

## Impact of Teacher's Ability, Student's Work Ethics and Institutional Environment on Student Performance of University of Gujrat

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**Abstract:** This study is aimed to investigate the impact of teacher's ability, student's work ethics and institutional environment on performance of students in University of Gujrat. Student's performance at university level majorly depends upon the effort of the student. Yet there are certain determinants that are of importance. University of Gujrat is a newer university with 8 years of history. The findings of the study will help determine the factors that are playing major role in the performance of the students. Subsequently those would be given importance to enhance student's performance in universities in general and in University of Gujrat in particular.

**Key words:** Teacher's ability • Student's Work Ethics • Institutional Environment • Student Performance • University of Gujrat • Pakistan

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### INTRODUCTION

Determinants of students performance has been a widely discussed topic in research studies for many years. Due to its various implications this issue gained the attention of institutions, teachers and policy makers. Knowing the determinants of students' performance can help teachers to modify teaching methods and institutes to allocate their resources accordingly. It could help policy makers to plan and implement strategies to increase efficiency of education as education plays an important role in increasing individual productivity as well as economic growth.

A great deal of research exists on exploring determinants of students' performance in developed as well as developing countries. Earlier studies focused on endogenous factors to be important for students' performance. Students' characteristics that are believed to have a strong impact on their performance are gender [1], ethnicity [2-5], students' aptitude, attendance [6, 7], hard work and past performance etc [8-10]. While many recent studies focused on some external factors to be important for students' performance like teachers' quality, school resources, class size, family background etc. [11]. This study focuses on relationship between institutional environment, student's work ethics, teacher's abilities and student's performance.

Among all exogenous characteristics teachers' abilities commonly seem to be most affecting. Teachers are generally perceived to play a vital role in students' achievement by institute administration, parents and students themselves. Teachers' characteristics directly affect students' learning behavior. Effective teaching helps to develop a deep approach to study (conceptual learning) resulting in better learning outcomes whereas improper approach of teaching encourages surface learning in which student only attempt to memorize the content [12, 13]. Students following deep approach tend to show better academic achievements. In addition to improving students learning behavior and satisfaction, effective teaching has a direct and strong impact in increasing students' quantitative academic outcomes [14-16]. Hence improving teacher quality can be used as a tool in increasing students' achievements [17].

Earlier studies investigating the relationship between teachers' abilities and students' performance mostly used only teachers' qualification as a proxy for teacher's abilities.

This may be a possible explanation for some of these studies finding a weak or no evidence of any impact of teachers' abilities on students' performance. As these results were quite contrary to the general perceptions about teachers' abilities, researchers in the later years used many diverse characteristics to access teachers'

abilities which proved to be statistically significant in improving students' performance. Teachers' characteristics influencing students' achievement include teachers' qualification [17, 20], teachers' experience [17], teachers' training [18, 19], teaching style or approach [3], commitment to subjects and attitude towards students [12], teaching material etc [19].

Many research studies point out "academic environment" to affect students' learning behavior and their academic achievement. Some researchers focused on physical environment to affect students' performance while others have emphasized the importance of psychological or social environment on students' performance. Physical environment refers to an institute's resources including infrastructure, physical equipments, teaching aids, class size, internet facilities and libraries etc. [21, 22]. Other factors that are considered critical to students' health and safety include day lighting, ventilation, cleanliness and temperature and noise control. Institutes with such facilities provides comfort and better understanding of courses hence affecting their learning and ultimate achievement.

Psychological or social environment refers to the interaction between students and their teachers as well as peers. An interactive environment encourages participation and discussion of the students in the course and enhances their creative skills. An environment in which students are appreciated to ask questions, given the freedom to choose tasks, supported for unusual ideas, taught to learn from failures and encouraged to participate in decision making process enhances their creative skills [23]. Such a creative environment enhances leaning and students' achievement. Creativity is found to be significantly related to students' performance in many research studies [24].

The impact of student's work ethics on students' performance is a newer concept. Work ethics refers to the moral behavior of viewing work as a desirable activity rather than a burden. Individuals with strong work ethics are strongly committed to their work and feel more satisfaction in the work than their peers [25]. They value that they are being given the opportunity to work and put all their energy and work more hours to complete task [25]. Organizations nowadays have realized the significance of work ethics and some have started training programs to develop work habits of people. This leads to creativity, hard work, commitment and competition among individuals resulting in better performance [26-28].

Institutes are now focusing to develop strong work ethics in their students to help them improve their

academic achievement and perform better in professional life. The relationship between study effort and students' performance seems natural and is widely accepted. However study effort is now viewed as an outcome of academic activity. Students with a strong work ethics prefer work over other activities. They develop a habit of studying on daily basis even on weekends [29]. As their work has become their goal, students tend to work hard and long hours to achieve that goal. They become more dedicated, responsible and focused. Hence having strong work ethics can help students in increasing qualitative (working behavior) and quantitative (higher grades) academic achievements.

**Literature Review:** Darling-Hammond with his co researchers studied the impact of teacher quality on students' performance and concluded that teacher quality contributes in academic achievement [14]. In another study Darling-Hammond and Sykes pointed teachers' communication skills, knowledge of the subject, teaching approaches and adaptability of teaching method according to students' needs as important components of teacher quality [30]. Wiseman and Brown concluded that teacher's qualification has a positive impact on students' performance [20]. Student tendency of achieving higher grades increases with the increasing level of their teachers' qualification.

Teaching approach is related to students' selection of study approach [13]. Ramsden studied the impact of different teaching approaches on students' learning behavior [12]. He concluded that effective teaching attained through higher commitment and positive attitude develops deep approach of study among students. Whereas improper teaching approach leads students to opt surface learning and they tend to memorize and reproduce the content.

Fuchs and Wößmann examined the impact of teachers' education on students' performance and found a positive and significant relationship between teacher's level of education and students' performance [31]. Shaftel in his study included competence of teacher as an exogenous factor and found that effective teaching improves student attitudes and performance [32]. Engin-Demir in his study about Turkish urban poor explored the factor affecting academic achievement [21]. He concluded that students' perception about teachers' attitude towards them has a significant impact on their academic achievement. He suggested that teachers should be trained in a way that they develop an attitude of working successfully with economically disadvantaged students.

Volkwein and Strauss concluded that teachers' attitude of preparing their lectures well and design such assignments that students consider significant for them is considered to be most influential in determining students' achievement [33]. Pascarella and Terenzini summarized teacher characteristics important for students achievement include teacher's knowledge of subject matter, enthusiasm and interaction with students, giving timely and supportive feedback to students, encouraging them for discussion and having high expectations from their students etc [34]. Teachers' evaluations and teaching material also have a significant and positive impact on student achievement. Voss and Gruber conducted a study to explore teachers' characteristics that students desire and underlying benefits they seek; at a renowned German university using laddering method (A data collection technique in which respondents are asked to produce ladders or give answers in such a sequence that they reflect growing levels of abstraction) [35]. The results revealed that students value teachers' knowledge, approach, attitude and enthusiasm, adaptability to students' needs and communications skills. Students want quality teaching to pass tests and help them in their professional life. They are mainly concerned about professional aspect of their courses.

Besides these studies describing teacher characteristics to be vital to student performance, there exists a body of literature finding no evidence of a significant relationship between teacher characteristics and students performance. Hanushek provided an accounting of 147 studies on the determinants of students' performance that found no evidence of having a significant impact of teacher qualification and experience on student performance [36]. Most of these studies concluded that individual characteristics and family traits explain much of the variation in students' performance whereas teachers' degree level and experience are found to be relatively unimportant.

There is a weak relationship between school variables including teacher qualification and student achievement [37] and regarded these results to be consistent with many previous studies that have formed the impression that higher teacher qualification doesn't matter a lot. Rivkin, Hanushek, and Kain in their study found no evidence that teacher qualification measured in terms of master's degree increases teacher effectiveness [38]. Kane, Rockoff, and Staiger also found that higher teacher qualification and training has not been proved to make a consistent difference when these characteristics are assessed against students' gains [39].

Bowers and Burkett studied the effect of the environment on students' performance and discovered significant relationship between physical environment of school and Students' performance [40]. Performance of students was significantly better in newer school building as compared to schools having older facilities. Parents' involvement influences the infrastructure of schools which in turn affects students' achievement. There exists a positive relationship between school environment and student performance [41] suggesting making investment to improve physical environment of schools can result in better students' performance. Oates in a study of different school resources and student performance found that building age is considered to be the most significant to students' achievement [42].

Darling-Hammond and Snyder found that a reduction in class size (student-teacher ratio) contributes to student learning [43]. Changes in teaching environments may affect students' qualitative outcomes (learning behavior) and academic achievement in terms of grades [16]. There is significant impact of better equipment and teaching material on students' achievement [31]. Class size has a little impact on students' achievement [38]. School characteristics i.e. teacher-student ratio and school resources e.g. physical equipment and teaching aids have a significant effect on the academic achievement [21].

A recent study provided a review of literature to discuss the relationship between class room facilities and student performance in Malaysia [44]. The study concluded that poor physical environment adversely affect students' attendance and learning and also affect teachers' effectiveness on the other hand which in turn affect students performance.

Karemera and his colleagues examined the determinants of student performance at university level [45]. Apart from traditional variables of students' effort, the study included several background related and environmental variables. The study concluded that academic environment and facilities including satisfaction with academic climate, library services and interactive class environment and out of class experiences have a significant impact on students' performance.

Douglas and his co-researcher conducted a study to measure students' satisfaction in Faculty of Business and Law of Liverpool John Moores University [46]. This study used service-product bundle which categorized university resources and services into three elements: physical resources including infrastructure and teaching material,

explicit services comprising of teaching quality, work load, the extent of course complexity etc. implicit services consist of students perception of the friendliness of environment, respect for students' opinions, the degree to which lectures convey a sense of professionalism, staff competence and satisfaction of evaluation systems. The study concluded that physical resources are important when students have to choose a university and when they are in the institute, services related to learning and teaching i.e. faculty competence and teaching material become important. An interactive environment enhances creative skill of students which has a significant impact on students' performance.

Contrary to the vast body of literature considering school resources and environment to be very effective in determining student performance, there are a few research studies that found a little or insignificant impact of school quality on student's performance. Hanushek in his study reviewed almost 400 studies of student performance and concluded that after controlling variations in family characteristics, there is not a strong relationship between school quality and student performance [47, 49].

Rau and Durand examined the impact of academic ethics on students' grades [29]. They argued that there is a clear set of attitudes that differentiate students having strong ethics from those who don't possess such ethics. Academic ethics are not a person's inherent qualities but a learned behavior by family, teachers, colleagues and organization. Students having strong academic ethics set high goals and put all efforts to pursue the goals. The study concluded that students with academic ethics tend to study on daily basis and in a sober fashion, commit long and work hard and their grades are better as compared to their peers.

### Hypothesis Development

**Teachers' Abilities:** Many research studies contend that teachers' characteristics are significantly related to students' performance. Teachers' abilities like higher qualifications, additional certification in the course, experience and training directly affect students' achievements [14, 20]. While teaching approaches help students to opt a study approach and hence determine their learning behavior and outcomes [12, 13]. Moreover teacher' enthusiasm and interaction with students, timely and supportive feedback, encouragement and high expectations from their students motivate students to work hard and achieve higher grade [34]. So we

hypothesize a positive relationship between teachers' abilities and students' performance in UOG.

H1: *There is a positive relationship between teachers' abilities and students' performance.*

**Institutional Environment:** The impact of institutional environment on students' performance has been the subject of many research studies. The physical environment or the resources provide comfort, security and better understanding of courses hence affecting their learning and ultimate achievement [21, 22]. While social and interactive environment encourages participation and discussion of the students in the course and enhances their creative skills. An interactive environment in which students are appreciated to ask questions, given the freedom to choose tasks, supported for unusual ideas, taught to learn from failures and encouraged to participate in decision making process enhances their creative skills, learning and students' achievement [48]. So we hypothesize that environment has a strong affect on students' performance

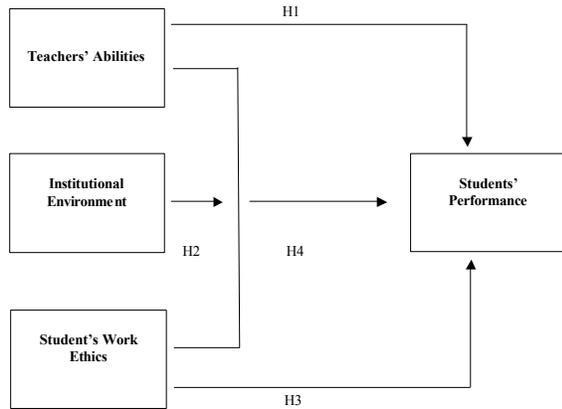
H2: *There is a strong impact of institutional environment on students' performance.*

**Student's Work Ethics:** The impact of student's work ethics on their performance is a newer concept. Work ethics refers to the moral behavior of viewing work as a desirable activity rather than a burden. Students with a strong work ethics prefer work over other activities. They develop a habit of studying on daily basis even on weekends [29]. As their work has become their goal, students tend to work hard and long hours to achieve that goal. They become more dedicated, responsible and focused. Therefore, having strong work ethics help student in increasing qualitative (working behavior) and quantitative (higher grades) academic achievements. So we hypothesize a positive relationship between student work ethics and their performance

H3: *There is a positive relationship between student's work ethics and students' performance.*

H4: *Collectively teacher's ability, institutional environment and student's work ethics can lead to better quantitative performance of students.*

**Research Model**



**Participants and Methodology:** A structured questionnaire of 45 items was developed to collect the data. 5 point likert scale was used ranging from strongly disagree to strongly agree. The questionnaire was further divided to gather data regarding work ethics, teacher’s ability and environment. Reliability of the scale was checked and detail is given in Table 1. Student’s Cumulative Grade point Average was considered the criteria of student performance.

All the students of University of Gujrat were the target population. 250 questionnaires were distributed among the students. Random sampling method was utilized. 214 complete and analyzable responses were received. Students from different departments contributed, their participation was totally voluntary. The responses of the questionnaires were analyzed using SPSS 16.

**RESULTS**

**Reliability Analysis:** The scale incorporated in this study was tested for reliability. Cronbach alphas for each variable are shown in the table 1.

Table 1: Scale reliability

Variable name	Cronbach Alpha
Student’s Work Ethics	0.77
Institutional Environment	0.77
Teacher’s Ability	0.72

Results of the Pearson’s correlation indicate the fact that the three independent variables are strongly related to each other.

**Hypotheses Testing:** Hypotheses of the study were tested using classic linear regression. The table below provides a summary of the regression results.

The results of the regression indicate that in UOG there is no relation between student performance and teacher’s ability, as the p-value of the regression model is greater than 0.01. So considering the result first hypothesis is rejected.

Environment has been proved to be a significant predictor of student’s performance in the current study. Here p-value<0.05 so we can consider environment as a significant predictor of student’s performance in UOG. The regression co-efficient is 0.22, which indicates that one unit increase in environment will improve the student performance by 22%. So H2 is accepted.

Work ethics of the students have not proved to be predictor of student’s performance. Regression statistics indicated that p-value>0.01 and considering the result we can conclude that there is no relation between student’s work ethics and student performance in University of Gujrat. H3 is rejected.

In last hypothesis collective impact of teacher’s ability, student’s work ethics and environment was collectively determined on student’s performance. Regression results indicate that p-value is less than 0.05 and regression co-efficient is 0.39. Therefore H4 is accepted.

Table 2: Correlation, Means and standard deviation

Sr. No.	Variable Name	M	SD	1	2	3
1	Teacher’s Ability	3.9	0.54	-		
2	Institutional Environment	3.7	0.48	.23**	-	
3	Student’s work ethics	4.1	0.34	.26**	.18**	-

\*\* . Correlation is significant at the 0.01 level (2-tailed)

Table 2: Hypotheses Testing

Hypotheses	Independent Variable/variables	Dependent variable	p-value	f-value	β	Result
H 1	Teacher’s Ability	Student Performance	0.087	2.094	0.087	Rejected
H 2	Institutional Environment	Student Performance	0.048	3.71	0.17	Rejected
H 3	Student’s Work Ethics	Student Performance	0.167	1.92	0.14	Rejected
H 4	Teacher’s Ability, Student’s Work Ethics, Institutional_ Environment.	Student Performance	0.023	5.28	0.39	Accepted

## CONCLUSION

This study intended to find out the impact of teachers' abilities, environment and work ethics on students' performance. There is no impact of teacher's abilities on student's performance according to this study. Despite the fact that teachers' quality is considered vital to students' performance by school management, parents, students themselves and policy makers. Many prior studies found no evidence of having a significant relationship between teachers' characteristics and student achievement.

Similar to the findings of this paper, a number of previous studies examining the effect of teacher characteristics on students' performance found that individual characteristics and family traits explain much of the variance in students' achievement while teachers' characteristics are relatively unimportant in this regard. Higher teacher qualification and training has not been proved to make a consistent difference when these characteristics are assessed against students' gains. Therefore, results are consistent with previous studies.

However it is imperative to notify why some studies have failed to find any significant relationship between teachers' ability and student performance. Majority of research on this issue has taken objective measures of student performance (test scores) to examine the impact of teachers' characteristics. This may be a possible reason for these studies finding a weak or no relationship between teacher quality and student performance. Test scores don't represent all facets or aspects of what students learn from their teachers. Teacher may have a strong effect on students' qualitative achievement, learning behavior and personality building which are not considered as measures of student performance in previous as well as this study in UOG.

Also the variation in student achievement is not fully explained by observable or apparent characteristics like teacher inspiration, passion, motivation and proficiency at presenting class material or delivering lecture to influence students' performance, it is hard to precisely measure such characteristics and thus these are usually omitted from analysis. Another rationale particular to this study, may be, that the faculty in this university is young and less experienced. Absence of this important characteristic among teachers can be a possible reason for insignificant impact of teacher's ability on students' performance, as teachers' experience has been proved to be statistically significant to students' performance in some studies.

The results of the study also demonstrate that work ethics has no significant impact students' performance. Furthermore the study fails to find any significant impact of environment on students' performance. The finding of the study though seem contradicted to the conventional wisdom that institutes matter a lot, but are consistent with a few studies that found that school quality or resources have not a strong impact on students' achievement. However the results of the study strongly support the hypothesis that teachers' abilities, environment and work ethics have a collective impact on student performance.

Therefore the findings of the study suggest that though teacher abilities, student's work ethics and institutional environment independently don't seem to be significant, these factors collectively do have a strong effect on student performance. Thus the results of the study don't suggest that teachers, work ethics and environment don't matter but it implies that student performance is a function of all of these factors. For improving student performance competent teachers, strong work ethics and a healthy and interactive environment is required. The findings of the study are very logical as it clearly demonstrate that individually the independent variables no matter how important they are cannot enhance the performance of the student unless they are simultaneously present. Therefore teacher characteristics, work ethics and facilities in the institute and the social and interactive environment should be collectively recognized as a tool to improve students' performance. However it is important to consider that these conclusions are derived from the sample of one institute and based on one measure of output (CGPA) only so some cautions must be taken to generalize these results. Clearly additional research is required to be done in this area. Although the results have identified environmental variables as a determinant of students' performance but there must be several others endogenous and exogenous factors that play significant role in explaining student performance which should be explored. Moreover it is important to realize that rather than including only conventional characteristics like teacher qualification, experience and training, it is essential to find out alternative or unconventional sources of information on teachers' quality that may affect students' performance. However these aspects are unlikely to be emerged from quantitative studies, though these studies provide base on which qualitative research on differences in student achievement can be further conducted.

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