) to choose educational opportunities (iii) to arrange educational opportunities (iv) to evaluate the performance. Four common components of curriculum as mentioned in figure 1: objective, content, methodology, and evaluation. This study also focused on these components to assess the teaching practices and awareness of blended learning. i.e., which subject were they teaching through which mode? What instructional method was in practice, and how did they evaluate the learning outcomes? How much they were aware of blended learning?
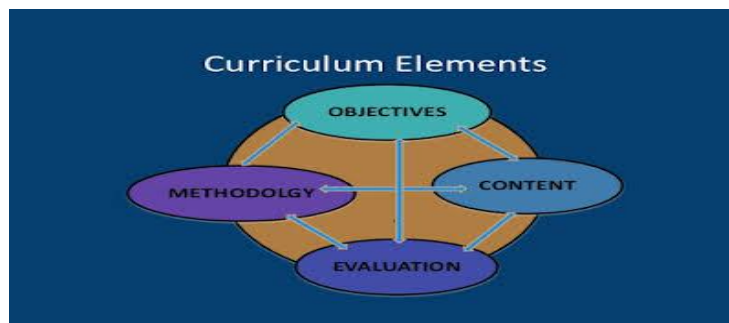

Figure 1. Component of curriculum.

METHODOLOGY

The study was qualitative and descriptive in nature. The population of the study was teachers of children with intellectual disabilities working in special schools in Punjab. The sample was selected through snowball techniques to approach the teachers of children with intellectual disabilities teaching in the government (19) and semi-government (18) schools in Punjab. Due to Covid, face-to-face contact with teachers was denied, so the snowball technique was used to interact with the teacher. The questionnaire was prepared to cover the following constructs of the questionnaire in addition to demographic variables.

1. Teaching modes to reflect the objectives

2. Teaching content/ material

3. Teaching instructional methods/ delivery method

4. Evaluation

5. Awareness of blended learning

Academicians and practitioners evaluated the tool's content validity. Data was collected from questions converted a Google Forms. The link to the form was shared through WhatsApp's official group of semi-government teachers and personal messages to government teachers. After filling out the questionnaire, teachers informed the researcher.

RESULTS AND DISCUSSION

The researcher calculated the responses through SPSS and tabulated them. Frequencies and percentages were measured for demographic variables and each construct. This section is divided into two sections. Section A deals with demographic data analysis and section B deals with teaching practices covering teaching content/ material, delivery/mode, and evaluation process.

Section A: Demographic Data

Table 1. Demographics of teachers of children with intellectual disability.

Characteristics		Frequency	Percent
Gender	Male	15	37.5
	Female	25	62.5
Age	21-30	18	45.0
	31-40	20	50.0
	41-50	1	2.5
	51-60	1	2.5
Experience	Less than 1	2	5.0
	1-5	16	40.0
	6-10	12	30.0
	11-15	2	5.0
	16-20	4	10.0
Qualification	MA/MSC	20	50.0
	M Phil / MS	18	45.0
	PhD	1	2.5
	Diploma	1	2.5
Profession	Special educator	29	72.5
	Psychologist	5	12.5
	Computer teacher	2	5.0
	JST	3	7.5
	Science teacher	1	2.5
District	Rawalpindi	6	15.0
	Khushab	2	5.0
	ICT	4	10.0
	Chakwal	4	10.0
	Gujranwala	5	12.5
	Lahore	4	10.0
	Shaiwal	4	10.0
	Vehari	5	12.5
	Rahim yar khan	3	7.5
	Gujrat	3	7.5

Table 1 shows that the maximum number of teachers was 31-40 years old. Few of them were in the age range of 21-30 years. The respondent rate was 40 among 60, and the female respondents were 25. The Table shows that 5 % of teachers had less than one year of experience. 40% of teachers had up to five years of experience. 12 % had six to seven years of experience. 4% were serving for the last 20 years, and 4% had more than 20 years. Most of the teachers were masters and Phil. Only 2.5% was diploma holder and Ph.D. 72% were special educators by profession, and 12% were psychologists working as a teacher in the class. The rest of them were computer teachers and JST. 15% belonged to Rawalpindi, 10% were from Lahore, Sahiwal, chakwal. Some data was found from Quetta, Mardan, Sindh, and Islamabad also.

Section B: Data about Current Teaching Practices

Table 2 explained that 13% of teachers preferred sharing the home-based plan in hard form, 9% were using the face-to-face component, 11% were sharing tasks through messages, 2 % were using WhatsApp, and 1% preferred zoom sessions and Google meet.

Table 2. Modes of teaching used by teachers of children with intellectual disabilities.

Objective	Frequency	Percent
Home-based hardcopy	13	32.5
FTF	9	22.5
SMS	11	27.5
Phone call	2	5.0
Whatsapp sharing	2	5.0
Zoom session 1to1	1	2.5
zoom group	1	2.5
Google meet 1to1	1	2.5

Table 3. Content used by teachers of children with intellectual disabilities.

Content		Frequency	Percent
Books	Without online interaction	9	22.5
	With online interaction	14	35.0
	Face to face	16	40.5
	Other	1	2.5
Notes	Without online interaction	13	32.5
	With online interaction	16	40.0
	Face to face	11	27.5
	Other	-	-
worksheets	Without online interaction	11	27.5
	With online interaction	19	47.5
	Face to face	9	20.5
	Other	1	2.5
Recorded video	Without online interaction	12	30.0
	With online interaction	16	40.0
	Face to face	11	27.5
	Other	1	2.5
Audio segment	Without online interaction	12	30.0
	With online interaction	16	40.0
	Face to face	11	27.5
	Other	1	2.5
Animated video	Without online interaction	11	27.5
	With online interaction	12	30.0
	Face to face	17	42.5
	Other	-	-
Video segment	Without online interaction	13	32.5
	With online interaction	12	30.0
	Face to face	13	32.5
	Other	2	5.0

Table 3 reveals that 16% of teachers preferred face-to-face components for books, 16% opted for online interaction (real-time), and 9 % of teachers used online interaction mode. 16 % of teachers chose online interaction with students for notes, 13% picked without online interaction, and 11% selected face-to-face mode. For worksheets, 16% of teachers nominated online interaction, 9 % voted for a face-to-face component, and 11% preferred without online interaction. Their choice was online interaction (real-time) for recorded video and audio segments. While the majority of them shared animated videos face-to-face

Table 4 explained that most teachers used face-to-face mode for pictures, PowerPoint, instructional tips, practice through games, practice on board, and solving quizzes, and less preference was for online interaction for these tasks.

Table 4. Content used by teachers of children with intellectual disabilities.

Content		Frequency	Percent
Picture	Without online interaction	13	32.5
	With online interaction	14	35.0
	Face to face	13	32.5
	Other	-------	-------
PowerPoint	0	1	2.5
	Without online interaction	10	2.5
	With online interaction	11	27.5
	Face to face	16	40.0
	Other	2	5.0
Instructional tips	Without online interaction	8	20.0
	With online interaction	15	40.5
	Face to face	14	37.8
	Other	1	2.8
Practice through games	Without online interaction	14	35.0
	With online interaction	10	25.0
	Face to face	16	40.0
	Other	-------	-------
Practice on board	Without online interaction	12	30.0
	With online interaction	9	22.5
	Face to face	19	42.5
	Other	--------	--------
Solve quiz	Without online interaction	13	32.5
	With online interaction	13	32.5
	Face to face	14	35.5
	Other	---------	
Any other method	Without online interaction	--------	-------
	With online interaction	-------	-------
	Face to face	No other 36	No other 90.0
	Other	4	10.0

Table 5 illustrates that in the lecture method, 17% of teachers used face-to-face mode, 17% delivered lectures through online interaction, and only 6 % did without online interaction. In the demonstration, 17% of teachers selected face-to-face mode, and 13% opted for online interaction. For the discussion method, 17% majority of teachers preferred face-to-face, and 13% used online interaction. 14% of teachers chose face-to-face, and 14% online interaction for drill and practice. The Role play method was decided by 20% of teachers for face-to-face, and 16% picked online interaction.

Table 5. A delivery method used by teachers of children with intellectual disabilities.

Delivery method	Modes	Frequency	Percent
Lecture method	Without online interaction	13	32.5
	With online interaction	14	35.0
	Face to face	13	32.5
	Other	-------	-------
Demonstration	Without online interaction	10	2.5
	With online interaction	11	27.5
	Face to face	16	40.0
	Other	2	5.0
Discussion	Without online interaction	8	20.0
	With online interaction	15	40.5
	Face to face	14	37.8
	Other	1	2.8
Drill & practice	Without online interaction	14	35.0
	With online interaction	10	25.0
	Face to face	16	40.0
	Other	-------	-------
Role play	Without online interaction	12	30.0
	With online interaction	9	22.5
	Face to face	19	42.5
	Other	--------	--------

Table 6 shows that 19% of teachers spent 30-45 minutes in a class, while 8% delivered lectures for 15-30 minutes; according to 8% of teachers, they utilized 45-60 minutes, while only 5 %of teachers continued their lectures for more than one hour. The majority of teachers conducted online activities for 30-60 minutes and face-to-face activities for 30-40 minutes.

Table 6. Duration of class, online activities, and face-to-face activities used by teachers of children with intellectual disabilities.

Duration of activities		Frequency	Percent
Duration of a class	15-30min	8	20.0
	31-45min	19	47.5
	46-60min	8	20.0
	Above 1 hour	5	20.0
Online activities	No online	4	10.0
	10-30min	5	12.5
	30-60 min	13	32.5
	1-2 hour	9	22.5
	3-4 hour	6	15.0
	Full day	3	7.5
Face-to-face activities	0	1	2.5
	10-20min	6	15.0
	21-30min	10	25.0
	31-40 min	15	32.5
	41-50 min	5	12.5
	51-60 min	3	7.5

Table 7 proves that 18% of teachers used face-to-face mode and 12% preferred online interaction for assessment through MCQ, 16% of teachers asked questions through online interaction, and 15% by face-to-face mode. 15% conducted the assessment face-to-face, and 11% with online interaction for learning and writing. The majority of the teachers shared videos through online interaction while giving projects through face-to-face interaction for assessment.

Table 8 reveals that 24% of teachers of semi-government and government schools of children with intellectual disabilities in Punjab were not aware of blended learning, 29 % did not know about its model, and all of them did not distinguish the model names. 11% of them had knowledge about blended learning, but only 8% of them knew about the models of blended learning.

Table 7. Evaluation criteria adopted by teachers of children with disabilities.

Evaluation		Frequency	Percent
MCQ*s*	Without online interaction	9	22.5
	With online interaction	12	30.0
	Face to face	18	45.0
	Other	1	2.5
Ask Question	Without online interaction	8	20.0
	With online interaction	16	40.0
	Face to face	15	37.5
	Other	1	2.5
learn and write	Without online interaction	14	35.0
	With online interaction	11	27.5
	Face to face	15	37.5
	Other	------	-------
solve exercise	Without online interaction	10	25.0
	With online interaction	15	37.5
	Face to face	15	37.5
	Other	---------	--------
send video	Without online interaction	12	30.0
	With online interaction	16	40.0
	Face to face	11	27.5
	Other	1	2.5
give them projects	Without online interaction	13	32.5
	With online interaction	9	22.5
	Face to face	11	27.5
	Other	7	17.5

Table 8. Awareness of blended learning and its model to the teacher of children with intellectual disabilities.

Awareness		Frequency	Percent
Knowledge about Blended learning (BL)	Yes	11	27.5
	No	24	60.0
	May be	5	12.5
Models of BL	Yes	8	20.0
	No	29	72.5
	May be	3	7.5
BL Models name	Station rotation	0	0
	Lab rotation	0	0
	Flex model	0	0
	None	40	100

Table 9. Subjects through online teaching during Covid and before Covid to children with intellectual disabilities.

Online teaching	Subject	Frequency	Percent
Online Teaching during Covid	Math	0	0
	English	0	0
	Urdu	0	0
	Poems	12	30.0
	Socialization	11	27.5
	Cognitive skill	6	15.0
	Islamiat	8	20.0
	Fine motor skills	3	7.5
	None	0	0
Online Teaching before Covid	Math	0	0
	English	0	0
	Urdu	0	0
	Poems	0	0
	Socialization	0	0
	Cognitive skill	0	0
	Islamiat	0	0
	Fine motor skills	0	0
	None	0	0

Table 9 shows that most of the teachers were using online modes for poems and socialization. Few were using it for cognitive skills, Islamiat, and fine motor. None of them were using online mode for English, Urdu, and math during Covid. All were not using online mode before Covid.

Table 10. Online Teaching during Covid and before Covid to children with intellectual disabilities.

Online teaching		Frequency	Percent
Online Teaching during Covid	Yes	3	7.5
	No	22	55.0
	Some extent	15	37.5
Online Teaching before Covid	Yes	0	0
	No	40	100
	Some extent		

Table 10 demonstrates that no one was teaching online before Covid. 3% of teachers were teaching online during Covid. 22% informed that they were not teaching online during Covid. 15 % were using online modes of teaching during Covid.

Table 11. Willing to continue teaching after the pandemic situation & insight about online teaching and blended learning of teachers of children with intellectual disabilities.

Characteristics		Frequency	Percent
Readiness to continue	Yes	0	
	No	13	32.5
	Never	18	45.0
	To some extent	5	12.5
	Occasionally	4	10.0
Perception about BL & online learning	Same	23	57.5
	Different	11	27.5
	Don't know	6	15.0

Table 11 depicts that the majority of teachers were not willing to pursue the online teaching mode after the pandemic situation. Only 4-5% reported that they would use it occasionally or to some extent. And most of

them consider blended learning and online teaching to be the same. Some of them considered it as different. While some don't know about it.

Discussion

The key benefit of digital technology might be the potential for increased work flexibility and learner autonomy, which promotes higher self-regulation (Topping et al., 2022). The blended learning method was generally well-received by both students and teachers (Lehmann et al., 2013). The present study results also proved that teachers used that mode when there was no other opportunity for them to teach the student. Due to the Covid dilemma, they had the compulsion to use online teaching mode when there was no possibility of face-to-face interaction. Most of the teachers used online interaction without real-time and shared general videos and topics related to socialization and poems through WhatsApp or SMS. If we rarely used zoom sessions, students weren't allowed to interact. They were passive learners. Teachers were not aware of blended learning. Some of them considered online learning as blended learning. Several had no knowledge of blended learning or its model, and they were not using online teaching before Covid. Numerous teachers are not willing to continue it.

Various types of research proved the feasibility of blended learning in numerous platforms of the education field. It was found that the use of a practical and effective blended learning methodology results in improved student performance and increased participant motivation (Bayyat, 2020). Results of the current study indicated that the majority of the teachers were engaged in socialization and sharing poetry online. Few people were using it for fine motor, Islamiat, and cognitive abilities. For English, Urdu, and math during Covid, none of them were using the online method. Before Covid, none of them used the online mode. A study further showed the use of serious games (SGs) to improve learning processes and focus on specific skills for those with intellectual disability (ID) or autism spectrum disorder (ASD). However, blended learning (BL), which blends in-person and online learning, is used in both formal and informal educational contexts (Tsikinas et al., 2018). Another study undertaken by Giannousi et al. (2014) also showed that blended learning is a more successful form of instruction than the group using traditional methods.

Results revealed that in Punjab, most of the teachers working in semi-government and government schools for kids with intellectual disabilities were unaware of blended learning. Some were unaware of its model, and all of them couldn't identify the names of the different models apart. Only a few of them were aware of the blended learning approaches, even though rare were familiar with the concept. Before Covid, nobody offered online instruction. Few instructors used Covid to deliver instruction online. Half of them surveyed said they would not be teaching online after Covid. They used online learning strategies just due to Covid only.

The majority of teachers reported that they were unwilling to pursue online teaching mode after the pandemic situation. Few of them surveyed said they would use it occasionally or to some degree. And the majority of these correspond to blended learning and online training. Some of them considered it to be unusual. Many people are ignorant of it. Same as a national study by Raza et al. (2022) described a required analysis to create an instructional design specifically for the blended learning environment in their study that was conducted across the country. The study findings highlighted the necessity of using planned instructional strategies in order to close the performance gap between aspiring instructors and their expectations and need in the teaching-learning process. According to Fakhir (2015), additional research is needed to successfully implement a blended learning strategy to improve student achievement in academic areas. These studies also need to take other factors like gender, student performance rate, and prior exposure to information technology and the internet into account. By meeting their needs, digital support for blended learning more effectively engages students than instructor support does. Student engagement was directly correlated with teacher support. Student involvement and digital support have different relationships. The advantages of providing numerous modalities, taking learning expertise into account,

and using emotional designs are possible answers. The outcomes add to the Self-determination theory by introducing a fresh viewpoint, namely, digital assistance, and by doing so, they suggest a fresh framework for needs support in blended learning (Chiu, 2021).

CONCLUSIONS AND RECOMMENDATIONS

The findings helped the researcher to conclude that blended learning in a COVID-19 environment has not been widely adopted by most schools. Due to COVID-19, they were communicating online, but blended learning practices were not applied. Children with specific needs must be taught using blended learning approaches. It was found that a mixed learning paradigm might combine both traditional classroom instruction and online-only exercises. The teachers had not really applied integrative learning. They were less conscious of the urge to interact when interacting online as opposed to in person. Most teachers were reluctant to use the online teaching strategy after the pandemic emergency.

Only a small percentage of those polled indicated they would use it occasionally or to some extent. And th e majority of these correspond to blended learning and online training. Some of them considered it to be unusual. They were not enthusiastic about using it. While many people are ignorant, they are not aware of blended learning. The study recommended that the necessity of blended learning as an instructional design that may provide flexibility to address individuals with intellectual disabilities was mentioned in this study in the context of special education. This study should be extended to train teachers to adopt blended learning as a mode and as a blended learning instructional method. Challenges of using this mode and instruction method can also be addressed through teachers, parents, and administrators.

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