

Investigating Secondary School Effectiveness: Peer-Teacher Relationship and Pedagogical Practices

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Abstract

The research objectives of the study were to investigate the effectiveness of public secondary schools with respect to peer-academic relationship, teacher and students' academic relationship, significance of pedagogical practices, and school plant-infrastructure for learning-supportive. Survey method was applied to collect data with the five-point Likert scale. Population of the study were 10th grade students studying in Government Municipal Corporation Secondary Schools in Rawalpindi city. Convenient sampling technique was applied to select students. The result of the Year 2007-2011 of 10th grade and enrollment trends were also analysed. The main conclusions of the study were that the enrollment rate in the public secondary schools is decreasing. It is reflected that the decreasing trends are due to the missing facilities in public schools and lack of student centered learning opportunities. Students may be involved in decision making relating to academic activities, and dialogue between students and teachers in the form of question answer may be encouraged. Teachers may be trained to assign group work activities for accelerating learning of average, mediocre and bright students that may also enhance the peer-teacher-academic relationship.

Keywords: Effectiveness, Students' perceptions, Secondary school

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Introduction

Progress and prosperity of a nation depends upon the quality of education maintained by the educational institutions of a country, and quality of education is the direct outcome of school effectiveness. Effectiveness is broadly defined that a school required certain characteristics to perform well, and also possess capability of producing desired results. It is also explained in terms of academic achievement, classroom behavior, classroom participation, attitude towards learning and well-rounded personal development (Barton, 2005). According to Brophy (2004), school effectiveness can be measured by the high attainments of the school goals. Indicators of Effective Schools (ES) are strong leadership characteristics, high expectations, friendly atmosphere and caring attitude towards peer. There are frequent complaints in the media about deteriorating standard of the quality of education in the educational institutions of the world and especially of developing countries. According to a report that the students who complete primary education only 23% can read simple words with understanding and 13% are able to write in Pakistan (Saleem, 2010). Existing scenario motivated the researcher to conduct a study to investigate the effectiveness of secondary education Institutions of Pakistan, according to the perceptions of students, because they are themselves the main stakeholders of the education system.

Several studies conducted in a variety of national and international context reported the need of collaboration and involvement of maximum stakeholders (students, teachers, parents, community members, educationists, researchers) in decisions making that may enhance the effectiveness of school program. It increases learning of students and inculcate self confidence in them (Christenson & Anderson 2002). An ES is one that promotes progress of its students in a broad range of intellectual, social and emotional outcomes, taking into account of social-economic status, family background and prior learning (Finn, 2006). According to McGaw, Piper, Banks, and Evans (1992), ES promotes positive relationships for learning, development of positive self-concept, sense of self-discipline and self-worth, promote students' living skills (becoming a productive and confident member of the adult world in time), development of the appropriate value system and the preparation of the student to the next stage of learning. According to Fredericks, Blumenfeld, Paris (2004), the indicators of ES are purposeful leadership, staff involvement, intellectually challenging teaching, work centered environment, the maximum communication between teacher and students and positive climate. The questions arise whether the Secondary Schools operating in the public sector in Pakistan are fulfilling the above mentioned demands of effectiveness.

The indicators of ES are that they have congruence between objectives and achievement, self-respect, personal and social development, citizen skills, intellectual development, employment capabilities, self-confidence and self-discipline, caring and sensitive to others, imaginative and innovative, problem solving, and leadership qualities. Ali (2006) enlisted six elements of quality and effectiveness of a school that includes reputation of a school, resource and input, process, content, output and outcomes and value added. Lockheed & Verspoor (1991) have identified various input and process determinants of educational output. These include orderly school environment, academic emphasis in the form of clearly defined learning outcomes and standards, curriculum particularly the implemented curriculum, time for learning, effective use of school time, qualified teachers and healthy children. Salomon & Nevo (2002) enlisted the effective indicators such as teacher training, improved curriculum, management system, parent and community involvement, and accountability as a major requirement. Ali (2006) analyzed the measures for Effective School Education are proper training for teachers, updated primary school kit, provision of computers, books of general knowledge and raising the number of teachers.

The measures for qualitative improvement in school education are merit based recruitment of teachers, pre-service and in-service training for teachers, provision of career structure and system of awards and incentives, introducing learner centered instruction, improving the quality and availability of text-books, capacity building of various bodies of management and supervision of education, reforms in the examination and assessment system. According to Furrer and Skinner (2003), effectiveness is dependent on people and the availability of resources. Greene, Miller, Crowson, Duke, and Akey (2004) enlisted five characteristics of ES are strong administrative leadership, high expectation for student achievement, emphasis on basic skills, safe and orderly climate that is conducive for learning and frequent evaluation of students' progress. The primary stakeholders of the educational institutions are the students of different programs who are directly influenced by the effectiveness of the institution. It is, therefore, they be asked what is their take about the effectiveness of the school in which they are studying.

Research objectives

The research objectives of the study were:

1. To explore the perception of secondary school students about the peer-academic relationship for school effectiveness
2. To examine the perception of secondary school students about the teacher-student academic relationship for school effectiveness
3. To find out the perceptions of secondary school students about the significance of pedagogical practices and school infrastructure for school effectiveness

Research question

The research question of the study was:

What were the perceptions of secondary school students about school effectiveness with reference to Peer academic relationship, Teacher- student academic relationship, Significance of pedagogical practices, School plants and infrastructure and Community effectiveness.

Research Methodology

Survey method was applied to collect data about the effectiveness of secondary school. Population of the study was 10th grade students studying in Municipal Corporation Public Secondary School in Rawalpindi city. There are 16 Municipal Corporation Secondary Schools in Rawalpindi city. The study was delimited to only male Municipal Corporation Public Secondary Schools. Convenient sampling technique was applied to select students to participate in the study. The researchers visited five schools for data collection with the consent of school authorities. Minimum 50 percent and maximum 80 percent of 10th grade students of each school participated in the study. The sample size was:

Table 1

Percentage of participation of Grade 10 students

School Name	Sample size	Percentage of the class
A	19	50 %
B	22	62%
C	15	75%
D	24	78%
E	20	68%
Total	100	

School D shared enrollment trends of the Year 2007-2011 and annual results of grade 10, while the other schools did not share this information. The school was established in 1952, got the status of Middle school in 1983 and high school in 1985. There are 55 sanctioned posts and amongst them 12 are vacant. It has got all the required facilities such as playground, clean drinking water, boundary wall, toilets, electricity and a small library. The library has been equipped with only 345 books, whereas the total number of students was 954. Students’ enrolment in the last 5 years was continuously decreasing.

Instrument of the study was Likert scale focusing on the major factors about the effectiveness of secondary school. It was consisted of 28 items divided into 5 main areas: effectiveness of peer relationship, effectiveness of teacher and student relationship, effectiveness of pedagogical process, effectiveness of school plant and infrastructure, and effectiveness of community participation. The instrument was validated by the experts and pilot tested in another school. As the result of pilot testing, some of the items of the instrument were modified. The researchers visited the school and administered the scale. The documentary analysis about the enrollment trends of the Year 2007-2011 and results of 10th grade were also analyzed. Data obtained from Likert scale, enrollment record and annual results of grade 10 were analyzed to calculate frequencies and percentages.

Analysis of data

Quantitative data were collected from the students by using Likert scale. The School was visited to check enrolment trends and annual results of grade 10 of the Year 2007-2011 were also analyzed to check the progress trends. The data are presented in the following tables:

Table 2

Effectiveness of peer relationship

Items	SA	A	UD	DA	SDA
I feel happy when I miss my school.	46	36	07	06	5
I enjoy spending time with my class fellows at school.	36	08	26	16	14
I like to share my secrets with my friends	26	12	36	20	06
My friends care for my likes	28	14	26	22	10
My friends help me in solving academic problems	18	08	08	32	34

Table 3

Effectiveness of teacher-student relationship

Items	SA	A	UD	DA	SDA
I enjoy spending time with my teachers at school	12	18	10	48	12
My teachers respond my questions politely	22	12	26	26	14
My teachers always care for my likes	18	12	26	20	24
My teachers appreciate me when I do something good	32	16	12	24	16
My teachers give importance to my opinions and ideas.	11	11	14	42	22

Table 4
Effectiveness of Pedagogical Process

Items	SA	A	UD	DA	SDA
Our classroom lessons are very interesting at school.	10	14	12	42	22
My teachers follow techniques of teaching by doing	06	08	16	46	24
My teachers also assign group work in teaching lessons	16	10	26	26	22
My teachers motivate us by telling story/showing pictures before starting lesson	12	08	18	24	36
My teachers consult us for taking classroom decision	11	11	14	42	22
My teachers relate the lessons with day to day problems of life.	14	12	17	38	19
Our teacher use A.V aids for teaching lessons.	12	08	18	41	21

Table 5
Effectiveness of School Plant and infrastructure

Items	SA	A	UD	DA	SDA
Our class rooms are airy	22	32	10	24	12
Our seats are comfortable to sit and write for lesson work	12	20	16	38	14
There is clean washroom in our school.	05	11	16	42	26
Fresh and pure water is available to drink in our school	12	17	14	39	18
There is play ground to play games in school	38	32	0	14	16

Table 6
Community Effectiveness

Items	SA	A	UD	DA	SDA
My parents visit school to know my progress.	16	26	12	34	12
My parents help teachers in solving school problems	08	14	26	38	14
Community cooperate to solve school problems	05	11	24	36	24

Table 7
Analyses of the Enrolment Trends at grade 10 in Science and Arts

Year	Group	Strength	Percentage	Total strength
2007	Science	56	74	76
	Arts	20	26	
2008	Science	56	64	88
	Arts	32	36	
2009	Science	37	72	51
	Arts	14	28	
2010	Science	35	66	53
	Arts	18	34	
2011	Science	46	70	66
	Arts	20	30	

Table 8*Analyses of the results at grade 10 in Science and Arts groups*

Year	Group	Appeared	Pass	Fail	Percentage
2007	Science	56	39	17	69.64%
	Arts	20	12	07	65.00%
	Total	76	52	24	68.42%
2008	Science	56	41	15	73.21%
	Arts	32	19	13	59.37%
	Total	88	60	28	68.18%
2009	Science	37	28	09	75.67%
	Arts	14	09	05	64.28%
	Total	51	37	14	72.55%
2010	Science	35	28	07	80.00%
	Arts	18	11	07	61.11%
	Total	53	39	14	73.58%
2011	Science	46	38	08	82.60%
	Arts	20	12	08	60.00%
	Total	66	40	16	78.78%

Major findings of the study

Effective peer relationship has significant effects on learning. It may enhance learning of students having mixed abilities by supporting, guiding and facilitating to one another. Lack of intimacy and existence of rivalry and grouping negatively affects the teaching learning process. The key findings of effective peer relationship are:

1. The majority of students viewed that “they feel happy and relaxed when they do not attend school”. 46 percent were strongly agreed and 36 percent were agreed to the statement.
2. Only 44 percent of students enjoyed spending time with their peer amongst the given sample. 56 percent did not enjoy spending time with peer.
3. 62 percent students of the given sample did not enjoy intimacy with their peer and did not share their secrets and heart feelings with each other.
4. Only 42 percent of the respondents viewed that their friends care for their likes and 58 percent were not in favour of the statement.
5. 74 percent viewed that their friend did not provide any type of support and guidance in solving academic problems in school.

Effectiveness of the teacher-student relationship has also significant effects on students' learning. Students feel ease to share, discuss and comment on the learning. The key findings of the teacher-student relationship are:

6. 60 percent of students viewed that they did not enjoy spending time with their teachers.
7. Only 34 percent students viewed that their “teacher politely respond to the questions asked in learning”.
8. 70 percent students think that their teachers did not care and give consideration to their likings and priorities.
9. Only 48 percent students viewed that their teacher “appreciate and recognize when they do something good in the class”. 52 percent of the students were not in favour of the statement.
10. Only 22 percent students viewed that their teachers give importance to their opinions and suggestions to address the academic activities. 78 percent of the students were not in favour of the statement.

Effective peer and student-teacher relationship build the ground for experimenting innovative and student centered pedagogical practices. Key findings related to effective pedagogical practices are:

11. 24 percent students viewed that our “classroom lessons are interesting” and 76 percent students were not in favour of the statement.
12. 86 percent students viewed that Student Centered Teaching Approaches were not practiced in our classroom for learning. Only 14 percent of the students were in favour of the statement.
13. Group work/pair work activities were rarely practiced in classroom teaching. Only 26 percent students were in favour of the statement and 84 percent were against it.
14. Lesson opening was engaging for only 20 percent of the students whereas 80 percent viewed that their teacher usually did not begin the lesson by telling a story, showing a picture that may engage the students.
15. Students were by and large not consulted for classroom decision about the academic activities. Only 22 percent were in favour of the statement and 88 percent were against it.
16. 26 percent students viewed that teacher relate learning to real life situation whereas 84 percent were against the statement.
17. Only 20 percent students viewed that our teacher use A.V aids in teaching. 80 percent were not in favour of the statement.

Operational school plant and infrastructure are significant factors for the success of teaching learning process. The key findings about the effective school plant and building are:

18. 54 percent students viewed that our classrooms are comfortable and airy. 46 percent were not in favour of the statement.
19. 68 percent students viewed that furniture in the classroom is not comfortable and appropriate to study and perform writing tasks.
20. 84 percent viewed that washrooms are not usually clean and in working position in the classroom. Only 16 percent were in favour of the statement.
21. 71 percent students viewed that fresh and clean water is not available to drink.

The role of community participation is important to support schools to achieve their learning targets. The community may contribute in academic, administrative and financial activities of the school. The key findings related to the role of the community are:

22. 58 percent students viewed that their parents do not visit schools to check the academic progress. 42 percent of the students were in favour of the statement.
23. 78 percent students viewed that there was absence of the role of parents in solving academic problems and any type of participation in academic activities of school.

Key findings about enrollment trends and about the school results are:

24. Rate of enrolment in public secondary school is decreasing. It was found less than 76 in the session 2009, 2010 and 2011. It is revealed that people have lost confidence in public sector institutions and students are switching to private sector institutions.
25. The analysis indicated that the results of the Arts and Science groups were continuously increasing. The pass percentage was increased from 68% to 78 %. However, the result of the Arts group indicates decreasing trend. It was found 65% in the session 2007 whereas it was 60 % in the session 2011. The result of the Science group indicates an increasing trend. It was found 69% in the session 2007 whereas it was 82 % in the session 2011.

Discussion

The results of the study indicate that the majority of the students studying in grade 10 do not enjoy effective peer relationship. Lack of effective peer relationship not only affects the academic performance of the students, but also becomes the cause of students' rivalries and grouping. It may also provide opportunities to be engaged in certain negative activities that has serious repercussion for their moral development. It is also inferred that school climate does not provide them opportunities for working in cooperative and collaborative ways. Social-emotional factors such as the quality of peer relationships, social competence and socially responsive behaviors impact academic success (Appleton,

Christenson, & Furlong, 2008). Peer acceptance in some way raises the level of students' interest in school and openly affects students' emotional well-being. It is believed that perceived support and perceptions of peer influence academic motivation and success. More particularly, Appleton, Christenson, Kim, and Reschly (2006) demonstrated that young adolescents who had friends at school showed higher levels of academic achievement and pro-social behaviors, and less emotional distress than students without reciprocating friendships. McGaw, Piper, Banks & Evans (1992) found that students, who were bullied by their peers at school, tended to report lower levels of self-esteem, feel less connected to their peers, teachers, and school, and were less motivated to perform well at school.

The results also revealed that learning is dominated by teacher centered approaches and the teachers are overwhelmed to cover the syllabus within the prescribed time schedule and have no time to initiate group/pair work activities that needs longer time. Classroom space also does not allow them to practice students centered learning activities that may engage and involve the learner in learning. It is also reflected that the teachers are not trained to provide practice of the group work activities in the classroom. The majority of the teachers do not motivate students before presenting new learning material in the classroom in the form of telling story or any other group activity. They do not feel competent enough to relate learning with day to day matters of the students. Consequently, learning process runs in a tight jacket under the command of authoritative teacher. Transformation of learning as an enjoyable, democratic and performing activity is almost missing. The study conducted by Scheerens, (2000) also confirmed the results that when students perceive their teachers as supportive; disruptive behavior decreases and students' perception of successful interactions with their teachers increases. A positive classroom environment, that is, a classroom in which students feel supported and in which order is maintained, tends to lend itself to higher academic accomplishments among the students. Teachers who support their students academically and emotionally, who are friendly toward them, and who help to build cooperation among them tend to elicit higher academic functioning from their students (Dochy, Segers, & Sluijsmans (1999). Saleem (2010) suggested that a positive relationship between students and teachers improves students' attitudes about school and increases their desire to learn.

Physical development plays an important role in mental development because a sound body has a sound mind. The school administration is required to operationalize the existing washroom facilities and manage clean drinking water for students. Community plays an effective role in school matters. They positively contribute to the effectiveness of a school. There is a blockade between school and community in respect to its role in academic, administrative, financial and logistic support. A visit of the parents to get update about their wards' progress is rare. The results of the study were also validated by

Adediwura, Alaba, Oluwatosin & Ajeigbe (2003), that, positive school environment is a significant factor in determining students' sense of belonging and satisfaction. It is thus, expected that students who feel connected with the school are more motivated to achieve academically and less motivated to engage in anti-social behavior than students who feel disconnected from it.

Conclusions

It is concluded that the enrollment rate in public secondary schools is going down. We can address the decreasing trend of public sector institutions if we improve the effectiveness of schools by providing basic facilities such as library, language lab., computer lab., clean drinking water, neat and clean toilets, playground, airy classrooms with comfortable seating arrangements. The collaboration and involvement of maximum stakeholders such as parents, community, educational experts, and philanthropic organizations may be ensured to improve the effectiveness of public sector institutions. It is also concluded that the effectiveness of peer relationship enhances learning of students at school. They may be involved in taking decisions about school matters. Their opinions may be respected and given weight age in taking decisions so that the students may feel happy to spend their time at school. School may provide them opportunities to work cooperatively in school and enjoy learning activities with their peer.

The dialogue between students and teachers in the form question answer may be encouraged and facilitated for effective relationship and quality education. Students do not feel any type of frustration and boredom in the company of their teachers so that they may share their problems with them. It is also concluded that the teachers do not assign group work activities to students. Group work activities promote learning of different ability groups of students. The average, mediocre and bright students are benefiting from one another. Therefore, the teachers may be trained to conduct learning process in the mode of group work activities.

Recommendations

Holistic development is suggested to be the top most focus of school that may promote effective peer and also student-teacher relationship. For this purpose, cooperative and collaborative learning approaches are suggested to be designed that may provide opportunities for students to work in a team. Teacher may facilitate and encourage group work activities that enhance dependence in learning of students on one another.

School leadership may take measures to facilitate community input and engagement in academic, administrative and financial matters of school for its optimum effectiveness. Looking to Government for the provision of each and every need of school may not be possible because of increasing secondary school population in Pakistan.

Self-directed learning pedagogies with the support of ICT is recommended to be practiced that may enable the learner to take control of the learning by themselves; and it may also enhance pedagogical effectiveness by considering the opinions of learners in academic decision.

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