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## Blended Learning in Secondary Schools of District Mardan: A Cross-Sectional Survey

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## Abstract

Blended learning represents the concern of the entire school and is committed to providing quality education to all Learners in the most efficient way, so that special education and general education are consistent. The study aimed to analyze Blended learning in District Mardan. The study was descriptive in nature and a cross-sectional survey was applied to collect the data. All secondary school teachers and leaders of District Mardan were the population of the study. A Simple random sampling technique was used to select the sample. The researcher selected 200 secondary school teachers and loo leaders through a simple random sampling technique as a sample. A questionnaire for teachers and leaders was used as a research instrument in this study. Data were collected and analyzed through mean scores and standard deviation. Based on analysis it was found that Blended learning provides an opportunity for the enjoyment and implementation of full human rights without any discrimination because Blended learning allows understanding individual differences. It is recommended that the school Education Department of District Mardan may introduce Blended learning at the district and tehsil level. Further, they need to plan for all teachers and leaders to provide awareness about Blended learning.

Keywords: Blended learning, Secondary Schools, District Mardan

## Introduction

No one can deny the fact that for the survival of any individual and nation, education is important. Education is a lifelong investment in human resource development. The strength of a nation is determined by the quality and quantity of educated manpower. Education is a fundamental right of every individual regardless of their caste, color, creed, ability, or disability (Adi, & Fathoni, 2020). Blended learning is the innovative style in the direction of teaching the Learners with different aptitudes and wisdom problems with that of common ones using a similar method of teaching. It searches for discourse on the knowledge requirements of all kids with a particular emphasis on those who are susceptible to relegation and prohibiting. It points concerning all Learners- with or without incapacities being accomplished to acquire collective kindergarten requirements, institutes, and public instructive background with a suitable system of maintenance facilities. This is conceivable only in elastic teaching coordination that integrates the desires of a miscellaneous variety of Learners and acclimatizes itself to encounter these desires (An, 2002).

Inclusion is not a trial to be verified but a worth to be monitored. Entirely the kids whether they are incapacitated or not have the right to instruction as they are the upcoming inhabitants of the nation. In the prevalent condition, properties are inadequate even to deliver excellence conventional institutes for communal kids, it is unprincipled and unviable to put kids with distinct desires to test or to verify something in an investigation study to live and acquire in the conventional of the institute and communal (Austin, & Turner, 2020). The blended system provides better quality education for all children and is instrumental in changing discrimination. A school provides the context for a child's first relationship with the world outside their families, enabling the development of social relationships and interactions. Respect and understanding grow when Learners with diverse disabilities and backgrounds play, socialize, and learn together. It is the dire need of the time to establish and familiarize the concept of Blended learning to socialize and to make productive a major portion of the population that is labeled as disabled. It is also very important to provide all Learners with the most appropriate learning environment and opportunities for them to best achieve their potential that's why the focus of the study was to analyze Blended learning in District Mardan.

## **Objectives of the study**

1. To explore the prevailing practices of Blended learning in District Mardan

2. To find out the strengths and weaknesses of Blended learning in District Mardan

## **Research Questions**

- 1. What are the existing practices of Blended learning in District Mardan?
- 2. What are the strengths of Blended learning in District Mardan?
- 3. What are the weaknesses of Blended learning in District Mardan?

## **Review of Literature**

## **Blended learning**

Blended learning is a contentious term and lacks a strict conceptual emphasis, which may lead to some confounding activities and misunderstandings. The United Nations Educational, Scientific and Cultural Organization (UNESCO) first found out in 1994, concerning Learners with disabilities, that blended schools are the most successful way to eradicate prejudice and attitudes towards Learners. International laws and regulations have subsequently grown into threats to proprietary practices while upholding diversity and insisting on equality for all and access to high-quality education. Just ordinary schools have been more blended. In other words, if they are willing to educate all children in the community, they can create a "blended" education system. Article 24 of the United Nations Convention on the Rights of Persons with Disabilities acknowledges the need to receive education 'without prejudice based on equal opportunity at all levels of the Blended learning system.' It is well known, however, that children with disabilities continue to experience various types of exclusion, depending on their disability, their residence, their community, or class (Evans, Yip, Chan, Armatas, & Tse, 2020).

Blended learning represents the concern of the entire school and is committed to providing quality education to all Learners in the most efficient way, so that special education and general education are consistent. Equity issues have always been a major force internationally, which has promoted the development of more Blended learning systems and ways to define blendedness (Faradillah, & Hadi, 2020). Faradillah and Hadi, (2020) believe that most educators are very clear about tolerance, but politically speaking; they manipulate the terminology to adapt to whatever practice they are currently engaged in, regardless of whether it is tolerance.

The idea and definition of Blended learning have also been provided by academics, practitioners, governments, and organizations such as UNESCO and UNICEF. Hadisaputra, Ihsan, and Ramdani, (2020) suggested a typology of the inclusion of schooling in six forms of thought. These are sensitivity to Learners with disabilities; as a reaction to disciplinary actions; referring to all easily excluded groups; creating schools for all; as education for all; as a system of education and culture founded on values. International human rights agreements, conventions, and legislation therefore provide definitions that are essential for understanding and implementing blendedness, as these definitions usually bind all signatories and influence national legislation.

## Measuring Blended learning

Macaruso, Wilkes, and Prescott, (2020) described the first step of Blended learning as having a clear understanding of "what is what" to prepare for a broader "what may be". To this end, Blended learning needs to be measured. It is not different from the IQ tests that are designed to measure intelligence without a consensus definition. Blended learning measuring tools are forced to define their definitions (or at least implicitly in the standards used) before providing blendedness. Following the definition of blendedness in the report, schools must be prepared to accept Learners with different needs and actively eliminate barriers to full participation. Schools must adopt the characteristics of tolerance and be prepared to dismantle the mechanisms and practices leading to exclusion (Wagner, 2009). Measurements therefore need to examine blendedness. This is a practical change to a child-friendly school to ensure that all children, regardless of background or ability, are successful.

Mahaye (2020) lists 10 areas related to Blended learning:

- 1. Provide information
- 2. Blended school policy
- 3. Physical characteristics
- 4. Performance evaluation
- 5. Teaching strategy
- 6. IEP
- 7. Student interaction

- 8. Course Setting
- 9. External links
- 10. Personnel and staffing.

Several measures have been developed to combine these characteristics. Ożadowicz (2020) "Blended Index" is the most commonly quoted measurement tool (revised in 2011). The index was developed in the United Kingdom. The index can be used in a small number of schools in Western Australia and provides a series of research-based inclusion indicators to be used at the school level through self-censorship. Its use has been widely reported throughout the world and has been translated into at least 22 different languages and has been modified in a range of international environments. There is evidence that the use of this index in schools may cause some difficulty, especially when school staff lacks the ability to self-check (Portillo, & de la Serna, 2020). The conclusion is that, given the comprehensive nature of the index and the time it takes for employees to efficiently use the index based on the Western Australian School Inclusion Index test, the index appears to be fully popularized (Seage, & Türegün, 2020). However, it is useful to inquire about the nuances of the evolving cultural construction of the school through pedagogy, curriculum, school and classroom organization, and the nuture of the decision-making process.

Sriwichai (2020) also suggested that the Blended learning system should be measured at three levels: macro (school jurisdiction, country, region, etc.), meso (school, school group, and local community), and micro (individual classroom and people). Newman (2009) sets out a set of standards consistent with its model that can be used to help measure Blended learning. Wilkes., Kazakoff, Prescott, Bundschuh, Hook, Wolf, and Macaruso's (2020) review of the literature points to possible outcomes for measuring blended learning. This process produced many themes, leading to the classification of results into three levels: macro, meso, and micro, suitable for the measurement of Blended learning. However, many international scholars have been consulted as part of the review process. They doubt that any set of results or indicators, whatever their quality, is sufficient to measure the task of Blended learning.

#### Methodology

The study was descriptive and quantitative in nature and a survey method was applied for conducting this research. All the secondary school teachers and leaders of district Mardan were the population of the study. A Simple random sampling technique was used by the researcher to choose the sample from the population. The researcher selected 45 leadersand185 secondary school teachers through a proportionate Simple random sampling technique (Gay, 2011).

Two questionnaires were developed using a 5-point Likert Scale ranging from strongly agreed to strongly disagree each containing 40 items to get opinions from leaders and secondary school teachers. To test whether the research instruments were valid or not, the researcher validated the research instruments from the educational experts. To check the internal consistency of items, Cronbach's alpha statistical technique was used. The values of Cronbach's alpha were 0.825 and 0.860 which were appropriate for conducting the research. The researchers distributed the questionnaire among 45 head teachers and 185 secondary school teachers through personal visits from approachable areas, whereas, from distant areas, the researchers used postal services and electronic services. Data were analyzed by using Statistical Package for Social Sciences (SPSS) software. Mean and Standard deviation were used to analyze the data.

# **Results** Table 1

Demographic Variables	Level	Frequency	Percentage
	Male	50	50%
Gender	Female	50	50%
	B.A/B.Sc	0	0 %
Academic Qualification	M.A/M.Sc	73	73 %
	M. Phil	27	27.2%
	B. Ed	87%	872%
Professional Qualification	MEd	13%	13%
-	below 5 Years	26	26%
	5-10 years	15	15%
	11-15 years	19	19%

Demographic analysis of Head Teachers

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Administrative Experience	16-20 years	17	17%
	21-25 years	10	10 %
	26-30 years	9	9 %
	Above 30 years	4	4%

Table 1 shows the demographic analysis of leaders. The table further depicted that 50% of the participants were male and female; had the academic qualification and professional qualification of M.A. /M.Sc. and M. Ed. accordingly. Furthermore, the majority had experience of below 5 years. Table 2

Demographic analysis of Secondary school teachers

Demographic Variables	Level	Frequency	Percentage
	Male	100	50 %
Gender	Female	100	50 %
	B.A/B.Sc.	50	25 %
Academic Qualification	M.A/M.Sc.	105	52.5.%
	M. Phil	45	22.5 %
	B. Ed	90	45%
Professional Qualification	M. Ed	110	55%
	below 5 Years	40	20 %
	5-10 years	36	18 %
	11-15 years	34	17 %
Administrative Experience	16-20 years	34	17 %
	21-25 years	29	14.5%
	26-30 years	27	13.5%

Table 2 shows the demographic analysis of secondary school teachers. The table further depicted that 50% of the participants were male and female; had the academic qualification and professional qualification of M.A. /M.Sc. and M. Ed. accordingly. Furthermore, the majority had experience of below 5 years.

Table 3

The mean and standard deviation of existing practices of Blended learning in DISTRICT MARDANS. No.StatementsMeanStandard

<b>S. No.</b>	Statements	Mean	Standard Deviation (SD)
1.	The individual needs of each student are taken care of in Blended learning.	4.16	.877
2.	Teachers know their Learners' strengths, needs weaknesses, interests, and learning preferences	4.23	.709
3.	The teachers take care of special needs learners which ensures the success of their inclusion in the mainstream classroom	4.14	.711
4.	General education teachers use to teach children with disabilities	4.12	.717
5.	The learning experiences are designed to tap into the strengths and interests of Learners	3.78	.676
6.	Schools and districts have a zero-rejection policy and all children are welcomed and valued	3.87	.687
7.	Educators have resources, supports, training, and time to implement the inclusion	3.98	.692
8.	There is a positive involvement of the community in school regarding Blended learning	4.02	.899
9.	There are practices regarding strengthening and sustaining the participation of pupils, teachers, parents, and community members to enhance inclusion	3.78	.678
10.	All Learners are supported to make friends and socially successful with their peers	3.75	.659

Table 3 depicts the existing practices of Blended learning in District Mardan. The table further showed that the statement, "General education teachers use to teach children with disabilities" found the highest value M=4.12 and SD=.717 regarding existing practices of Blended learning. The other Blended learning practices also showed better mean scores which were near to the mid-value i.e. 2.5. It means that the schools were using all the above-mentioned Blended learning practices. Table 4

*The mean and standard deviation of strengths of Blended learning* 

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S. No.	Statements	Mean	Standard Deviation (SD)
1.	Creates an environment in which every student has the opportunity to learn	4.43	.845
2.	Positive effect on the social development of special need Learners	4.79	.788
3.	Positive effect on economic development of special need Learners	4.63	.767
4.	Economically efficient for developing countries	4.38	.879
5.	Blended classrooms are more active than general	4.39	.688
6.	Helps to create a blended society	3.90	.657
7.	Inclusion allows understanding individual differences	4.35	.699
8.	Work a lot in the socialization of special need Learners	4.42	.795
9.	Blended learning allows teachers to develop teamwork skill	4.52	.823
10.	Fulfillment of human rights	4.19	.688

Table 4 shows the mean and standard deviation of the strengths of Blended learning. The table further indicated that the majority of participants agreed with the statements, "Positive effect on social development of special need Learners" (M=4.68); "Positive effect on economic development of special need Learners" (M=4.63); "Blended classrooms are more active than general" (M=4.39); and, "Blended learning allows teachers to develop teamwork skill" (M=4.52). The other strengths of Blended learning also showed better mean scores which were above or near to 4. It means that all the above-mentioned statements were considered the strengths of Blended learning by the participants. Table 5

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S. No.	Statements	Mean	Standard
			<b>Deviation (SD)</b>
1.	Blended learning is costly	4.27	.745
2.	Burdens the regular class teachers	4.76	.889
3.	Inclusion sounds good in theory but does not work well in practice	3.45	.567
4.	Exclusion causes many disadvantages such as isolation and non-socialization	3.67	.641
5.	General education teachers are untrained to teach learners with disabilities in a regular class	3.77	656
6.	Exclusion causes disadvantage such as poverty	3.78	.665
7.	Lessen the quality of education of Learners without disabilities	3.87	.761
8.	Disable Learners feel uncomfortable in the blended classroom	3.79	.641
9.	General education teachers are unprepared to teach learners with disabilities in a regular class	3.72	.623
10.	Inclusion makes disabled Learners an object of ridicule in general class	3.76	.684

Table 5 shows the mean and standard deviation of the weaknesses of Blended learning. The table further exposed that the majority of participants agreed with the statements, "Blended learning is costly" (M=4.27); and, "Burdens the regular class teachers" (M=4.76). The other weaknesses of Blended learning also showed better mean scores which were near to 4 or above 3. It means that all the above-mentioned statements were considered the weaknesses of Blended learning by the participants.

#### Discussions

The main purpose of this research is to explore the blended and comprehensive education practice of District Mardan Discover that Blended learning supports and meets the individual needs of each student. Most of the respondents agreed that public high schools implement a zero-tolerance policy regarding the implementation of Blended Learning, and teachers knew the strengths, needs, weaknesses, and interests of Learners. A study found that compared with Learners in special schools, Learners with intellectual disabilities who were fully included in the general education made greater progress in literacy skills (Dessemontet, Bless & Morin, 2012). Hence, it was concluded that Blended learning was practiced in the secondary schools of District Mardan

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The second objective of the research was to find out the strengths and weaknesses of District Mardan integrated education. Studies have found that Blended learning has played an important role in the socialization of Learners with special needs, reducing marginalization and helping to build a blended society, where everyone is affected, regardless of their disability. Blended learning puts a burden on ordinary class teachers. Besides, untrained general education teachers can teach disabled children in ordinary classrooms. A similar study found that non-disabled Learners made significant progress in reading and mathematics when studying in a blended environment (Cole, Waldron, & Majd, 2004). Another study also found that Learners who provided peer support for Learners with disabilities in general education classrooms showed good academic performance, such as improved academic performance, homework completion, and classroom participation (Cushing & Kennedy, 1997). Keeping in view, it was concluded that the inclusion of education had strengths and needed to be practiced in the secondary schools will full zeal and zest.

## Conclusion

Following conclusions were drawn from the results of the study.

- 1. It is concluded that Blended learning supports and addresses the individual needs of each student. The majority of the respondents agreed that there was a zero rejection policy of enrolment in government secondary schools and teachers knew their student's strengths, needs, weaknesses, and interests. It is also concluded that the success of inclusion in the general classroom depended upon teachers. The majority of the respondents agreed that administration and teachers worked together to enhance inclusion but to implement in real senses they had not enough resources like training and time. It is further concluded that the attitude of people of society towards special need Learners was biased to some extent, and the environmental factors to a great extent, acted as barriers to enhance inclusion in general education institutions.
- 2. Blended learning worked a lot in the socialization of special needs Learners, decreases marginalization, and helped to create a blended society in which everyone can be treated equally regardless of their disabilities. It is also concluded that Blended learning is economically efficient for developing countries and it has a positive effect on the social and economic development of special needs Learners. Blended learning helps teachers to develop teamwork skills and to make the classrooms more active than general classrooms.
- 3. It is concluded that Blended learning burdened the regular class teachers. Furthermore, general education teachers were untrained to teach children with disabilities in general classrooms. It is also concluded that exclusion caused many disadvantages such as isolation, non-socialization, poverty, and to some extent disable Learners feel uncomfortable in blended classrooms.

#### Recommendations

- 1. The result of the study showed the success of inclusion depends upon teachers so special training related to Blended learning on an annual basis may be given to all teachers to enrich them to promote understanding, disposition, and different basic skills related to Blended learning. Workshops and refresher courses may be arranged at the district level to promote Blended learning.
- 2. For the implementation of Blended learning, vacancies of special education trained teachers may be advertised and these newly appointed teachers may be provided in Blended learning schools as co-teachers to minimize the burden of regular teachers.
- 3. People in general and schools in common may be taken the initiative to arrange seminars and meetings to focus on the needs of special children and to eradicate segregation and marginalization and exclusion. Parents of special needs children may be encouraged to educate their special children to make them useful and productive figures.
- 4. It is recommended that the Government of DISTRICT MARDAN may formulate a policy to launch Blended learning in the State of AJK because special education is an expensive system of education. It is almost non-existent on the governmental level. So that, a remarkable portion of the population (disable children) may be productive and prolific by taking steps to promote Blended learning in the state of AJK.

5. Ministry of Education and Department of Education may build up a secondary school as a model school for promotion of Blended learning on a district level to promulgate Blended learning with letters and spirit.

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