

Effectiveness Of Special Education For The Students With Hearing Impairment In Faisalabad Division: Quantitative Inquiry

¹Saira Zafar , ²Dr. Hina Fazil , ³Hafiz Muhammad Afzaal*

¹Ph.D Scholar Institute of Special Education, University of the Punjab Lahore, Pakistan.

²Assistan Professor, Institute of Special Education, University of the Punjab Lahore, Pakistan.

³*Ph.D Scholar Institute of Special Education, University of the Punjab Lahore, Pakistan.

Abstract

The purpose of this research was to find out the educational effectiveness for the students with hearing impairment perceived by the teachers at elementary level of Govt. special education schools and centers in Faisalabad Division of Punjab Province. Quantitative paradigm was used to conduct this research. Teachers of students with hearing impairment who are working in Govt. Special Education Schools and Centers considered as a population of this research. Random sampling technique was used to select the sample for this research and 50 special education teachers of hearing impaired students of Faisalabad Division were selected as a sample of this research. Dynamic model for the educational effectiveness was used as a framework of this research. Self-made questionnaire developed by the researchers based on dynamic model against five point likert scale and distributed to teachers for collecting data. Data was analyzed through SPSS. Parametric statistics were used to analyze the results.

Keywords: Educational effectiveness, Students with hearing impairment, Special Education Teachers, Govt. Special Education Institutes

Acknowledgment

We had no source of funding to conduct this study. So, we would like to thanks to all of them who supported us to conduct this study especially for the heads/principals and teachers of Govt. special education institutes who provided us data regarding this study. We also thanks to Special Education Department, Punjab for the permission to collect data from special education institutes to conduct this study.

Introduction

Education is essential for the development and completion of any society. And education plays a very important role in the life of human beings in any society. As far as deaf or hard of hearing dumb people are concerned, education is as important for them as it is for ordinary people. There are many skills, techniques and methods for teaching deaf children that a special teacher needs to know. And for a deaf student to have a good education, it is very important to have a good teacher as well as to be effective in all the things that are directly or indirectly related to the education of the child.

As per WHO (2020) that overall in the world, it is estimated almost 466 million people living with hearing loss from which 34 million are the children. It is likewise appraised that the number 466 million would be increase over 900 million at the time of 2050 in future. A study conducted by Niemann, Greenstein & David (2004) it is described that education expands the communication skills of deaf students, and can provide them with skills to lead productive lives and support their families. The Individuals with Disabilities Education Act (IDEA, 1990) is a law that warrants the students who have deficiency in their hearing receive an adequate schooling. Development of an Individualized Education Program (IEP) and Individualized Family Service Plan (IFSP) are also included in this law. The section number 504 of the Rehabilitation Act of 1973 is a law that guarantees that disabled persons are not excluded from participating in programs that receive federal funding, such as public schools. Public Law 94-142 94th Congress insists to provide the educational support to all children with handicap (IDEA, 1975). No Child Left Behind Act (NCLB, 2001) advocated for quality based education reform on the grounds that setting high standards and setting measurable targets could improve individual outcomes in education and Pakistan is also the signatory of this Act.

Education for All (EFA, 2000) focuses the need to deliver access to the education for usually disadvantaged clusters, including the girls as well as women, native peoples and distant rural clusters, wandering children. EFA (2000) also covers the education of migrants and nomads, Persons with Disabilities (PWDs), language and cultural subgroups and children with disabilities (CWDs). It is also mentioned under the section "Right to Access to Education" which ensures admiration for the right to schooling without any differentiation on any grounds and to confirm adequate housing and provision measures provide education for disabled children to achieve effective admittance and access to full possible social integration (EFA, 2000). United National Convention on the Rights of Persons with Disabilities (UNCRPD) also endorses the education for the PWDs (UNCRPD, 2006). As well as Millennium Development Goals (MDGs, 2000) also focuses on the education and to attain the universal primary education is the second goal of MDGs. According to UNICEF, it is declared that 90% of CWDs living in countries which are in developing condition who do not join the school (Global Partnership for Education, 2016). Different researches explored in the kindness of educational effectiveness for deliver the well education to the students as well as the students with disabilities. Educational Effectiveness Research (EER) is a focal point in almost every aspect of any school board's improvement planning

and policy making (Sinay & Ryan, 2016). The fact is that efficiency can be considered as a most significant feature of educational value (Scheerens, Luyten, & Van Ravens, 2011).

As per the Southern Baptist Theological Seminary (2022), educational program strengthened and integrated by the reflection of educational effectiveness. Effectiveness is the level to which an action completes its planned purpose or mission. As per Fraser (1994), this is a degree of the match between the described goals and their success. It is continuously probable to attain easy and low standard aims. In other words, it is stated that quality in higher education should not only be a question of 'outputs' of output but also of decisions about goals. According to Erlends son (2002) that effectiveness of efficiency is the level to which goals are met (doing the right things) and Wojtczak (2002) defines that effectiveness in the setting of medial education to the extent that a precise treatment, procedure as well as schedule, or service, when organized in the field under normal circumstances, does what is envisioned for a precise populace. In the healthcare sector, it is a measure of the productivity of health services that helps reduce the scale of a problem or improve an unsatisfactory situation (see Harvey, 2022). Educational effectiveness leads towards the ability of a school or school system to properly meet its stated educational goals. The study of educational impact analyzes whether the input of specific resource inputs has a positive effect, which has been extensively explained (Organization for Economic Co-operation and Development, 2013).

The educational effectiveness is whether or not a specific set of possessions has a optimistic effect on achievement and if so how much of an impact. System inputs define whether the word 'Effectiveness or Efficiency' should be used. System outputs define whether descriptors 'internal' or 'external' apply to effectiveness or efficiency (Lockheed & Hanushek, 1994). Drucker (1967) also described that the efficiency' refers to that all things are getting better and 'quality' is which is uncountable level of excellence. The result of a service that is good value and fit for purpose is 'quality' which is more difficult to measure than traditionally measuring 'performance'. Thus the effective use of resources in the context of education is when the results observed from education are produced at the lower level (inputs) of resources or more productivity is produced with the given level of resources (Johnes et al., 2017). As per Organization for Economic Co-operation and Development (OECD, 2011), conditions affecting teacher claim and supply in Greece are changing quickly, in ways that should help increase academic performance. The financial crisis and measures by the Education Ministry are leading to a important reduction in the number of teachers in primary and secondary education. Successful businesses frequently report that the assortment of staffs is the very significant set of judgements they make. In order to improve students' education, schools should be given a vital role in teacher assortment.

Effectiveness indicators refer to both the results of the education system, for example, in terms of observable products, the number of graduates in a given academic year, and the results obtained. According to Johnes, Portela & Thanassoulis (2017) that with the competitive demands of funding from government, it is imperative that education be delivered as competently as probable. Performance happens when results from education are produced at the lowest level of

resources (be it financial, for example, students' innate ability). Some of the education effects are clearly helpful to culture as a full (social or external benefits), while others are limited to the single.

It also shows in the annual report of OECD (2005) with the title of “Teachers Matter” that attitude works best where parallel measures are taken to ensure that performance and equality are not compromised. Such initiatives include: developing the skills of school directors in staff management; Provide more resources to the backward schools to recruit effective teachers. And progressing the run of knowledge and checking the teacher work market. Effective devolution of personnel administration needs that central and area establishments show a solid part in guaranteeing a fair and reasonable delivery of teacher assets overall the country (see OECD, 2011). As per manuscript written by the Jacob E. Adams and Michael W. Kirst (1999), what these and other examples have in common is a relationship in which a "principal" holds an "agent" responsible for certain parts of the performance. The manager is probable to offer the principal with an "account". This account describes the performance for which the agent is held accountable. The percentage of children who pass the exam or maybe even include a explanation of the presentation achieved. Repeatedly the principal sets the standard that sets the appropriate performance. May reward for or punish the agent for substandard work (Educational Accountability6, 2022).

Dynamic model about the educational effectiveness of Creemers and Kyriakides (2008) has developed a cause of motivation for experimental study. Therefore, the same model has been used in this study. Interestingly, thematic report on PISA shows (Luyten et al., 2005), in just countries the correlation between normal Socio Economic Status (SES) and "good" teaching situations is abundant higher than in other republics is stronger. This means that later republics perform well in creating equal situations in education. One impressive result was that 5 out of 11 more or less theoretical studies are based on models. by Creemers (1994) and Creemers and Kyriakides (2008).

As per Special Education Department (2022) the total enrollment of the students with disabilities is 36000 in the all government of special education institutes in all over the Punjab in which 20880 are the Students with Hearing Impairment (SWHI). The total number of teachers of deaf students who are teaching in Faisalabad Division are 112.

Framework of the Study

The phenomenon that is under investigation is the effectiveness, to check out the effectiveness of any program, different models, approaches and framework are available. The Dynamic Model of Educational Effectiveness will be used as a framework of this study to check the educational effectiveness for the students with hearing loss. Creemers Bert P. M and Leonidas Kyriakides have used this model in their article with the title of “Using the Dynamic Model to develop an evidence-based and theory-driven approach to school improvement” and this article was published in journal “Irish Educational Studies” in 2010.

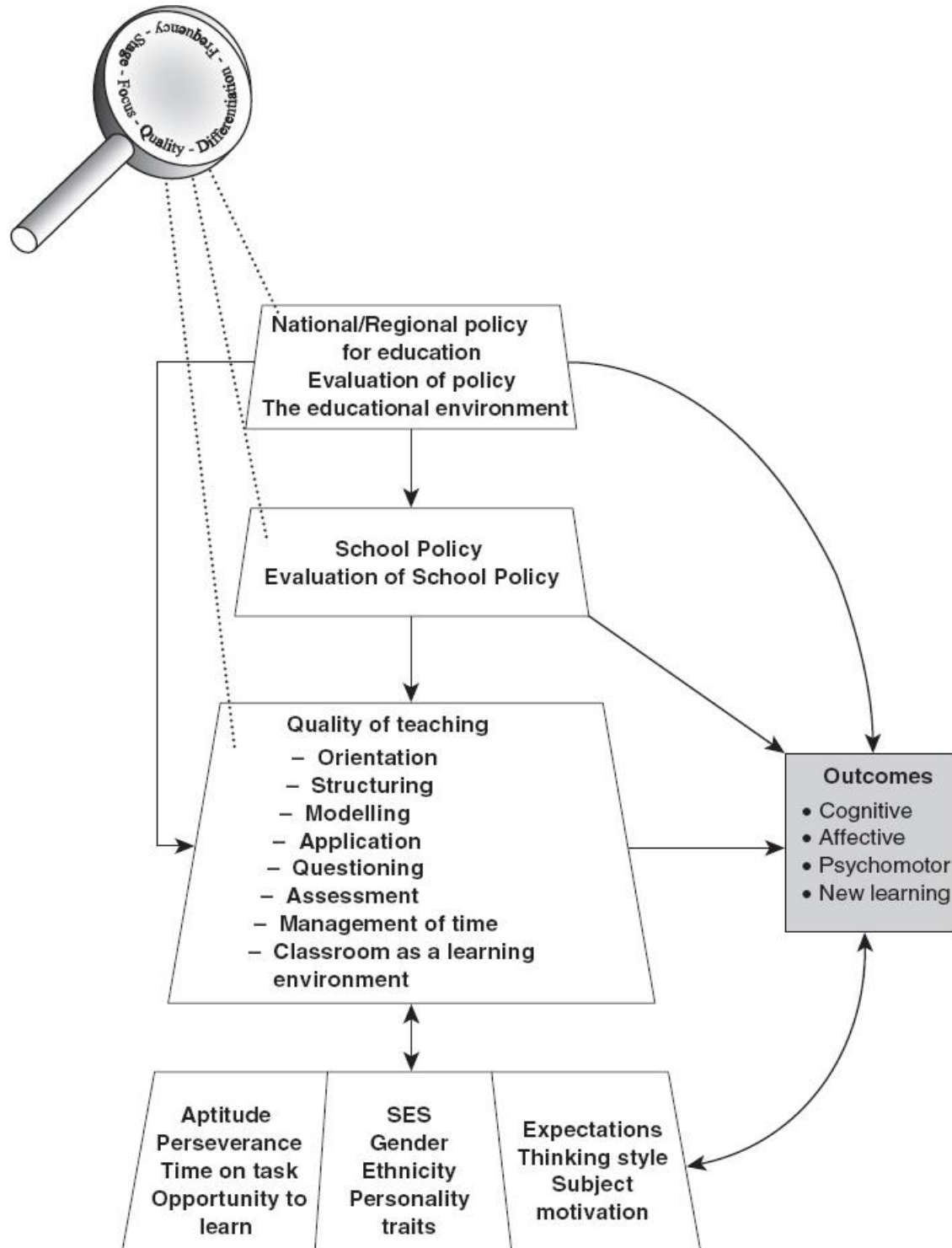


Figure 1: The dynamic model of educational effectiveness by B.P.M. Creemers and Leonidas Kyriakides, 2010

Statement of the Problem

The hearing impaired students have to face the problem while getting quality education in our country. Without any proper and well procedure of educational delivery, the SWHI cannot succeed their life in our country. The improvement in special education is necessary for the SWHI to improve the quality of their life. Therefore, this research is design to study the effectiveness of special education for SWHI enrolled in Faisalabad division through the perception of Govt. special education teachers of deaf students.

Significance of the Study

This study will enable the readers as well researchers to understand the actual situation of the hearing impaired students about their formal education in Faisalabad division. It will also helpful to the administrators to locate the areas in the field of special education that needs to be improved. It will be also beneficial for the all stakeholders for the betterment of education for SWHI. The study will provide valid and reliable data about the special educational services which are providing to the SWHI in Faisalabad division that will help to fulfill the needs of the SWHI in the relevance of special education. It will open new skylines for researchers to explore more angles of other services for the SWHI especially in the corner of education.

Research Objectives

This research was conducted to:

1. Examine the effectiveness of special education services available for the SWHI studying at elementary level in government special education institutions of Faisalabad division.
2. Determine the differences among the respondents regarding educational effectiveness for the SWHI based on their demographic information.

Research Questions

1. What is the effectiveness of special education at system level for the SWHI studying at elementary level in Govt. special education institutions of Faisalabad division?
2. What is the effectiveness of special education at school level for the SWHI studying at elementary level in government special education institutions of Faisalabad division?
3. What is the usefulness of special education at classroom level perceived by special educationists for the SWHI studying at elementary level in government special education institutions of Faisalabad division?
4. What is the effectiveness of special education at student level for the SWHI studying at elementary level in government special education institutions of Faisalabad division?
5. What are the differences among the responses of teachers of Faisalabad division regarding effectiveness of special education for the SWHI enrolled in Faisalabad division based on demographic Information (gender, qualification, experience, institutions and districts)?

Research Design and Methodology

Quantitative type of research was used to conduct this study along with the descriptive research design.

Population and Sample Strategy

Population of the study was special education teachers of SWHI working in special education centers and schools of Faisalabad division in Punjab province. Random sampling strategy was used to collect the sample for this study and 50 special education teachers (Junior Special Education and Senior Special Education Teacher) of deaf students was the sample of this study who are working in the Govt. special education schools in two districts of mentioned division such as Toba Tek Singh and Faisalabad.

Data Collection Instrument

Researchers used self-made questionnaire for data collection from teachers of special education schools and centers of Faisalabad division. The first portion of the questionnaire was a consent part, the second portion was about the demographic information and the third portion was consisted of comprising statements about effectiveness of special education for the SWHI. Before implementing the instrument, the instrument was validated by field experts and after that it was piloted on teachers of SWHI. After necessary modifications in the instrument final data was collected personally, through electronic mail, ordinary mail and by using social media. Reliability value of Cronbach's Alpha for pilot test, was noted 0.978 and the number of items of questionnaire were 44.

Data Analysis Procedures

After the completion of data collection, data was analyzed through SPSS with parametric. The results of the data about the effectiveness of special education of the SWHI was presented in tabulated form.

Table 1: Descriptive statistics on demographic information

Components	Factors	%	f
Gender of the Teachers	Male	40	20
	Female	60	30
Experience of the Teachers	0-5	34	17
	5-10	32	16
	10-15	22	11
	15-20	12	6
Qualification of the Teachers	M.A	76	38
	M.Phil	24	12

Table shows that total respondents were fifty in which 40% of the respondents were male and 60% respondents were female. Seventeen teachers had 0-5 years working experience of teaching SWHI, sixteen teachers had 5-10 years working experience of teaching SWHI, eleven teachers had 10-15 years working experience and six teachers had 15-20 years working experience of teaching to SWHI. Thirty eight teachers had the qualification of masters and twelve teachers had the qualification of M.Phil.

Table 2: Descriptive statistics on system level

Sr. No.	Statements		SD	D	N	A	SA	M	SD
1.	All subject specialist special education teachers have the opportunity to review the purpose of National policy for the PWDs.	f %	5 10	11 22	8 16	23 46	3 6	3.16	1.149
2.	National Policy for PWDs provides equal educational facilities to all kind of students with special needs.	f %	1 2	5 10	5 10	32 64	7 14	3.78	.887
3.	National Policy for PWDs meets the requirements of the twenty first century for the education of students with hearing impairment.	f %	5 10	19 38	9 18	15 30	2 4	2.80	1.107
4.	National Policy for PWDs specifically addressed the special educational needs with provisions for students with hearing impairment.	f %	3 6	13 26	12 24	18 36	4 8	3.14	1.088
5.	National Policy for PWDs clearly highlights the issues of access regarding the education of students with hearing impairment.	f %	1 2	19 38	8 16	16 32	6 12	3.14	1.125
6.	Special Education institutions are located in a reasonable distance from the residence of students with hearing impairment.	f %	6 12	24 48	4 8	12 24	4 8	2.68	1.203

7.	According to National Education policy for PWDs, all buildings for SWHI are designed according to the needs.	f	2	19	2	21	6		
		%	4	38	4	42	12	3.20	1.195
8.	Qualified and trained special education teachers are provided according to the needs of the SWHI.	f	1	10	2	32	5		
		%	2	20	4	64	10	3.60	.990
9.	In Punjab province, institutions are developed according to the numbers of SWHI.	f	3	22	7	14	4		
		%	6	44	14	28	8	2.88	1.136
10.	Institutions on provisional level for the SWHI are providing high standard education.	f	1	17	11	14	6		
		%	2	34	22	28	12	3.14	1.099
11.	Suitable current educational environment is made for individual education for students with hearing impairment.	f	2	15	9	19	4		
		%	4	30	18	38	8	3.16	1.087

Table 3: Descriptive statistics on school level

Sr. No.	Statements		SD	D	N	A	SA	M	SD
12.	According to National Policy for PWDs, SWHI are enrolled in Govt. institutions on the basis of zero rejection formula.	f	0	1	2	35	12		
		%	0	2	4	70	24	4.16	.584
13.	All institutions for hearing impaired students on provisional level are successfully providing special education on individual basis.	f	3	15	7	21	4		
		%	6	30	14	42	8	3.16	1.131
14.	All institutions for SWHI on provisional level are providing equal educational opportunities.	f	2	4	3	34	7		
		%	4	8	6	68	14	3.80	.926
15.	Consolation teacher training programs are arranged for the	f	3	13	1	26	7		

	betterment of professional abilities of competent teachers.	%	6	26	2	52	14	3.42	1.197
16.	For the betterment of educational activities, follow up studies came into being according to the National Policy for PWDs.	f	1	14	6	25	4		
		%	2	28	12	50	8	3.34	1.042

Table 4: Descriptive Statistics on Class room Level

Sr. No.	Statements		SD	D	N	A	SA	M	SD
17.	Orientation of the lesson is being provided on the presentations of all subjects.	f	1	0	5	32	12		
		%	2	0	10	64	24	4.08	.724
18.	SWHI are informed of what they are expected to learn.	f	0	2	4	33	11		
		%	0	4	8	66	22	4.06	.682
19.	During the lesson, different activities are planned in a reasonable quantity for the students with hearing impairment.	f	1	4	5	33	7		
		%	2	8	10	66	14	3.82	.850
20.	Reasonable amount of time is allocated to fulfill each activity during lesson.	f	0	3	4	37	6		
		%	0	6	8	74	12	3.92	.665
21.	SWHI are encouraged to improve the ability of problem solving.	f	1	2	4	31	12		
		%	2	4	8	62	24	4.02	.820
22.	Teaching approaches are according to the needs of the SWHI.	f	0	13	1	28	8		
		%	0	26	2	56	16	3.62	1.048
23.	Homework assignment is given to the students on regular basis.	f	1	1	2	33	13		
		%	2	2	4	66	26	4.12	.746
24.	SWHI are taught to solve questions in different patterns.	f	3	3	1	34	9		
		%	6	6	2	68	18	3.86	.990
25.	Appropriate time is given to the students to respond in a well manner.	f	0	3	2	33	11		
		%	0	6	4	66	22	4.06	.719
26.	Questions are relevant to the lesson objectives.	f	0	1	6	30	13		
		%	0	2	12	60	26	4.10	.678
27.	The level of the group is kept in mind while answering the questions.	f	2	1	2	33	12		
		%	4	2	4	66	24	4.04	.856

28.	Questions for assessment are relevant to the objectives of curriculum.	f	1	2	3	33	11		
		%	2	4	6	66	22	4.02	.795
29.	Assessment system is according to the needs of the students with hearing impairment.	f	1	3	5	32	9		
		%	2	6	10	64	18	3.90	.839
30.	Classrooms are well organized for effective use of time for teaching to deaf students	f	1	3	8	33	5		
		%	2	6	16	66	10	3.76	.797
31.	It is well planned to divide the teaching time into specific activities	f	2	2	3	38	5		
		%	4	4	6	76	10	3.84	.817
32.	Individualized educational plan is developed for the children with hearing impairment.	f	4	14	3	26	3		
		%	8	28	6	52	6	3.20	1.161
33.	Students are allowed to think of solutions to practical problem themselves before the teacher shows them how they are solved.	f	2	3	9	30	6		
		%	4	6	18	60	12	3.70	.909

Table 5: Descriptive Statistics Student Level

Sr. No.	Statements		SD	D	N	A	SA	M	SD
34.	Problem solving techniques are taught to the SWHI to enhance their ability.	f	2	5	3	36	4		
		%	4	10	6	72	8	3.70	.909
35.	Goals are recalled for the perseverance of the SWHI.	f	1	1	7	35	6		
		%	2	2	14	70	12	3.88	.718
36.	Enough time is allotted on the academic tasks during the school day.	f	3	1	4	37	4		
		%	6	2	8	74	8	3.78	.872
37.	The teacher helps the SWHI when they face any problem to understand the lesson.	f	0	1	2	37	10		
		%	0	2	4	74	20	4.12	.558
38.	Educational services are being provided regardless of the socio economic status of SWHI.	f	3	1	1	36	9		
		%	6	2	2	72	18	3.94	.913
39.	There is no any gender discrimination in this education	f	0	0	4	28	18		
		%	0	0	8	56	36	4.28	.607

	system for the students with hearing impairment.								
40.	There is no any religious discrimination in this education system for the students with hearing impairment.	f	0	0	2	30	18		
		%	0	0	4	60	36	4.32	.551
41.	Education increases the chance of survival in the social life of the students with hearing impairment.	f	0	3	5	31	11		
		%	0	6	10	62	22	4.00	.756
42.	SWHI are asked to participate in classroom discussion for better understanding.	f	1	4	2	31	12		
		%	2	8	4	62	24	3.98	.892
43.	Independent projects are assigned to the SWHI to improve their thinking style.	f	0	2	4	35	9		
		%	0	4	8	70	18	4.02	.654
44.	Activities are organized to motivate the students in order to achieve their life goals.	f	1	4	2	37	6		
		%	2	8	4	74	12	3.86	.808

Table 6: Independent sample t-test on gender for system level, school level, classroom level and students level

Components	Gender	N	Mean	Std. Deviation	t	df	Sig (2-tailed)
System Level	Male	20	3.1815	.77618	.223	48	.825
	Female	30	3.1315	.77703			
School Level	Male	20	3.4800	.74946	.706	48	.484
	Female	30	3.6400	.80755			
Classroom Level	Male	20	3.8588	.57679	-.228	48	.775
	Female	30	3.9099	.63897			
Student Level	Male	20	3.9636	.55053	-.268	48	.790
	Female	30	4.0061	.54646			

Table 6 shows that in system level, mean value of male teachers is high as compared to the female teachers of SWHI (female M= 3.1315, male M= 3.1815) whereas standard deviation of female teachers is high as compared to the standard deviation of male teachers (male SD= .77618, female SD= .77703). So, there is no statistically significance difference between male and female in system level (t=.233. df=48, Sig=.825).

In school level, mean value of female teachers is higher as compared to the male teachers of SWHI (male M= 3.4800, female M= 3.6400) as well as standard deviation of female teachers is

higher as compared to the standard deviation of male teachers of the SWHI (male SD= .74946, female SD= .80755). So, there is no statistically significance difference between male and female in school level (t=.706, df=48, Sig=.484).

In classroom level, mean value of female teachers is high as compared to the male teachers of SWHI (male M= 3.8588, female M= 3.9099) as well as standard deviation of female teachers is high as compared to the standard deviation of male teachers of the SWHI (male SD= .57679, female SD= .63897). So, there is no statistically significance difference between male and female in classroom level (t=-.228, df=48, Sig=.775).

In student level, mean value of female teachers is high as compared to the male teachers of SWHI (male M= 3.9636, female M= 4.0061) whereas standard deviation of male teachers is high as compared to the female teachers (male SD= .55053, female SD= .54646). So, there is no statistically significance difference between male and female in school level (t=-.228, df=48, Sig=.775). So, there is no statistically significance difference between male and female in student level (t=-.268, df=48, Sig=.790).

Table 7: Independent sample t-test on districts for system level, school level, classroom level and students level

Components	Districts	N	Mean	Std. Deviation	t	df	Sig (2-tailed)																																
System Level	Faisalabad	25	2.8669	.71579	-2.790	48	.008																																
	T.T.Singh	25	3.4361	.72573				School Level	Faisalabad	25	3.2160	.82648	-3.645	48	.001	T.T.Singh	25	3.9360	.54074	Classroom Level	Faisalabad	25	3.7225	.62964	-1.996	47.168	.052	T.T.Singh	25	4.0565	.55089	Student Level	Faisalabad	25	3.8691	.57381	-1.587	46.918	.119
School Level	Faisalabad	25	3.2160	.82648	-3.645	48	.001																																
	T.T.Singh	25	3.9360	.54074				Classroom Level	Faisalabad	25	3.7225	.62964	-1.996	47.168	.052	T.T.Singh	25	4.0565	.55089	Student Level	Faisalabad	25	3.8691	.57381	-1.587	46.918	.119	T.T.Singh	25	4.1091	.49237								
Classroom Level	Faisalabad	25	3.7225	.62964	-1.996	47.168	.052																																
	T.T.Singh	25	4.0565	.55089				Student Level	Faisalabad	25	3.8691	.57381	-1.587	46.918	.119	T.T.Singh	25	4.1091	.49237																				
Student Level	Faisalabad	25	3.8691	.57381	-1.587	46.918	.119																																
	T.T.Singh	25	4.1091	.49237																																			

Table 7 shows that in system level, mean value of teachers of district Toba Tek Singh (T.T. Singh) is high as compared to the teachers of district Faisalabad (Faisalabad M=2.8669, Toba Tek Singh M= 3.4361) as well as standard deviation of teachers of Toba Tek Singh is high as compared to the standard deviation of teachers of Faisalabad (Faisalabad SD= .71579, Toba Tek Singh SD= .72573) and there is statistically significance difference between Faisalabad and T.T. Singh in system level (t=-2.790, df=48, Sig=.008).

In school level, the mean value of teachers of T. T. Singh is high as compared to the teachers of Faisalabad (Faisalabad M=3.2160, T.T Singh M=3.9360) as well as standard deviation of teachers of Faisalabad is high as compared to the standard deviation of teachers of Toba Take Singh (Faisalabad SD=.82648, T. T. Singh SD=.54074). There is a statistically significance difference between Faisalabad and T.T. Singh in school level (t=-3.645, df=48, Sig=.001).

In classroom level, mean value of teachers of Toba Take Singh is high as compared to the teachers of Faisalabad (Faisalabad M= 3.7225, T.T. Singh M= 4.0565) whereas standard deviation of teachers of Faisalabad is high as compared to the standard deviation of teachers of T.T. Singh (Faisalabad SD=.62964, T.T. Singh SD= .55089). So, this table shows that there is statistically significance difference between T.T. Singh and Faisalabad in classroom ($t=-1.996$, $df=47.168$, $Sig=.052$).

In student level, mean value of teachers of T.T. Singh is high as compared to the teachers of Faisalabad (Faisalabad M=3.8691, T.T. Singh M=4.1091) whereas standard deviation of teachers of Faisalabad is high as compared to the standard deviation of teachers of T.T. Singh (Faisalabad SD=.57381, T.T. Singh SD=.49237). So, this table shows that there is no statistically significance difference between district T.T. Singh and Faisalabad in student level ($t=-1.587$, $df=46.918$, $Sig=.119$).

Table 8: Independent sample t-test on institutions for system level, school level, classroom level and students level.

Components	Institutes	N	Mean	Std. Deviation	t	df	Sig (2-tailed)																																
System Level	Center	27	3.1380	.81130	-.133	48	.895																																
	School	23	3.1673	.73429				School Level	Center	27	3.5333	.83574	-.415	48	.680	School	23	3.6261	.72690	Classroom Level	Center	27	3.9826	.58182	1.175	48	.246	School	23	3.7802	.63541	Student Level	Center	27	4.0471	.57406	.816	48	.418
School Level	Center	27	3.5333	.83574	-.415	48	.680																																
	School	23	3.6261	.72690				Classroom Level	Center	27	3.9826	.58182	1.175	48	.246	School	23	3.7802	.63541	Student Level	Center	27	4.0471	.57406	.816	48	.418	School	23	3.9209	.50787								
Classroom Level	Center	27	3.9826	.58182	1.175	48	.246																																
	School	23	3.7802	.63541				Student Level	Center	27	4.0471	.57406	.816	48	.418	School	23	3.9209	.50787																				
Student Level	Center	27	4.0471	.57406	.816	48	.418																																
	School	23	3.9209	.50787																																			

Table 8 indicates that in system level, mean value of teachers of schools is higher as compared to the teachers of centers (Centers M= 3.1380, Schools M= 3.1673) whereas standard deviation of teachers of centers is high as compared to the standard deviation of teachers of schools (Centers SD= .81130, Schools SD= .73429). So that there is no statistically significance difference between schools and centers of SWHI in system level ($t=-.133$, $df=48$, $Sig=.895$). In school level, mean value of the teachers of schools is higher as compared to the teachers of centers (Schools M= 3.6261, Centers M= 3.5333) whereas standard deviation of teachers of centers is high as compared to of teachers of schools (Centers SD=.83574, Schools SD=.72690) and there is no statistically significance difference between schools and centers ($t=-.415$, $df=48$, $Sig=.680$) in school level.

In classroom level, the mean value of teachers of centers is high as compared to the teachers of schools (Centers M= 3.9826, Schools M= 3.7802) whereas standard deviation of teachers of schools is high as compared to the standard deviation of teachers of centers (Centers SD= .58182, Schools SD= .63541). There is no statistically significance between schools and centers ($t=-1.175$,

df=48, Sig=.246) in classroom level. In student level, mean value of teachers of centers is high as compared to the teachers of schools (Centers= 4.0471, Schools= 3.9209) as well as standard deviation of teachers of centers is high as compared to the standard deviation of teachers of schools (Centers SD= .57406, Schools SD= .50787). So this table shows that there is no statistically significance difference between schools and centers in student level (t=816, df=48, Sig=.418).

Table 9: Mean of all levels about educational effectiveness

Components	N	Mean	Std. Deviation
System Level	50	3.1515	.76913
School Level	50	3.5760	.78104
Classroom Level	50	3.8895	.60932
Student Level	50	3.9891	.54286

Findings

1. Majority (46%) of the respondents answered that all special education teachers have the chance to review the purpose of National policy for the PWDs.
2. Majority (64%) of the respondents responded that the National Policy for PWDs provides equal educational facilities to all kind of students with special needs.
3. Majority of the respondents (44%) replied that in Punjab province, institutions are not developed according to the numbers of students with hearing impairment.
4. Majority of the respondents (34%) answered that institutions on provisional level for the SWHI are not providing high standard education.
5. Majority of the respondents (70%) responded that as per National Policy for PWDs, SWHI are enrolled in Govt. institutions on the basis of zero rejection formula.
6. Majority of the respondents (68%) responded that all institutions for SWHI on provisional level are providing equal educational opportunities.
7. Maximum respondents (52%) showed that consolation teacher training programs are arranged for the betterment of professional abilities of competent teachers.
8. Maximum teachers (64%) responded that orientation of the lesson is being provided on the presentations of all subjects.
9. More than (66%) teachers responded that SWHI are informed for what they are expected to learn.
10. More than (74%) respondents replied that reasonable amount of time is allocated to fulfill each activity during lesson.
11. Maximum respondents (68%) answered that SWHI are taught to solve questions in different patterns.
12. Majority of the respondents (66%) reacted that the level of the group is kept in mind while answering the questions.

13. Majority of the respondents (76%) reacted that it is well planned to divide the teaching time into specific activities
14. Maximum of the teachers (72%) responded that problem solving techniques are taught to the SWHI to enhance their ability.
15. Majority of the teachers (74%) replied that enough time is allotted on the academic tasks during the school day.
16. Majority of the teachers (74%) retorted that the teacher helps the SWHI when they face any problem to understand the lesson.
17. More than (72%) of the teachers reacted that educational services are being provided regardless of the socio economic status of students with hearing impairment.
18. More than (62%) of the teachers replied that education increases the chance of survival in the social life of the SWHI.
19. Majority of the respondents (70%) answered that independent projects are assigned to the SWHI to improve their thinking style.
20. Majority of the respondents (74%) responded that activities are organized to motivate the students in order to achieve their life goals.
21. Statistically significance difference was noted between district Faisalabad and T.T. Singh in system level by the respondents ($t=-2.790$, $df=48$, $Sig=.008$).
22. Statistically significance difference was observed between district Faisalabad and T.T. Singh in school level ($t=-3.645$, $df=48$, $Sig=.001$) by the teachers.
23. Statistically significance difference was saw between T.T. Singh and Faisalabad in classroom ($t=-1.996$, $df=47.168$, $Sig=.052$) by the respondents.

Discussion

Effectiveness can be considered as an essential aspect of educational quality in detail (Scheerens, Luyten, & Van Ravens, 2011). According to the Southern Baptist Theological Seminary (2022) that educational program wired and integrated by the reflection of educational effectiveness. The first objective of this was to examine the effectiveness of special education services available for the SWHI studying at elementary level in government special education institutions of Faisalabad division. As per study conducted by (Levenson, 2012) that education finances tauten, district and school staff, programming, and every component of service delivery need to work harder to maximize efficiency and effectiveness. This should include special education along with everything else. Fortunately, some districts have made real progress in increasing achievement for students with special needs while spending less. And the second objective of the study was to determine the differences among the respondents regarding educational effectiveness for the SWHI based on their demographic information. There is statistically significance difference was noted between Faisalabad and T.T. Singh in system level, school level and classroom level. So, as per this study it is explored that it is more need to check the educational effectiveness of the SWHI for their better education.

Conclusion

The education of the SWHI is very important and at the same time the effectiveness of this education is even more important. While the quality of education of ordinary children is checked, the quality of education of deaf students is also looked into. This study looked at the teachers of SWHI of special education institutions in Division Faisalabad and asked them questions about the effective education of students, to which they answered with five options in mind. This conclusion can be drawn in the light of their answers that all teachers have the chance to review the purpose of National policy for the PWDs (2002). National Policy for PWDs provides equal educational facilities to all kind of students with special needs. Institutions are not developed according to the numbers of SWHI in all over the province and existing institutions on provisional level for the SWHI are not providing high standard education. As per National Policy for PWDs, SWHI are enrolled in Govt. institutions on the basis of zero rejection formula and all institutions for SWHI on provisional level are providing equal educational opportunities. Teacher training programs are arranged for the betterment of professional abilities of competent teachers time by time. During class SWHI are informed for what they are expected to learn and reasonable amount of time is allocated to fulfill each activity during lesson as well as SWHI are taught to solve questions in different patterns and the teacher kept in mind level of the group while answering the questions. Problem solving techniques are taught to the SWHI to enhance their ability and enough time is allotted on the academic tasks during the school day and teacher helps the SWHI when they face any problem to understand the lesson. Educational services are being provided regardless of the socio economic status of SWHI and independent projects are assigned to the SWHI to improve their thinking style. Different activities are organized to motivate the students in order to achieve their life goals. So, over all situation of education of SWHI is good but not 100% accurate situation as per laws and policies in division Faisalabad. It is more need to accomplish the lacking areas for better education of SWHI by different ends.

References

- ADAMS, JACOB E., and KIRST, MICHAEL W. 1999. "New Demands and Concepts for Educational Accountability: Striving for Results in an Era of Excellence." In Handbook of Research on Educational Administration, 2nd edition, ed. Joseph Murphy and Karen Seashore Louis. San Francisco: Jossey-Bass.
- All Handicapped Children Act, 1975
- Cornali, F. (2012). Effectiveness and Efficiency of Educational Measures: Evaluation Practices, Indicators and Rhetoric. *Sociology Mind* Vol.2, No.3, 255-260. Published Online July 2012 in SciRes. <http://dx.doi.org/10.4236/sm.2012.23034/>
- Educational Accountability. Retrieved from <https://education.stateuniversity.com/pages/1931/Educational-Accountability.html/> on 15 March 2022.
- Erlendsson, J. (2002) Value For Money Studies in Higher Education http://www.hi.is/~joner/eaps/wh_vfmhe.htm accessed 4 January 2002

- Education for All (2000). "The EFA movement". United Nations Educational, Scientific and Cultural Organization. ISBN: 978-92-806-4188-2.
- Fraser, M. (1994). Quality in higher education: an international perspective' in Green, D. (Ed.), 1994, What is Quality in Higher Education? pp. 101–111 (Buckingham, Open University press and Society for Research into Higher Education).
- Global Partnership for Education (2016). Children with disabilities face the longest road to education. Retrieved from: <https://www.globalpartnership.org/blog/children-disabilities-face-longest-road-education> dated 11 March, 2020.
- Harvey, L., 2004-22, Analytic Quality Glossary, Quality Research International, <http://www.qualityresearchinternational.com/glossary/>
- Drucker, P. F. (1967). The effective executive. Heinemann. Retrieved from <https://dtleadership.my/wp-content/uploads/2019/05/Drucker-2006-The-Effective-Executive-The-Definitive-Guide-to-Getting-the-Right-Things-Done.pdf>
- Johnes, J., Portela, M., & Thanassoulis, E. (2017). Efficiency in education. Journal of the Operational Research Society, 68, 331–338 <https://doi.org/10.1057/s41274-016-0109-z/>
- Kyriakides, L., & Creemers, B. P. M. (2008). Using a multidimensional approach to measure the impact of classroom-level factors upon student achievement: A study testing the validity of the dynamic model. School Effectiveness and School Improvement, 19, 183–205.
- Luyten, J. W., Scheerens, J., Visscher, A. J., Maslowski, R., Witziers, B., & Steen, R. (2005). School factors related to quality and equity: Results from PISA 2000. Paris: OECD.
- Lockheed, M. E., & Hanushek, E. A. (1994). Concepts of educational efficiency and effectiveness (Working Paper No. HRO 24). The World Bank. <https://bit.ly/2ZoneIV>
- Levenson, N. (2012). Boosting the Quality and Efficiency of Special Education. Retrieved from <https://files.eric.ed.gov/fulltext/ED534985.pdf>
- Millennium Development Goals-MDGs (2000). Retrieved from [Millennium Development Goals - MDGs \(mdgmonitor.org\)](http://www.millenniumdevelopmentgoals.org/)
- Niemann, S., Greenstein, D., and David, D. (2004). Helping The Children Who Are Deaf. Hesperian Health Guides. Retrieved form: https://en.hesperian.org/hhg/Helping_Children_Who_Are_Deaf:Going_to_school_is_important_for_deaf_children. Dated march 15, 2020.
- No Child Left Behind Act (2001)
- OECD (2011), “Improving Efficiency in Primary and Secondary Education”, in Education Policy Advice for Greece, OECD Publishing, Paris. DOI: <https://doi.org/10.1787/9789264119581-3-en>
- OECD ANNUAL REPORT (2005) ISBN 92-64-00782-2. Retrieved from <https://www.oecd.org/about/34711139.pdf/>
- OECD (2013c), OECD Review on Policies to Improve the Effectiveness of Resource Use in Schools. Draft Design and Implementation Plan for the Review (internal document available on request).

- Sinay, E, & Ryan, T. G. (2016). Research series on school effectiveness and school improvement: Local and international trends in school effectiveness and school improvement. (Research Report No. 16/17-03). Toronto, Ontario, Canada: Toronto District School Board.
- Scheerens, J., Luyten, H., & Van Ravens, J. (Eds.). (2011). Perspectives on educational quality: Illustrative outcomes on primary and secondary education in the Netherlands (Springer Briefs in Education). Dordrecht: Springer.
- Special Education Department, Government of the Punjab (2022).
- The Individuals with Disabilities Education Act, 1990
- The Southern Baptist Theological Seminary (2022), Educational Effectiveness. Retrieved from <https://www.sbts.edu/accreditation/educational-effectiveness/>
- UNCRPD (2006). UN General Assembly, Convention on the Rights of Persons with Disabilities, 13 December 2006, A/RES/61/106, Annex I, available at: <https://www.refworld.org/docid/4680cd212.html>.
- World Health Organization (2020). Deafness and hearing loss. Retrieved from: <https://www.who.int/news-room/fact-sheets/detail/deafness-and-hearing-loss>.
- Wojtczak, A. (2002). Glossary of Medical Education Terms, <http://www.iime.org/glossary.htm>, December, 2000, Revised February 2002.