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# Teacher Effectiveness and Student Achievement in the Smart School Hyderabad

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#### **Abstract**

The study aimed to identify the role of effective teacher on student's achievement in school, how teachers teaching can be effective and what are the qualities of effective teachers and how it can affect students learning. This study was conducted in Virtual university of Pakistan in Hyderabad campus, total of 266 respondents were selected to collect data from the school "the smart school" Hyderabad from three different campuses of the school randomly from class 7, 8, 9 and 10 The main research of the study was on the teacher's effective teaching and its effect of student's achievements, the researcher used a 5 points grading questionnaire paper in which 1: strongly disagree, 2: disagree, 3: neutral, 4: agree and 5: strongly agree was used in order to know the relationship between the variables. This research highlights the main theories and facts of effective teachers teaching, what teachers should adopt, how teachers can influence and keep students motivated towards learning and what are the effect of effective teachers on students achievement, in their learning and grades.

Key Words: Effect of effective teachers, Achievement, Life satisfaction

#### 1 Introduction

Role of an effective teacher is to facilitate his/her students learning, effective teacher is the one who maintains the nonthreatening environment in classroom and use different teaching methods as teaching strategies to keep students more motivated and learning interesting, few examples are group work and classroom discussions. Effective teaching is more than just the successful transference of knowledge and skill or application around a particular topic. Effective teaching ensures that this surface approach to learning is replaced by deeper, student driven approaches to learning that analyze, develop, create and demonstrate understanding, teachers have been known to have important influence on students' academic achievement and they also play a crucial role in educational attainment because the teacher is ultimately responsible for translating educational policies and principles into actions based on practice during interaction with the students. Effective teacher is the one who quite frequently makes it possible for learners to learn well, many research studies have been carried out about both the conditions that affect learning, the teacher's personal characteristics or classroom activities show that there is little agreement among researches on the field of education about the qualities of an effective teacher. Researches also show that effective teachers are the most important factor contributing to student achievement. The best way to assess teachers' effectiveness is to look at their on-thejob performance, including what they do in the classroom and how much progress their students make on achievement tests, although curricula, reduced class size, district funding,

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family and community involvement all contribute to school improvement and student achievement, the most influential factor is the teacher. Choosing effective teachers is critically important for schools trying to improve their performance. Teacher's effective teachings are the main thing behind student's progress in class, in school and academically, teachers may be evaluated by student's achievement.

Walls (1999), described few important factors of effective teachers should have the "Four Aces of Effective Teaching" summarize the most prevalent recommendations from the teaching-effectiveness research literature. They are the strongest links between what teachers can do and the learning that students achieve. The Four Aces represent a consolidated way of thinking about the "process" of teaching as it influences the "product" (student learning). You may think of them as catalysts for learning. Student learning is better, faster, and/or more long-lasting when teachers are able to play the Four Aces. The Four Aces of Effective Teaching are summarized.

The first Ace of Effective Teaching concerns the utilization of an outcomes-based instructional orientation. Outcomes enable students to focus their attention on clear learning goals. These eight outcomes inform students of where they are going and how they will get there. Outcomes also provide the teacher with a framework for designing and delivering the course content. Furthermore, outcomes enable teachers to assess student learning as a measure of their own instructional effectiveness. More effective teachers use designated outcomes as a basis for the establishment of curricular alignment. Curricular alignment is the degree to which the employed instructional methods and assessment techniques enable the student to acquire and/or demonstrate the desired outcomes.

The second Ace of Effective Teaching involves the clarity of instruction, most effective teachers typically provide students with highly explicit directions and explanations concerning the course organization and content. When delivering instruction, nothing should be left to chance. If students are not meeting your expectations, your methods of delivery may lack the required degree of clarity. When a teacher tells, shows, and makes the message available from alternate perspectives to alternate senses, that teacher is engaged in effective instructional practice. Additionally, the course should be structured in a way that affords students the opportunity to make connections between the new material that is being presented and the concepts that they have already learned. This instructional strategy is referred to as curricular scaffolding. When a teacher helps students connect new information with what they already know, the teacher is assisting these students in accurate organization of information.

The third Ace of Effective Teaching is engagement; this principle suggests that students learn by doing. The formal lecture represents an archaic model defined by instructor as deliverer and student as receiver. This model exemplifies one-way communication and perpetuates an incomplete model of education. Accordingly, teachers must create a dynamic, educational environment that affords students the opportunity to practice every concept that they are learning. More effective teachers utilize instructional strategies that engage students repeatedly throughout the entire lesson. This engagement should begin early in the lesson and continue throughout the lesson introduction, body, and closure. Furthermore, these engagement activities are intended to facilitate the development of the knowledge, skills, and attitudes that will enable the student to accomplish the previously identified lesson outcomes. This type of curricular alignment is a critical component of an effective, student-centered learning environment.

The fourth Ace of Effective Teaching is enthusiasm. As straightforward as it may seem, "if you hate to teach it, your students will hate to learn it." Conversely, if you love to teach it, your students may very well love to learn it. Enthusiasm is contagious. More effective teachers display a high level of enthusiasm that reflects their professional competence and confidence. These characteristics are derived from the individual teacher's subject matter knowledge and instructional experience. Teachers can begin to establish a positive learning environment by showing their passion for the subject matter, using student names, reinforcing student participation during class, and being active in moving among the students. The most critical component for fostering classroom enthusiasm, however, is student success. Accordingly, it is the teacher's responsibility to establish a classroom environment that allows for a high degree of student achievement. Ultimately, high levels of student achievement serve as a powerful motivator for both student and teacher.

## 1.1 Objectives of the Study

- 1. To explore the role of effective teacher in class.
- 2. To explore the components of effective teacher.
- 3. To find out the relationship between effective teacher and student's achievement at elementary and secondary level.
- 4. To find out the differences in effective teacher and student's achievement on basis of demographic variables.

## 2 Literature Review

When we talk about teaching effectiveness, it's usually in the context of evaluation. Effective teachers have strong personalities, they have command respect, and they are intelligent, full of confidence, positive, enthusiastic, friendly and genuinely care for their students. Reynolds in 2010, studied the effect of Effective Teaching and wrote a book on: Evidence and Practice, stated in his book; the characteristics of effective teaching that effective teachers have active teaching that takes curriculum content to children's, high levels and quality of questioning, good time management and frequent feedback.

Defining effective teaching is of course problematic. Ideally, we might define effective teaching as that which leads to high achievement by students in valued outcomes, other things being equal. We acknowledge that available assessments – and particularly those that have been used for high-stakes accountability or in existing research studies – may not fully capture the range of the outcomes that we might specify as desirable aims for education (Muijs, 2014). Many researches on the qualities of effective teachers has been conducted, (Langer, 2000) according to the results of these researches; effective teachers should take close care of their students, treat them fairly (Campbell, 1999), establish positive interaction with students (Brookhart & Loadman, 1992), be enthusiastic in educational activities (Rowan et al., 1997), be skilled in classroom management (Molnar, 1999), pay more attention towards teaching (Cawelti, 2004), have high expectations of him/herself and students (Cotton, 2000).

According to Bayrak (2003, p. 196) the concept of effective teacher is different from the concept of good teacher, because "a good teacher can seldom be effective while an effective teacher is always good".

The factors that have been shown to influence student achievement can be categorized into three: school-related factors, student-related factors, and teacher related factors. Among these three, teacher-related factors, especially teacher quality, have generated

a great deal of attention (Dossett, 2003). Goldhaber (2004) in his study have mentioned the study on us department of education in which he mentioned that: The U.S. Department of Education has recognized that the most important factor contributing to poor student achievement may be unqualified teachers. The NCLB Act states that "every child in America deserves a high-quality teacher" and "States will be accountable for ensuring that all children are taught by effective teachers" by the end of 2005-2006 school year.

The main purpose of this study is to identify the role of effective teacher on student's achievement in school, how teachers teaching can be effective and what are the qualities of effective teachers and how it can affect students learning. The study involves observation of teachers teaching and student's academic results to know the effectiveness of teachers teaching. The teacher whose teaching is effective show more positive impact on students learning and in their academic results and these students perform better in class and in school. Effective teachers have strong personalities, they have command respect, and they are intelligent, full of confidence, positive, enthusiastic, friendly and genuinely care for their students. This report shows how teacher can be effective? How it will affect students learning and achievements? What are the qualities of Effective teachers?

## 3 Research Methodology and Data

## 3.1 Research Methodology

The study was designed to determine the teaching effectiveness, teaching qualities of teachers and their effect on student's achievement. A descriptive survey design was used to collect data from students. The first objective of the study was to know the role of effective teacher, second objective was to know the components of effective teachers and third is to know the qualities of effective teacher and fourth is to know the relationship between teachers effective teaching and students achievement.

## 3.2 Sampling Strategy

The present quantitative research is taken to collect the data by simple random sampling technique, data is collected from students to know teachers effective teaching and their effect on student's achievement. The population for this study consisted of selected branches of secondary school "The Smart School" TSS Hyderabad. Total of 266 students were selected from 3 different branches of school. Total of 266 students were selected randomly from grade 7 to 10 of 3 campuses of TSS, total of 100 students from grade 7, 110 from grade 8, 30 from grade 9 and 26 from grade 10.

- 1. Fatima Nawaz campus
- 2. Askari campus
- 3. G.O.R campus

#### 3.3 Measurement Scale

In this survey research, an instrument was designed though focus group discussion. A pool of items was generated. Finally, 38 items that were tapping the variables properly selected to collect data of student's grade and percentage and what they think or describe about their teachers. The responses utilized were 1: strongly disagree, 2: disagree, 3: neutral, 4: agree, 5: strongly agree. To gather demographic variables of respondents we collected the data on the basis of gender, age, percentage, class, last grade, mother tongue and locality of students.

#### 4 Results and Discussion

The main objective of study was to speculate the teaching effectiveness, teaching qualities of teachers and their effect on student's achievement. Descriptive analysis of demographic variables was carried out along on the current sample. Besides, t-test analysis was run to test main hypothesis in the study. The results are given below.

Table 1
Students Demographic Data (N-266)

Demographic	Type	Frequency	Percentage
Variable			
	Male	126	47.4
Gender	Female	140	52.6
	Total	266	100.0
	10-12	57	21.4
	12-14	13	51.5
Age	14-16	72	27.1
	Total	266	100.0
	7	100	37.6
Class	8	110	41.4
	9	30	11.3
	10	26	9.8
	Total	266	100.0
	A+	36	13.5
	A	106	39.8
Last grade			
achieved			

The table 1 showed the gender of respondents, the table showed that there were 126 male respondents and 140 were female respondents. The age of the respondents was divided into categories of the age range from 10 to 12 year showing frequency of 21.4% and the category of the age 12 to 14 years was showing frequency of 51.5% and the category of age 14 to 16 years was showing frequency of 27.1%, 4 classes were selected as shown in table 37.6% respondents from class 7, 41.4% from class 8, 11.3% from class 9 and 9.8% from class 10. Last grades of respondents were 13.5% got A+, 39.8% got A, 40.6% got B+, 4.5% got B and 1.5% got C, Percentage in above table showed that 13.9% respondents were above 90%, 39.8% were between 80 to 90%, 14.2% were between 70 to 80%, 4.5% respondents were between 60 to 70% and 1.4% were between 50 to 60%. Mother tongue of the respondents was divided into 4 categories in which majority were Sindhi 50%, 14.7% Punjabi, 32.3% Urdu and only 3% Siraiki. Locality was divided into two urban and rural majority were from rural 159 respondents and 107 respondents from urban.

Table 2
Independent sample t-test on the teacher effectiveness in terms of gender

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Variable	Categories	M	Sd	Df	T	P
Gender	Male					
		4.3500	.49254			
				264	-1.789	.078
	Female	4.4476	.4.4476			

Table showed that the p value of gender table is .078 the p value is greater than .05, so there is no significant gender difference found in the analysis.

Table 3
Independent sample t-test on the teacher effectiveness in terms of locality

Variable	Categories	M	Sd	Df	T	P
Locality	Urban	4.3716	.46493			
Locality	Rural	4.4456	.41351	264	-1.331	.079

Table showed the p value is .079 which is greater than .05, so there is no significant difference in terms of urban and rural locality.

Table 4
One Way Analysis of Variance of scores on the teacher effectiveness with respect to different age groups

	Sum of Squares	M	Df	f	p
Between groups	3.430		2		
	49.199	1.715	263	9.167	.000
Within groups		.187	265	,,,,,	
Total	52.629				

The p value of age is .000. There was significant mean difference on the analysis of ANOVA table in age to further explore the difference between age variable post hoc tukey was used.

Table 5
Post HOC Test of Tukey on Age

Variable (I)	Variable (J)	Mean differences	p
	10-12	.32	.000
14-16	12-14	.32	.015

On further investigating the significance difference by applying post HOC Tukey analysis it was found that the difference in the age categories of 14-16 with10-12 mean difference was .32 and it was significant at the .00 value and the difference between 14- 16 with 12-14 mean difference was at .18 and was significant at the 0.15.

Table 6
One Way Analysis of Variance of scores on the teacher effectiveness with respect to different classes

	Sum of	M	DC	C	
Daturan	Squares	M	Df	Ĵ	p
Between	4.636		3		
groups	47.000	1.545	262		
Within groups	47.993	102		8.437	.000
<b>C</b> 1	52.629	.183	265		
Total	32.029				

The p value of class was .000. There was significant mean difference found on the analysis of ANOVA in class, to further explore the difference between classes post HOC tukey was used.

Table 7

Post HOC Test of Tukey on class

Variable (I)	Variable (J)	Mean differences	p	
	7	.38	.001	
10				
	8	.17	.296	
	9	.08	.918	

On exploring the significance difference by applying pot HOC tukey analysis it was found that the difference of class 10 with 7 the mean difference was .38 and the difference with class 8 mean difference was .17 and with class 9 the mean difference is .08.

Table 8
One Way Analysis of Variance of scores on the teacher effectiveness with respect to Last grades

	Sum	of			
	Squares	M	Df	f	p
Between	6.298		4		
groups	46.331	1.575	261	8.870	.000
Within groups		.178	265	0.070	.000
Total	52.629		200		

The p value of grades was.000. There was significant mean difference on the analysis of ANOVA in last grade; to further explore the difference between the last grades post HOC Tukey was used.

Table 9

Post HOC Test of Tukey on Last grades

Variable (I)	Variable (J)	Mean differences	p
	A+	77	.006
C	A	78	.003
	B+	65	.022
	В	17	.958

On exploring the significance difference by applying pot HOC tukey analysis it was found that the difference of last grade with C with A+ mean difference was -.77, C with A mean difference is -.78, last grade c with B+ mean difference is -.65, last grade C with B mean difference is -.17.

Table 10
One Way Analysis of Variance of scores on the teacher effectiveness with respect to Mother tongue

respect to mot	iter tongue				
	Sum		Dr		<u>.</u>
	of Squares	M	Df	f	p
Between	.578		3		_
groups	.570	100			
	52.051	.193	262	070	407
Within groups	32.031			.970	.407
William Bromps		.199	265		
TD + 1	52.629		203		
Total					

The p value is .407 which is higher than 0.05, mother tongue mean is insignificant.

#### 5 Conclusion

The purpose of this study was to identify the factors of effective teaching and their effect on their student's achievement. The study was conducted using primary data. The data was collected from randomly selected 266 respondents which include both male and female students of grade 7, 8 9 and 10 from The Smart School Hyderabad. The variables that have been identified are gender, locality, age, percentage last grade, mother tongue and class of respondents. It is also identified that majority of respondents were from rural and majority were female and most of the respondents grade percentage was above 80%, which means there teachers teaching was effective and had positive effect on respondents academic achievement, teachers teaching quality and ways effect on students leaning outcomes because teacher is the one who maintains the studying atmosphere and keep students motivated towards learning, and this study result tells us that teachers teaching show direct effect on students achievement in academic.

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