

# Investigating the Effects of Rubrics on Assessment of Writing Tasks

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## **Abstract**

*This specific research aims to find out the rubric effects on raters' reliability with connection to language testing with reference to language testing in Pakistani context. It was also aimed to explore if any significant difference in marking of the student essays, with and without rubric is present. The population for this specific study was 100 students from Public Sector University who were assigned a topic to write an essay which was in the later stage given to a single teacher initially without rubric and later with rubric (see Appendix A). The outcomes of this study unfolded that there is marked difference in the assessment of the same essay, when evaluated with and without rubric. Additionally it was also examined that the assessment with rubric not only provide ease to the assessors but it also provides method, discipline, and direction to the assessors. This study has its practical implications.*

**Keywords:** Writing assessment, Rubric, Pakistani students, Language Testing.#

## **1. Introduction**

Assessment and testing are the chief components of the modern human beings, with the advancement and development in life now assessment has become the pivotal aspect.

If we talk about students, they are always tested and assessed with the purpose whether the learning objectives of the teachers are achieved or not. That assessment can be done formally and informally, it can be a formative, interim and summative as well.

In the recent years, testers of English as a second language (ESL) as well as the teachers are focusing more on the direct assessment rather than multiple choice options based tests. These assessment focus o the stimulus of real life and real world situation thus encouraging the students to not only use language naturally but also to construct their ideas, massages and content accordingly (Bachman and Palmer, 1996). By doing this assessors can evaluate students' language ability more affectively and accurately. However, there are many problems with performance based assessment as they are subjective in nature. In order to equip raters to rate consistently, some specific guidelines are used which are usually known as rubrics.

### **1.1 Defining Rubric**

Andrade (2000) is of the view that a rubric is a tool used for scoring a piece of written discourse (p.1). In other words one can say that the descriptive plan of scoring made by the teachers to evaluate students is known as rubric (Moskal, 2000). Rubrics can be taken as tools for assessment, and their purpose is to support the evaluation process and also to facilitate the process of evaluation. It also helps in reporting and reflecting evaluators about achievements of the students. Rubric is a descriptive scheme used for determining the score, or a set line of guidelines to rate. The rubric is an emphasized construed set of assessment criteria to comprehend a task base written business assignment (Hafner and Hafner, 2003; Quinlan, 2006; Glickman-Bond & Rose, 2006).

## **1.2 Pakistan's situation**

In Pakistan the standard of education is quite low in comparison with the developed countries of the world. Here the assessment methods and techniques are orthodox. Though no one can deny the value of English in Pakistan, yet the effective and comprehensive written assessment of English is still a major concern for the evaluators. There is no training for the evaluator to assess writing in a proper manner. Here in Pakistan from secondary school examination to masters there is scarcity of rubric for assessing any piece of writing.

## **2.) Statement of the Problem**

This study investigates the use of rubric for assessing the reliability of the raters regarding essay writing. It tries to figure out that how rubric is beneficial as compared to the holistic techniques used for assessment of a written essay. Numerous attempts have been made to understand the effectiveness of rubric. And this is the focal point of this study to check if for any written essay assessment rubric plays a pivotal role for increasing the reliability of the rater?

## **2. Purpose of the study**

The current study purposes

- To explore the effects of rubric on the reliability of the raters while assessment of a written essay.
- To examine if the use of rubric is helpful in assessing a writing with reference to language testing or not.

## **3. Significance of the study**

Rubrics have always been the focus of attention for the researchers and a lot has been written on the effectiveness of the rubrics especially in education and writing assessment. In Pakistan, however we find few studies related to rubrics and their effectively. Therefore, the researcher focused on the process to find out the effectively of the rubric with references to Pakistani students. The significance of rubric is thus tested in Pakistani context.

## **4. Population of the study**

For the current exploration, a study was performed in a Public Sector University in Faisalabad, Punjab. From the University 100 students were selected using random sampling technique as a population for the current study.

## **5. Delimitations of the study**

To delimit the current study only 100 students from a Public sector university in Faisalabad were taken. Then in the next phase only students who were studying writing skills module were considered as a sample. Further to narrow down the canvas of the research only a single teacher was taken to assess the essays written by the students with and without rubric. No private University students were considered in the current research and only Teacher from English Department who is regular university examiner for writing skills paper was chosen as population.

## **6. Research Questions**

- Does rubric affect the writing assessment?
- Is there any significance between marks of students with and without rubrics?

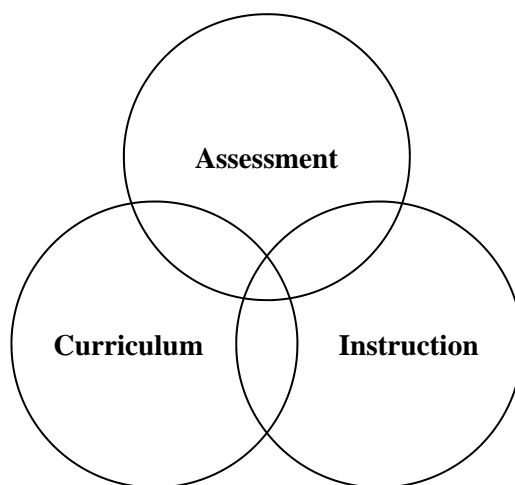
## 7. Literature Review

This section explains about the opinions of different scholars and some previous studies which deals with assessment, assessment types, rubric, affectivity of rubric, and different issues related to assessment and rubric

Conventionally, the criteria regarding productive skills are usually with the educators. Rather than articulating the grades on any specific project or an essay. Assessors expect their students to understand the principals of good writing (Andrade, 2000). So, evaluators and teachers tend to guide students through rubrics about writing assessment so that each and every detail related to writing can be explored with no chance on ignoring even a tiny mistake of students. This dense analysis on students' writing gives students an extremely effective feedback about their written work thus making them aware of their flaws and strengths. (Andrade, 2000, Goodrich, 1997). This is a renowned fact that writing is the center of attention in ELT in terms of assessment.

### 7.1 Assessment

Assessment is one of the precepts without which it is impossible to determine the students' achievement. Not only students' achievement, it is also impossible to see for a teacher whether or not they are successful in transmitting the knowledge to their students accurately. Assessments comprise different methods that permits the students to validate the fact that they can be checked ranging from performance tasks, standard tests and also observation and writing samples. (Julhas, 2014)

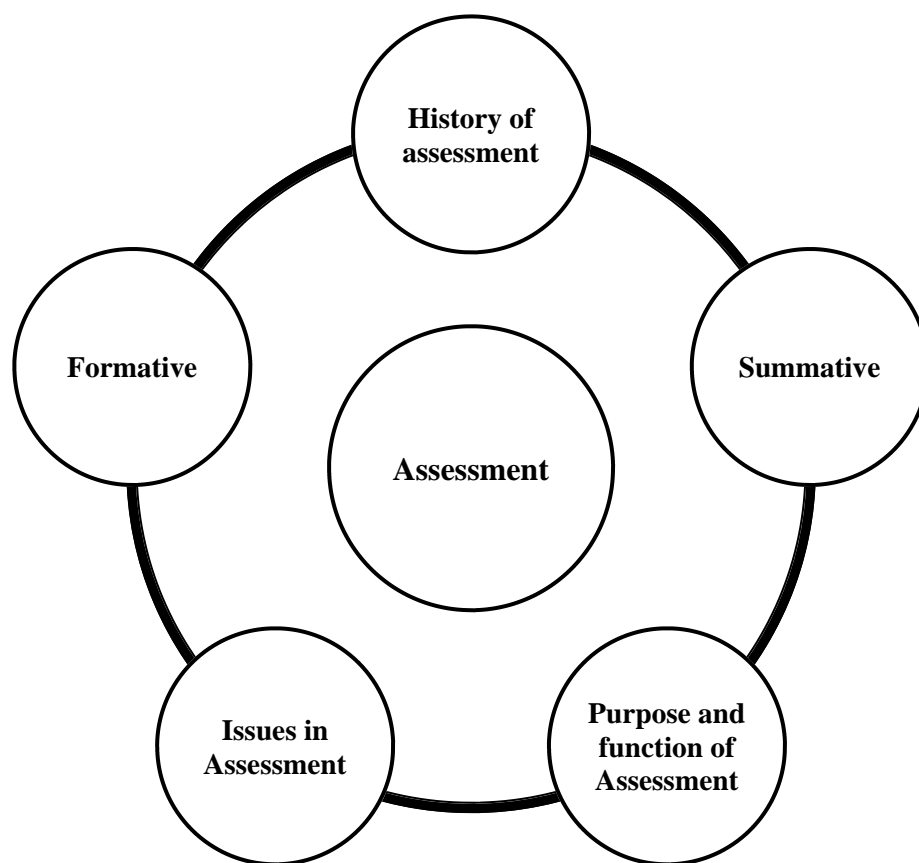


### 7.2 Defining Assessment

Numerous scholars have defined assessment differently

According to the multiple researches "Assessment is the systematic collection, review, and use of information about educational programs undertaken for the purpose of improving learning and development. (Palomba & Banta , 1999)

Assessment is the procedure of data collection. Precisely, assessment is a method through which the evaluators collect data related to their teaching and also their students (Hanna & Dettmer, 2004)



### 7.3 Writing Assessment's History

Writing assessment has three stages. The 1<sup>st</sup> stage of writing assessment was from 1950 to 1970 which focused objective type test. The 2<sup>nd</sup> stage was from 1970-1986 which focused on holistic tests, in which the real writing was being assessed. The 3<sup>rd</sup> stage started from 1986 till date which tilted from holistic to a portfolio and systematic type of assessment. (Hout& Neal 2006)

### 7.4 Types of Assessment

#### 7.4.1 *Formative Assessment*

It is a procedure which is being used by the students and the evauators not only to collect information to to judge them accordingly. In other words formative assessment “intends to help students identify their strengths and weaknesses and guide students toward the achievement of learning goals during the learning process” (Prins 2002). Formative assessment not only helps in improving the learning of the students who are studying in the class room but it also help teachers to evaluate better. (Ruiz-Primo and Furtak, 2006)

#### 7.4.2 *Summative Assessment*

It refers to the formal type of assessments which are given towards the end of the course or the academic year. It has an purpose to: “determine the success or failure only after a student's performance” (Prins,2002).

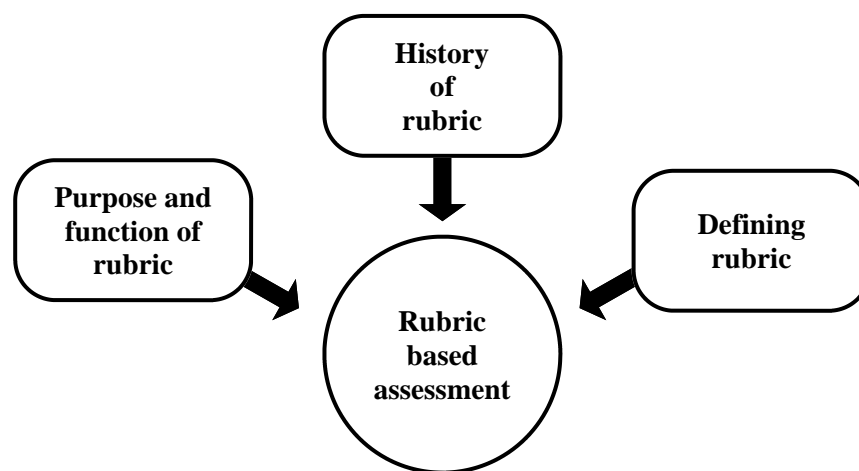
### 7.5 Purpose and function of Assessment

There are six chief purposes of Assessment:

- It Captures student time and attention.

- It generates suitable student activity of learning.
- It provides accurate feedback of the students work.
- It help students to adopt the required standards.
- It also Generate marks which differentiate between students.
- It provides evidence for other outside the course to enable them to judge the appropriateness of standards on the course. (Gibbs and Simpson 2004)

## 7.5 Rubric based assessment



Now days no one can deny the role and use of rubrics in evaluating students' work T evaluators tend to use rubric to evaluate every single ability of the students whether it is writing, listening, speaking or reading.

### Defining Rubric

A rubric can be defined as a multi-purpose scoring guide that is used for the assessment of student's performances.

There are a lot of ways through which rubric can be used to not only make the advancement in students learning

Rubrics are designed in a plan by the teachers of teachers and students or in certain cases by a third party to guide the students regarding the assessment and scoring of the examination (Moskal, 2000).

## 7.6 History of rubric

<b>Started since</b>	<b>1400 in general</b>
<b>In writing assessment</b>	<b>Started in 1970</b>
<b>In education</b>	<b>Started in the middle of 1990</b>

Since 13<sup>th</sup> century rubric has been used as a term in English. The 1<sup>st</sup> use of this term in education was started since the year 1990. So from medical to education this bridge has been covered quickly and now rubrics are part and parcel of every genre of education.

### **7.7 Purpose of rubrics**

The chief purpose of the rubrics is to assess students' performances. It might be the case that for some of the performances, one can spot the student during the learning process, i.e. like using an electric drill or discussing an issue.

### **Criticism on Rubric**

For an overall impression, the holistic approach of rubrics is quite common. It provides a general opinion of the examiner. However, it fails to guide the test taker on his weaknesses and drawbacks. The absence of examiner's feedback is the major drawback of the holistic rubric. (Linn & Gronlund, 2000). On the contrary Wiggins and McTighe (2005) emphasize educators to use analytic rubric to achieve students' understanding. The holistic approach, according to them, will mislead the learners and teachers. For an instant, two drafts will be considered unsatisfactory but these drafts contain very different errors from each other. East (2009) believes the holistic assessment can be a problematic approach of assessment. In the holistic exercise of assessments, the raters score differently; regardless of the availability of scales and characteristics of assessment.

Overall review of the literature does show that though there is a bit of criticism on rubric but this tool seems to be effective, relevant and important in language testing as well as for evaluating any writing assessment. Therefore, the researcher's research gap was to find out the significance of rubric in Pakistani class room and check the validity and reliability of the assessors.

## **8. Research Methodology**

This section explains the methodology, sampling, research design, data collection, data analysis, discussion and findings of the study.

## **9. Null Hypothesis**

There is no significant difference between the marks of the students with and without rubric.

## **10. Methodology**

In the current study, an Essay topic was initially given to the students. The time for essay writing was 30 minutes. The topic was given keeping in view the population and also their limitations, later on the essay was photocopied to make the number double i.e. 200. This was done to make the distribution equal for the evaluator i.e. 100 each with and without rubric.

## **11. Sample**

The size of sample for this study is 100, from a public sector University of Faisalabad studying in a BS program.

## **12. Instrument**

An Essay was distributed amongst the students for writing with a title "SMOKING".

## **13. Data Collection Procedure**

As already mentioned, for population, 100 students, were selected from a public sector university, were selected using simple random sampling technique. Later on an Essay

assessment was conducted amongst the said students and scripts were collected after the given time.

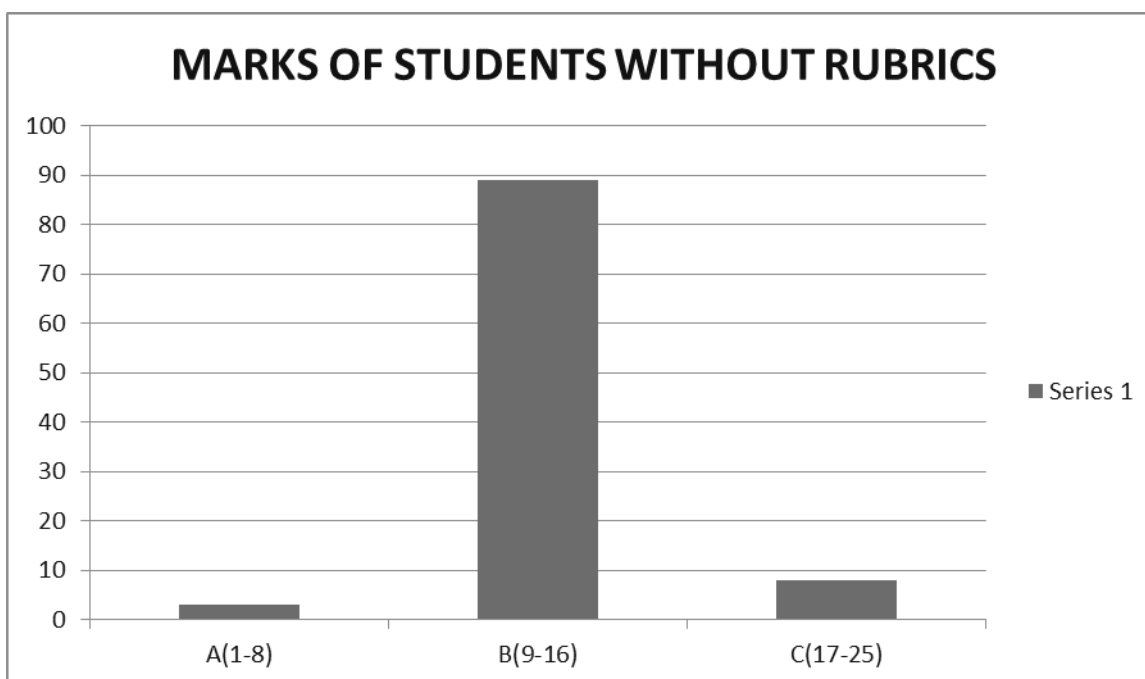
#### 14. Data Analysis

In the current study, Quantitative method was used to present the discussion and implications for the reliability of ratings and the consistency of the measurement results. an essay was structured viewing the population and also their limitations, the topic of the essay was a descriptive topic i.e. “SMOKING”. This was done to make things simpler. This also helps to keep the research relative, reliable and authentic and to avoid any issues in collecting data. The size of sample for this study is 100, from a Public Sector University of Faisalabad who was offering BS program and studying (English communication skills) as their minor subject.

There were two types of marks given to the students by the evaluator.

- 1) Without rubric
- 2) With rubric

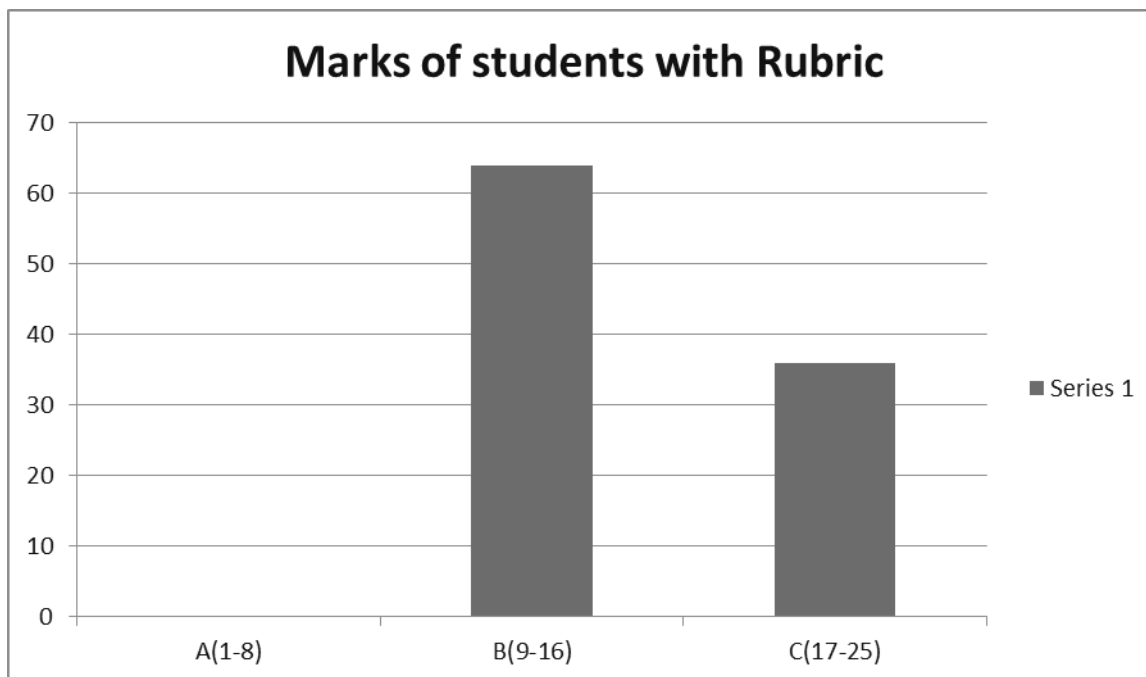
In both the cases the evaluator was the same the only difference was he marked the same set of papers twice. The next stage was the analysis of data for which the marks were examined through SPSS by applying one sample T test to find out the significance difference of marking with and without rubric. The frequencies and percentages of the data can be viewed from the graphs as well as the table and it shows some interesting facts.



Category of Range of Marks	Values under each category
A (1-8)	3
B (9-16)	89
C (17-25)	8

Here in the above graph (Fig. 1) the marks range of the students given by the evaluator has been discussed without rubric. There are three bars which are representing data. Below the graph is a table (1) which is showing range of marks and also the values under each category.

Here we can see that maximum students are lying under category B which ranges from 9 to 16, it means that 89 out of 100 students have scored marks from 9 till 16. Comparatively if we look at the other bars present in the graph we can see that only 3 students are in category A which is ranging from 1 to 8 marks and only 8 students comes under category C which is covering the range of marks from 17 to 25. It does reflect that majority of the class has performed averagely i.e. the collective number of underperformance and excellent performance of the students is 11 which is far low then the average performance of the students whose number is 89.



Category of Range of Marks	Values under each category
A (1-8)	0
B (9-16)	64
C (17-25)	36

In the above graph (2) we see three bars like the graph (1). The parameters of this graph is same as graph (1), however the major difference between both the graphs is that graph(1) represents students marks without rubric and this graph (2) presents students marks with rubric. Here also 3 categories of range of marks are present. The range of marks are A, B and C respectively with marks ranging in A category from (1-8), in B from (9-17) and in C from (17-25). The range is presented in the table form also to have clarity for the reader. Here the highest Number of students is in category 2 but they are 64 as compared to graph (1) whose value is 89. If we look at C here 36 students comes under this category but surprisingly there is no student who falls in category A which means there is a vivid difference in marking with or without rubric.

### Reliability Statistics

Cronbach's Alpha	N of Items	P value
.984	100	0.000394



## Case Processing summary

Case Processing Summary	N Cases	%
Valid	100	100.0
Excluded	0	.0
Total	100	100.0

In the above tables the reliability statistics and the case processing summary has been presented. The focal point to discuss here is the values given under reliability statistics table, as for any research to be effective and authentic it has to be reliable and valid.

In the above table one can see the third section in which P value is given the P value stands for significant value which shows the significance difference between variables in the research. If the value is greater than .5 then there is no significance difference but if the value is below .5 there is always a significance difference between the variables. Here we can see the P value is 0.000394 which is less than 0.5. It shows that there is a significant difference between the marks of the students with and without rubric. Therefore the Null hypothesis claiming that there is no significant difference between the marks of the students with and without rubric has been rejected.

## 15. Discussion on Results

Critical analysis of results of every individual shows that there is marked difference in the students marks when their essay was marked without and with rubric, there have always been a debate about marking strategies and how to mark effectively with reliability and validity. These results from the current research explain the true picture. If we closely look at the results and make a comparison between the two graphs we can see that in graph 1, there are 3 students who are in range A (1-8) and only 8 students who are in range C (17-25), these two benchmarks narrate that the students have attained average marks, but when the same essay is being assessed by the same examiner with rubric there is a vivid change in the result. In graph 2 we can see that no one falls in range A and 36 students fall in range C. One can perceive that without rubric examiners usually don't give high marks to any piece of writing in essays. They only give high marks to those writings which they feel are exquisitely excellent, similarly on the other side if some essays are below quality they take the overall impression and give low marks.

The results of graph A explain that the examiners generally perceive about any writing and assess and give marks accordingly. Only a master piece is placed in the highest range but normally they are reluctant to give even an above average writing high marks. On the contrary the assessment with rubric makes the examiner to assess differently, assessment with rubric does not help to focus on the length or on handwriting and grammar only, examiners are to check the scripts with a proper method in which each and every thing is explained i.e. marks for organization, language use, vocabulary, mechanics, ideas and contents. So overall a normal perceived writing can get good marks and a below level perceived writing can get an average mark. In holistic assessment a teacher can get an initial impression of the writing, just focus on one aspect i.e. use of vocabulary or good content and give marks to the student over all. But that does not justify the assessment as some scripts may lack good vocabulary and content, but the use of grammar, mechanics and organization of the writing is good. So it can be said that in holistic marking all the aspects of writing are not considered and some important aspect can be neglected by the examiner which may affect the marks of the student. Likewise if the marking method is rubric based, following a set criterion mentioned in the rubric it provides the examiner with a proper direction on what

to mark, how to mark ,where to deduct marks and where to focus, as good rubric gives attention to different sections of writing without neglecting any important aspect, so in other words rubric helps in dividing any piece of writing into different sections, focusing on each section not only help the examiner to assess effectively but he\she can focus on each aspect provided in the rubric separately and minutely, this can also help to improve the validity of the assessment.

## **16. Conclusion**

It can be said that in Pakistan the practice of using rubric is not so common. Here in this specific research the researchers were of the aim to find out if rubric have any effect on the marks of the students. The results and the finding explained that rubric has marked effect on the marks of the students.

It can also be said that rubric works in two ways

- 1) It is also helpful for the students as now each and every aspect of students writing is in front of the examiner therefore the marking reliability increased and the strengths and weaknesses of the students can be checked and monitored
- 2) It is helpful for the teachers also as rather than marking papers holistically , teachers mark papers while following specific rubric, it supports them to have a comprehensive analysis of the performance of each aspect of students writing, and they can evaluate each and every section of the student writing

Apart from that rubric also provide significantly helpful feedback to the learner and plays a pivotal part in the learning process. Moreover, it keeps the scoring transparent and fair and develops smooth learning track. Moskal (2000) maintains that it is almost inevitable to avoid personal prejudice and subjectivity no matter what. In this view, a detailed rubric will create a fence between his personal subjective opinion and the rational objective assessment of writings. As Moskal (2000) points out, by developing a pre-defined plan for the evaluation process, the subjectivity that is entailed in evaluating an essay becomes more objective.

Usually it is difficult for the teachersto track students' progress and help students on specific ongoing problems, if assessments are exclusively based on numbers and letter grades that are found in grade books. However, the use of rubrics makes it feasible for teachers to keep a complete detailed record of each student's progress. The detailed feedback on the rubric is useful for analyzing accurately where students' strengths and weaknesses lie. Lastly it has a great impact on teaching also as it helps the teachers to self-evaluate them after tracking the performance of the students.

## **17. Recommendation**

Following are the recommendations for the development and implementation of the rubric

- The criteria set forth within a scoring rubric should be clearly aligned with the requirements of the task and the stated goals and objectives.
- The criteria set forth in scoring rubrics should be expressed in terms of observable behaviors or product characteristics. A teacher cannot evaluate an internal process unless this process is displayed in an external manner.
- Scoring rubrics should be written in specific and clear language that the students understand. One benefit of using scoring rubrics is that they provide students with clear description of what is expected before they complete the assessment activity.
- Rubric based assessment should be a compulsion for every discipline.
- Teachers should be monitored regularly to follow rubric in local and university or colleges examination.

- Access of rubric should be made easy for every teacher.
- Students should also be given the same rubric so that they have the clear picture of on what terms they will be assessed.
- Marking trainings with rubrics should be conducted regularly for the teachers.
- Cascade training of marking with rubric should be conducted in remote areas.
- There should be one rubric followed for each discipline.

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**Appendix A**  
**Table representing students' marks without Rubric**

<b>Student Sr No:</b>	<b>Max Marks</b>	<b>Marks Obtained</b>
1	25	11
2	25	9
3	25	10
4	25	12
5	25	10
6	25	8
7	25	9
8	25	13
9	25	17
10	25	8
11	25	9
12	25	11
13	25	10
14	25	15
15	25	9
16	25	11
17	25	14
18	25	17
19	25	16
20	25	11
21	25	15
22	25	18
23	25	12
24	25	8
25	25	19
26	25	17
27	25	16
28	25	13
29	25	14
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31	25	13
32	25	11
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93	25	13
94	25	15
95	25	11
96	25	12

97	25	14
98	25	12
99	25	12
100	25	11

**Table representing students' marks with Rubric**

<b>Student Sr No:</b>	<b>Max Marks</b>	<b>Marks Obtained</b>
1	25	13
2	25	12
3	25	12
4	25	15
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