

An Analysis of Foundation Assisted Schools Program of Punjab as a Mechanism Influencing Pupil Cohort

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Abstract

Pakistan is lagging behind in education in this global world. To speed up the pace of work to achieve 100% literacy rate is a burning issue for the educationists. The failure of the public sector delivery of education system is adding fuel to the fire and educational innovations are the need of the hour. The very inception of Punjab Education Foundation is a step forward in this regard. Foundation Assisted Schools is the flagship program of Punjab Education Foundation under which assistance is provided to poor strata of society in the province of Punjab through Public-Private Partnership. This study aimed at analyzing whether the Foundation Assisted Schools Program has been successful in improving the quality of schools in their service delivery to the deserving students across the Punjab. The purpose was accomplished by analyzing the enrolment rate, grade transition and survival rate of respective pupil cohort of schools before and after becoming Foundation Assisted School partners. 1209 Foundation Assisted partner schools in 7 districts of the Punjab were constituted the accessible population and out of which 121 were taken randomly as sample. Data concerning trends on the pupil cohort were collected, recorded on Pupil Flow Chart and analyzed with the help of percentage and *t*-test. Results showed that the Foundation Assisted Schools Program, as a mechanism, was successful in influencing pupil cohort in a positive and desired way as improved ratios of enrolment, grade transitions and survival rate were observed.

Keywords: PEF-FAS program, pupil cohort, grade transition, enrolment rate, survival rate

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Introduction

There is no denying the fact that education is the backbone of a man's moral, social, political and intellectual growth. On the larger scale, it (education) plays the most important role in nation building. The light seems to come from the bulb but its real source is the generator from which the current is drawn. In the same manner, all the positive aspects depicted by a nation owe to education provided to its citizens. The role of education in human resource development, poverty alleviation, political maturity, institutionalized refinement, and economic stability cannot be overlooked by a sensitive nation. It is the prime and chief contributor to the national progress and economic growth of a country. Khan (2010) explicated that in the age of globalization, all the countries are putting their best efforts to utilize every possible mode of education to educate their citizens for the sake of responsible and mature human resources. Cut-throat competition in the field of economic development and political say among the community of nations demands productive participation of all the people who are educated and well-trained. The role of educated people was never considered as vital before this prevalent era of globalization.

The world community showed its commitment and positive intent through its programs like Millennium Development Goals (MDG) and EFA to educate all inhabitants of the globe irrespective of gender, cast, colour and creed. Now, it is the vision of the world community to provide education to every individual as it is regarded as one of the basic and, of course, the most important human right contributing to eradicate poverty and enhance the cause of progress, prosperity, better health and well-being of every individual in the best possible way (Unterhalter & Brighouse, 2007).

Pakistan is fully committed to respond to the global responsibility entrusted to it, by improving the state of educational affairs. In this regard, the task to achieve 100% literacy rate is one of the major concerns of the government. Government is looking forward to promote education, increase literacy rate, capacity building of teachers, and enhancement of facilities in all educational institutions. Federal and provincial governments are committed to provide free education up to the 10th grade. National and provincial governments are encouraging and facilitating the private sector to invest in the education sector for its promotion as a national cause (Government-of-Pakistan, 2016). But the pace required to achieve this much needed task is not matching to our aims and goals. A glimpse on all educational policies given by different governments since the very inception of Pakistan; indicates the utmost desire to improve literacy rate and the quality of education. Political instability and commitment, lack of resources, scarcity of skilled manpower and number of other factors serve as hindrance to improve the state of affairs in the field of education (Anees, 2005).

Educational indicators show that the performance of Pakistan in educational perspective is not satisfactory. At the moment, Pakistan's spending on education is at the bottom in the whole region as she expends only 2.2% of GDP resulting in as low literacy rate as 57%, as a natural outcome (Government-of-Pakistan, 2016). The plight of females and rural population is even worse and pathetic. The plight of the province of Punjab is not an exemption as its literacy rate is 59% only. The literacy rate for females is much lower than the male literacy rate. The situation is also graver in the rural areas of the province (Government-of-Pakistan, 2016).

The efforts highlighted in the Economic Survey of Pakistan (2015-16) are to attain hundred percent participation rates at primary level, to improve the quality of education and to increase public expenditure to 4.0% of GDP by 2018. Comprehensive reforms comprising of detailed actions in curriculum, pedagogy, technology, governance, assessment as well as social and economic relevance; made in the educational system to improve the quality of public schooling is likely to be unachieved due to number of factors mainly poor speed of students' enrolment, low retention especially in primary schools and high dropout rates due to number of reasons (Government-of-Pakistan, 2016). In the present scenario, almost one fourth of the primary school going age children do not go to school and half of those who are enrolled at primary level, are unable to complete their primary education. At this time only half of the enrolled children in grade-I are able to survive to continue their elementary education. It is also evident from the educational indicators that situation with girls, rural male population and rural female population is more serious and grim (Government-of-Pakistan, 2016).

According to Bilquees and Saqib (2004), high dropout rate is not helping the cause of achieving 100% literacy rates. A number of causes of high dropout rates can be pointed out such as economic factors, physical factors, geographical factors, administrative factors; curriculum related factors; teacher related factors and educational environment related factors. At very initial stage of primary education, this educational wastage is a matter of concern for educational planners and policy makers. As referred by Hussain, Salfi, and Mahmood (2011) a million children cannot complete primary education. Only 50% of the enrolled children in grade-I survive to continue their elementary education. Moreover, 54% females are unable to complete their primary education as compared to 46% males.

Kardar (2011) viewed that the failure of public delivery system indicates that novel and innovative ways and means are the need of the hour to improve our quality of education and increase overall literacy rate. In the last few decades, rapid emergence of private schools is a proof of parents' commitment to ensure quality of education for their children. Besides the very positive role of private institutions, it is also a matter of great

concern that most of the private institutions are not affordable for the poor segment of the society. It is note-worthy that emergence of low cost private schools in remote, far-flung, deprived, suburban and rural areas of the country and especially in Punjab shows a positive sign on the part of the poor and even illiterate parents who want to educate their children by spending their money. Though, the success of low cost private schools indicates towards the social demand for education yet financial constraints make it impossible and unaffordable for the private school owners to impart quality education and to provide better basic amenities to the students. The improvement in the standard of these low cost private schools can be made possible only through the concept of PPP (Public Private Partnership) (Malik, 2010).

The concept of PPP has been adopted by the world as a better service provider system to the masses. It not only improves the infrastructure, financial status of the entrepreneurs, satisfaction of the masses in getting improved services but it also saves public sector spending on developing infrastructure for new ventures. The vision of Public Private Partnership in providing more and better public services through improved infrastructure is very true in its real sense. The concept of PPP in the field of education is well adopted by the Punjab Education Foundation and in-fact; it is the torch bearer in this regard, at the present moment (Government of the Punjab, 2007).

The Punjab Education Foundation was established in the year 1991 and was 'restructured in 2004 as an autonomous statutory body established under an act of the provincial assembly'. Its role is to encourage and promote education in the private sector, operating on non-profit basis. Since its very inception, the foundation is very successful in promotion of education, especially in encouraging and supporting the efforts of private sector in providing education to the students belonging to poor families through its different Programs like Foundation Assisted Schools (FAS), Educational Voucher Scheme (EVS), and Continuous Professional Development Programs (CPDP) etc. (Punjab-Education-Foundation, 2012).

The Foundation Assisted Schools (FAS) Program of Punjab Education Foundation is the 'flagship' program of the Punjab Education Foundation in which the foundation provides financial assistance to the partner schools on per enrolled child, per month basis. The partner school, under terms and conditions imposed by the Punjab Education Foundation, is supposed to impart quality education without charging any fee in terms of tuition fee, admission fee, stationary charges, examination fee, and entertainment fee, etc. The FAS partner school is bound to improve the infrastructure of the school provide better facilities to the students and ensure quality of education. Quality Assurance Test (QAT) is the major determinant of the quality of education imparted by the FAS Partner School. Furthermore, better results shown in QAT make FAS partner

school eligible for financial assistance for the coming months. At present, 3,500 FAS partner schools in 36 districts of the Punjab Province show the success of this program in imparting quality education to the poor strata of the society (Punjab-Education-Foundation, 2012).

The required reforms in the education sector cannot be carried out by the government alone but they require active participation of public-private partnership which can pull out majority of country's population from illiteracy (Government-of-Pakistan, 2016). The ever increasing number of FAS partner schools demands a comprehensive analysis of the concept of Public Private Partnership in imparting quality education to the deprived segment of the society (Malik, 2010).

Indicators like enrolment, grade transition, and survival rate can be used to observe the emerging pattern of pupil cohort of the FAS partner schools. It is exposed by the above discussion that retention of Pupil Cohort is an important issue to deal with, in the context of alarming situation of Pakistan educational statistics and deteriorating quality standard of public sector education. In the contemporary age, the role of Public Private Partnership cannot be under emphasized. Therefore, this study was designed to analyze Punjab Education Foundation's FAS Program in terms of enrolment rate, grade transitions and survival rate of schools before and after becoming FAS partners through pupil cohort.

Review of Related Terms

Survival Rate: It is the percentage of a pupil-cohort that enters together in the first grade of primary education (e.g. grade five) and reaches the final grade of an educational cycle either with or without repeating a grade (Pakistan-Education-Statistics, 2016).

Pupil Flow Chart: It is a chart showing the flow of pupils from one grade to higher to determine the relationship between the output from the final grade and the corresponding enrolment in the initial grade (Shami & Hussain, 2006).

Pupil Cohort: Pupil cohort as it is 'group of pupils who enter the first grade of a level of education in the same school year and subsequently experience promotion, repetition, drop-out each in their own way (Shami & Hussain, 2006).

Grade Transition: Grade transition in the words of Shami and Hussain (2006) is the number of a cohort of pupils who enters first grade of primary education and who experience promotion, drop-out and repetition from grade to grade, i.e. how many of them roll over to the next grade, next year and so on, and thus complete a particular level or stage of education.

Enrolment Rate: It is the number of students registered on the rolls of an educational institution on a specific point of time. As Pakistan is concerned, the enrolment refers to the number of children enrolled as on 30th October of the academic session (Pakistan-Education-Statistics, 2016).

Terms of Partnership: It is an important document which shows how the first party (Punjab Education Foundation) assists the second party (Foundation Assisted School partners) to impart quality education to deprived and poor segment of the society. Different terms of partnership related to the following issues: (i). financial assistance (means first party ensure financial assistance for elementary classes Rs. 350 and for secondary classes Rs. 450 per enrolled student per month), (ii). physical infrastructure (second party is responsible in developing and maintaining physical infrastructure according to standards as specified by the first party), (iii). quality assurance tests (indicated that students' learning outcomes will be assessed by the experts nominated by first party after every six month through QAT), (iv). monitoring & evaluation (indicated that first party is authorized to inspect partner school without any prior notice on any day during working hours) and (v). teacher training programs (indicated that first party will provide training to the teachers of partner schools without any charges). These terms make a comprehensive and unified whole to enable FAS partners impart education through public-private partnership. These terms of agreement can be changed, revised or terminated by the first party without any prior notice to the second party (Punjab Education Foundation, 2012).

Objectives of the Study

The study was conducted to achieve the following objectives:

- To examine enrolment rate, grade transitions and survival rate of schools before and after becoming FAS Partners.
- To compare enrolment rate, grade transitions and survival rate of respective pupil cohorts of schools before and after becoming FAS partners.
- To evaluate perceptions of principals/owners of FAS partner schools regarding contribution of terms of partnership towards the effectiveness of FAS partner Schools

Methodology

This study was descriptive and survey method used to evaluate the Punjab Education Foundation's FAS program. In 2015-16, there were 3500 FAS partner schools in 36 districts of the Punjab province that constituted the target population, whereas 1209 FAS partner schools in seven districts of the Punjab province (i-e Bahawalnagar, Bahawalpur, Jang, Lodhran, Multan, Muzaffargarh, Rajanpur) constituted the accessible population because they were reported to have more than hundred schools affiliated with FAS program. Detail of sample is shown in the table given below:

Table 1

Description of Sampling

Sr.	Districts	No of FAS Partner Schools	Sample Size (10% of each)
1	Bahawalnagar	179	18
2	Bahawalpur	263	26
3	Jang	131	13
4	Lodhran	115	12
5	Multan	189	19
6	Muzaffargarh	224	22
7	Rajanpur	108	11
	Total	1209	121

Table 1 shows that out of accessible population i-e 1209 FAS partner schools, 10% of each was randomly taken as sample, and size of sample was found to be 121. Therefore, 18, 26, 13, 12, 19, 22, and 11, FAS partner schools of districts Bahawalnagar, Bahawalpur, Jhang, Lodhran, Multan, Muzaffargarh and Rajanpur respectively were visited by researchers for data collection.

As it is mixed-method study different research tools were used to collect data i.e. questionnaire, interview, analysis of record, and checklist, open ended questionnaire, test. To obtain information about enrolment rate, grades transitions and survival rate of schools before and after becoming FAS partners, researchers developed a tool named as Pupil Flow Chart (PFC). Pupil Flow Chart was also used to record the names, date of admissions and pupil flow for successive 5 years. In order to judge understandability, face and content validity of Pupil Flow Chart, the researchers personally visited 30 FAS partner schools. Pupil Flow Chart was discussed with the principals/owners of FAS partner schools. They validated and also proposed changes which were incorporated.

To evaluate the viability of terms of partnership researchers prepared a check list on five point Likert type scale ranging from “complete, somewhat complete, slightly complete, incomplete and totally different”. With regards to analyze the contributing factors towards the effectiveness of FAS partner schools, like financial assistance, physical infrastructure, teacher training, quality assurance test and monitoring and evaluation, views from principals/owners of FAS partner schools were taken. Data concerning trends on the Pupil Cohort were collected and recorded on respective Pupil Flow Chart. To meet this purpose document analysis of admission withdrawal registers, admission forms and result registers were done. The data were analyzed by computing the mean percentages of enrolment rate, grade transitions and survival rate of respective pupil cohort and *t*-test was applied for making the comparison among enrolment, grade transition and survival rate.

Results

Following tables deal with the analysis of Pupil Flow Chart to observe the emerging patterns of enrolment, grade transitions, and survival rate of pupil cohort of FAS partner schools before and after affiliation with FAS program.

Table 2

Enrolment Rate of Schools before and after FAS Partner

FAS partner schools (n)	Enrolment Before FAS Partner	Enrolment After FAS Partner	Difference in Enrolment	Remarks
121	3350	4211	26%	Increased

Table 2 shows the difference in enrolment of schools before and after becoming FAS Partner. Table shows that 3,350 students were enrolled in Grade-I before becoming FAS Partner, whereas the enrolment was found to be 4,211 in Grade-I after becoming FAS partner. Therefore the enrolment rate in Grade-I increased by 26% after becoming FAS Partner.

Table 3

Grade transition of Pupils Cohort before and after FAS Partner

Grade transition	Grade transition Before FAS Partner	Grade transition After FAS Partner	Difference in Grade Transition	Remarks
Grade-I to Grade-II	87.20%	93.62%	6.42%	Increased
Grade-II to Grade-III	83.77%	92.62%	8.85%	Increased
Grade-III to Grade-IV	86.85%	92.97%	6.12%	Increased
Grade-IV to Grade-V	90.00%	95.88%	5.88%	Increased
Grade-V to Grade-VI	93.88%	97.34%	3.46%	Increased

Table 3 shows the difference in Grade transition of pupil cohort from Grade-I to Grade-II, Grade-II to Grade-III, Grade-III to Grade-IV, Grade-IV to Grade-V, and Grade-V to Grade-VI before and after becoming FAS Partner. It implies that the Grade transition of pupil cohort was 87%, 84%, 87%, 90% and 94% before becoming FAS Partner, whereas after becoming FAS partner it was found to be 94%, 93%, 93%, 96% and 97% respectively. Therefore, increasing trend in Grade transition after becoming FAS partner was obvious.

Table 4
Comparison of Mean Percentage of Grade Transition

Grade Levels	FAS Partner	M	SD	df	t-value	p-value
Grade-I to II	Before	87.20	11.02	120	-3.202	.003
	After	93.63	8.30			
Grade II to III	Before	83.77	13.44	120	-3.365	.002
	After	92.63	7.17			
Grade III to IV	Before	86.86	11.17	120	-2.617	.013
	After	92.97	8.07			
Grade IV to V	Before	90.00	10.32	120	-2.947	.007
	After	95.89	4.55			
Grade V to VI	Before	93.88	11.72	120	-1.445	.161
	After	97.35	5.83			

Table 4 shows comparison of mean scores of students' grade transition before and after becoming FAS partner from grade I to grade VI. There was significant difference between before becoming FAS partner ($M = 87.20$, $SD = 11.02$) and after becoming FAS partner ($M = 93.63$, $SD = 8.30$) of students from grade I to II, $t(120) = -3.202$, $p = .003$. There was significant difference between before becoming FAS partner ($M = 83.77$, $SD = 13.44$) and after becoming FAS partner ($M = 92.63$, $SD = 7.17$) of students from grade II to III, $t(120) = -3.365$, $p = .002$. There was significant difference between before becoming FAS partner ($M = 86.86$, $SD = 11.17$) and after becoming FAS partner ($M = 92.97$, $SD = 8.07$) of students from grade III to IV, $t(120) = -2.617$, $p = .013$. There was significant difference between before becoming FAS partner ($M = 90.00$, $SD = 10.32$) and after becoming FAS partner ($M = 95.89$, $SD = 4.55$) of students from grade IV to V, $t(120) = -2.947$, $p = .007$. There was significant difference between before becoming FAS partner ($M = 93.88$, $SD = 11.72$) and after becoming FAS partner ($M = 97.35$, $SD = 5.83$) of students from grade IV to V, $t(120) = -1.445$, $p = .161$. Here the magnitude of the difference was found very small. Data depicted that a significant increasing trend was noticed in grade transition of pupil cohort from Grade-I to Grade-II, Grade-II to Grade-III, Grade-III to Grade-IV, Grade-IV to Grade-V, and Grade-V to Grade-VI after becoming FAS partner.

Table 5
Survival Rate of Schools before and after FAS Partner

FAS partner schools (n)	Survival Rate Before FAS Partner	Survival Rate After FAS Partner	Difference in Survival Rate	Remarks
121	57.25%	78.28%	21.03%	Increased

Table 5 shows that average percentage of the survival rate of the total sample before becoming FAS partner was 57.25% and after becoming FAS partner the average percentage was found to be 78.28. Therefore, the survival rate of total sample was increased by 21.03%.

Table 6
Comparison of Survival Rate of Schools before and after FAS Partner

Survival rate (n = 121)	M	SD	t-value	df	p-value
Before FAS partner	57.26	17.78	-5.619	120	.000
After FAS partner	78.29	15.64			

Table 6 shows difference in the survival rate of schools before and after becoming FAS partner. There was significant difference in scores of schools before becoming FAS partner ($M= 57.26, SD= 17.78$) and after becoming FAS partner ($M= 78.29, SD= 15.64; t (120) = -5.619, p = .000$). It is concluded that difference was found in the survival rate of schools after becoming FAS partner.

Table 7
Means and Standard Deviations of Terms of Partnership

Sr.	Terms of Partnership	M	SD
1	Financial Assistance	4.51	0.908
2	Physical Infrastructure	3.87	1.047
3	Teacher Training Program	3.91	0.841
4	Quality Assurance Test	3.71	0.926
5	Monitoring and Evaluation	4.50	0.942

Table 7 shows that financial assistance achieved highest $M=4.51 (SD = .908)$ followed by monitoring and evaluation with slight difference $M=4.50 (SD = .942)$. Similarly, remaining factors are also significant contributors as their mean scores relatively low. However, it was interpreted that financial assistance and monitoring and evaluation were the main contributing factors towards effectiveness of FAS partner schools that influencing pupil cohort.

Conclusion and Discussion

On the basis of data analysis, it is concluded that:

1. Punjab Education Foundation's FAS Program, as a mechanism, is successful in influencing pupil cohort in a positive and desired way. Besides improving the enrolment of FAS partner schools.
2. It has also improved the capacity of the said schools to retain students for a longer period of time.
3. Improved ratios of Grade transitions and Survival rate are a proof of the observation.
4. It is also conclude that by improving Enrolment, Grade transitions and Survival Rate, FAS program has remarkably improved the retention of FAS partner schools.

Hussain, Salfi, and Mahmood, (2011) referred to their study that half of the students could not complete their primary education due to drop out. The statement strengthens the findings of the present study as it was found that Survival rate of schools before becoming FAS partner was only 57% which increased 21% after becoming FAS partners. The statistics given by the (Government-of-Pakistan, 2016) indicated that highest dropout is in class one reaching to 29.4%. In Punjab, at primary level the lowest drop out is shown by class 4th i.e.18.7%. Trends depicted in the present study also related that Grade transition from Grade-I to Grade-II and Grade-IV to Grade-V was 87.2% and 90%, respectively.

Khan (2010) reported that poverty is the hurdle in the way of universalizing of primary education. It is concluded that the terms of partnership such as financial assistance provided to FAS partner schools per enrolled students per month and monitoring & evaluation of FAS partner schools were influencing on pupil cohort in improving the retention and survival rate.

Recommendations

It is recommended that more schools should be included in the FAS Program specifically underprivileged areas throughout the province at a rapid pace as there is still a large gap in improving educational standard and retention of students in our conventional schools, either in public sector or private sector. All other provincial Governments of the province i.e. Sindh, Balochistan and Khyber PK should ensure to introduce programs on the pattern of Punjab Education Foundation's FAS Program in under-developed and under-privileged rural and slum areas throughout the country as the said cost effective program has revealed its worth in imparting quality education.

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