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UNIFORMITY AND COMPARABILITY IN THE GRADING SYSTEM AT HIGHER EDUCATION: A NEED FOR EXAMINATION REFORM

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Abstract:

Educational evaluation is to determine the extent to which educational objectives have been achieved. The strength and success of an educational system mostly depends on the evaluation system. The study focused on the diversity in evaluation system at higher education. The universities in India have their own pattern of evaluation. In present many universities have adopted grading system for evaluation of students achievement is not uniform throughout the country. Thus direct comparison of the academic achievement of students of one university with that of another is difficult. Diversity in evaluation system followed by different varsities, students face problems in pursuing higher studies or applying for jobs. In the federal country like ours it is necessary to have a common system of evaluation should be adopted for uniformity and comparability so that student's mobility become easy. The study view that, grading should be cumulative grading and based on uniformity in the range of marks of grade interval with value based description. Also at the end of the course by using grading on the curve student's real progress in relation to similar group of students may be counted to bring uniformity and comparability in the system of evaluation at higher education.

Keywords:- Grading system, Examination Reform, cumulative grading, Confidence band, Grading on the curve

Introduction

Education is a key factor in all national development whether it will be social, political, economical, cultural or moral. Over all development of student is a goal of education system. As development is continuing process so evaluation is indispensable part of education. According to Kothari Commission (1964-66), "It has been accepted that evaluation is a continuous process. It exercises greatest influence on the teacher's method of instruction and on student's study habits and this helps not only to measure educational achievements but also to improve it. The new approach to evaluation will attempt to improve the written examination so that it becomes a valid and reliable measure of educational achievement and to devise techniques for measuring those important aspects of the student's growth that cannot be measured through written examinations."(5) Teaching, learning and evaluation are three basic parts of education process. It is basic need to evaluate the students achievement according to objective of teaching. Examination is very effective means for evaluation of total teaching learning process. Evaluation provides an essential yard stick to judge the quality of students. It plays an important role in the educational system. It also provides motivation and a sense of purpose to both teachers and students to achieve set goals. The term examination has come to be associated with stress and anxiety. The process of teaching and learning which is supposed to be

meaningful for the student loses its joy because of these negative connotations of examination.

According to Kothari Commission (1964-1966), "Examination Reform has become crucial to all progress and has to go hand in hand with the improvement in teaching. It recommended the introduction of grading for the uniformity and objective evaluation system at the higher stage."(5) Plan of action for examination reform (1973) regarding the grading universities system in and colleges recommended 7-point grading. The National Policy of Education (1986), Programme of Action (1992), National Curriculum Framework 2005 (NCF) suggested that grades be used in place of marks. (8) In India academic grading is based on a percentage system. Many universities and educational institutions rank their students in percentage of marks they get from examinations and credits. At university level, the differential between universities in terms of marking scale can be up to 20%. (9) Some universities requiring 85% plus for award the distinction, while yet others would award distinction at above of 70%. Thus direct comparison of the score of student of one university with that of another is difficult. Thus the comparison of GPA is quite difficult for Indian students elsewhere.

Need and Importance of the Study

Educational system clearly determines the socio-economic and political doctrines of a country and a sound educational policy with innovative thought marks social progress of a nation. For improving total educational standard examination reform is an effective instrument. Kothari Commission (1964-1966) also suggests the need of exam reform. According to Kothari Commission, "Examination reform is important and urgent because examination is an integral part of teaching and learning process. The reform has to be comprehensive in terms of educational objective, instructional goals, educational experiences and the mechanism to evaluate their efficiency."(5) Changes in the technologies innovations in the field of science, number of students appearing for exam are increases all these factors leading to rapid changes in the educational environment leading forth to continuous reforms to be done in the examinations.

Ranking the students, on the basis of their marks leads to an extremely stressful existence.(1) UGC plan of action for examination reform(1973) suggested that, "Students must awarded grades and not marks at the examination assessment. The degree should be awarded to all those candidates who attain a certain grade level to be decided by the university." (7) The National Policy of Education 1986 (NCF) and Programme of Action 1992 (POA) also envisaged the recasting of the examination system and suggested that grades to be used in place of marks. National curriculum Framework 2005 (NCF) envisaged an evaluation system which would grade the students on their regular activities in the classroom and enable students to understand and focus on their learning gaps and learn through these are part of Formative Assessment. Examination reform (1973) suggested that, "It is most appropriate that the grading system is uniformly adopted in all examinations in our country."(8) The universities in India have their own pattern of evaluation. In present many universities have adopted grading system for evaluation of students achievement is not uniform throughout the country. Thus direct comparison of the academic achievement of students of one university with that of another is difficult. Diversity in evaluation system followed by different varsities, students face problem in pursuing higher studies or applying for jobs. In the federal country like ours it is necessary to have a common system of evaluation should be adopt for uniformity and comparability so that student's mobility become easy. It may be more advantageous for a group of universities as it adopted grading system uniformly in all over the country. Owing to diversity in the evaluation system followed by different varsities, students face problems in

pursuing higher studies or applying for jobs. The purpose of the study is to suggest the grading system which will bring uniformity and comparability and maintain balance in the evaluation procedure at higher education.

Objectives

- 1. To ascertain the inadequacies in grading system.
- 2. To compare different academic grading.
- 3. To ascertain grading system for uniformity and comparability in the system of higher education.

Design of the Study

Sampling Plan:

- a. Sample Units- Universities in India.
- b. Sampling Size- A sample of five Universities in India was taken for the study.
- c. Sample Method- Purposive Method of Sampling.

Method

Keeping the nature of the problem in mind the researcher followed the present study on the lines of Descriptive Survey Method.

Grading System In India

Academic grading in India is based on a percentage system. According to George W. Pierson the first grades issue at Yale University were given out in the year 1785.⁽⁹⁾ 'Grading in education is the process of applying standardized measurement of varying levels of achievement in a course.'(8) Grades statements of relative quality. It is the quality of a student work, in relation to similar students and to what might reasonably be expected of them, that determines his or her grades. Recently UGC directed all universities to bring a uniform grading system. The commission has recommended a 10-point grading system.

Some grading systems used in India are:

a) Grade Distribution According to the Mark Range

Grades can be assigned as letters, generally A-F. ⁽⁶⁾ CBSE in consultation with the ministry of Human Resources Development, government of India has decided to introduce nine point grading system, student performance will be assessed using conventional numerical marking mode and the same will be converted into the letters grades on the basis of the predetermined marks ranges as shown in Table I. The board had introduced the above grading scheme at secondary level for classes IX and X from the academic year 2009-2010⁽¹⁰⁾

b.Direct Grading

Direct grading indicates a teacher's judgment of the work of a student's work in relation to the work of a she/he has known over the past years and against whom this student can reasonably be judged. Thus it is based on the relationship between the amount of merit in the student's work and the standard of achievement. Direct grading may be applied whenever you have a single production to grade for ex. dissertation or thesis, participation in a seminar etc. Direct grading is not applicable in a situation in which marks or scores or large no of separated grades are awarded.

c) Confidence Band

Confidence Band grading system based on 9 overlapping half grades. The quality levels of 5 point scale are normally categorized as very good, good, fair, marginal and unsatisfactory. The point value, AB - 4.5 point value, B - 4 point value, BC - 3.5 point value, BC- 3 point value, C - 3 point value, and so on The above grading scale demonstrates how each of these half grades is a Confidence Band within which the correct grade probably lies. Thus if a candidate is near the A/B borderline e g. one or two points above or below, this expressed by awarding an AB. This grading system gaining popularity among various countries in Europe, Asia, Africa and America.

It provides the guideline to answer the questions: How many of all, students I have known should be considered of each grade? How many students in the average class should be awarded each grade? When doing direct grading teachers are sometimes tempted to add pluses and minus to grades. For better than 'B' but not as good as 'A' teachers used to grade B+ or Athis unscientific procedure as it increases the 5 point grading system to 15 points. A better solution is by awarding a grade of AB. Adding AB, BC, CD and DE to original 5 point grades gives 9 level of differentials. If a student's correct grade is C, he will receive BC, C, or CD. This is called as 'CONFIDENCE BAND' grade because it indicate the range written which we can be a confident that the correct grade is lies as shown in Table II.

This shows that it is not just a substitution of a 5 point or 7 point scale. There is a qualitative as well as a quantitative difference. If a scale having 5,7 or 9 units is used, it would be easy to classify the students into a fewer categories which denotes the qualitative level of their performance. By this method, one can be more confident that the range within which a student is placed gives an

accurate indication of performance may be categorized as excellent, good, average, below average and poor on five point scale.

d) Grading on the Curve

Gage (1967) stated that, grading on the curve means that grades are assigned according to the relative status of the students taking a test, all of whom have been exposed to similar instructions.(4) It means that the large group which receive scores in the middle of the distribution will get average mark for the class. The relatively few students at the extreme of the distribution will get top and bottom marks, respectively and the student between middle and extreme groups will get above and below average grades. If these standard deviation distances were based on a normal distribution of scores, the percentages of the students in each group would be approximately 7, 24, 38, 24, 7 respectively as shown in figure I.

If fixed marks are used for grading then the same student seen on different position in different academic year. But by grading on the curve student's real progress may be counted. It is clear that when the student come out of university that particular year students getting low grade due to external circumstances but not due to their inefficiencies/short comings do not suffer forever and incorrectly penalized. Thus grading on the curve helps to bring some uniformity and comparability in the system evaluation. In this period of time immense facilities are available, software were developed due to massive computerization hence it will not cumbersome.

e) Absolute Vs Relative Grading

In absolute grading, simply marks are expressed in equivalent grades using Normative standard tables and grade points are easily convertible to equivalent percentage of marks and hence demerits of marking system are partially overcome by this absolute grading UCG's grading system is absolute one. In relative grading, the academic performance of students of a batch is not dependent on the performance of students belonging to either the previous or next year's batches. It is relative not only to the batches of students at different times but also different level of questions of examinations. Relative grading is based only on the academic performance of the students under examination. Hence relative grading is the actual measure of academic achievements of individual students.

Grading System In different Universities In India

i. Aligarh Muslim University.

The university offers full-time program leading to the Bachelor of Technology (B.Tech.) The combined marks obtained by a student in various components of evaluation of a course shall be converted into regular letter grades with their equivalent grade points as specified in Table III.

Range Grade 75 and above - A, 60 and above but less than 75 - B, 45 and above but less than 60 - C, 35 and above but less than 45 - D, Less than 35 - E. Two grace marks may be awarded by the examiner for passing a course and one grace mark may be awarded by the examiner to elevate the grade. Any fraction in any component of evaluation should be rounded off to the next whole number.

ii. Pondicherry University

The university offers full-time programme of Post Graduate, Five year integrated Post Graduate and M. Phil. M.A. /M.Sc./ All M.Tech. except M.Tech. (Nano Science & Technology) and M.Tech. (Electronics), M.Com., M.A. Economics, M.B.A., M.C.A. Performances of students in each paper are expressed in terms of marks as well as in Letter Grades. In case of fractions the marks shall be rounded off to nearest integer. Programme Committee shall consolidate the marks awarded by Internal and External Examiners and award grades. The class interval for the purpose of awarding the grades can be arrived by dividing the difference between the highest mark secured and the minimum pass mark by 6 as there are six passing grades. The formula is given below:

K = (X-50)/6 Where, K = class interval, X = the highest mark in the subject. The grades may be awarded as given in the following table IV.

K should not be rounded off to less than two decimal places. The numbers given in Range of Marks column, (X-K), (X-2K), (X-3K), etc., can be rounded off to the nearest whole number.

In courses where the number of students who have secured 50 marks and above is less than 10 then grading may be given based on the Table V.

iii. Mumbai University

The credit and grading system will be effective from the academic year 2012-2013 for Faculty of Technology of University of Mumbai. In every course, based on the combined performance in all assessments in a particular semester as per the curriculum/syllabus, the student is awarded a letter grade. These letter grades not

only indicate a qualitative assessment of the learner's performance but also carry a quantitative equivalent called the Grade Point. The letter grades and their equivalent grade point applicable for MCA programme are given below: Table VI.A learner who remains absent in any form of evaluation/examination, letter grade allocated to him/her should be AB and corresponding grade point is zero. iv. Indian Institute of Technology and Vellore Institute of Technology

Cumulative Grade Point Average (CGPA) refers to the overall GPA, which includes dividing the number of quality points earned in all courses attempted by the total degree-credit hours in all attempted courses. (7) In Indian institute of technology and Vellore institute of technology the evaluation system is the cumulative grade point average with the scale of 0-10 point scale which is converted to letters S-U. The evaluation system of IIT Madras is the Cumulative Grade Point Average with a scale from 0 to 10 which is converted to letters. Which is also used in other IITs. is the Cumulative Grade Point Average with a scale from 0 to 10 which is converted to letters: Table VII:

The cumulative grade point average is based on participation in class, attendance, quiz, examination and papers. Continuous evaluation is done by course instructions. The cumulative grade point average get calculated as CGPA

CGPA =
$$N \sum Ci GPi$$

 $\sum Ci$

where N is number of courses, Ci is the credit for i^{th} course GPi is grade point for i^{th} course .

Inadequacies in Grading System

From above discussion some inadequacies observed regarding grades as under:

i)Direct grading is not applicable in a situation in which marks or scores or large number of separated grades are awarded.

ii) Someone used absolute grading while someone used relative grading. In absolute grading, simply marks are expressed in equivalent percentage of marks. It is based on numerical marks and hence demerits of marking system are partially overcome by this method. UGC's grading is absolute one. As grades are statements of relative quantity of student work, in relation to similar students and to what might reasonably be expected of them, thus it is more proper to use relative grading than absolute grading.

- iii) Grading system is still not understood to most of the teachers. It is important that the structure of the grading system is understood clearly to all concerns.
- iv) The direct comparisons of grade obtained by different universities are quite difficult. Some universities award excellent grade requires 85% plus while yet other would award excellent grade at above of 70% (8).
- v) At university level however percentage between 69-79 are considered excellent grade and are quite difficult to obtain, particularly in the subjects related to language and social sciences. In some instances the score close to 90% is very rare and is virtually impossible. In the subject like mathematics there are some students who score 100% marks. In some instances, a score close to 90% is rare and is virtually impossible.
- vi) Grading system does not allow ranking of candidates. It can be justified that among students with same grade, there should not be any distinction.

Discussion

From all above discussion it is observed that:

- 1. Grading system is lesser prone to errors. Subjectivity in judgment has been found to be more severe in marking than in grading. Grading communicate effectively to a verity of stakeholders. Marking system psychologically affected badly and in most cases may find it difficult to face the society. Grading will minimize miss-classification of students on the basis of marks. Grades are evaluation on a relative scale.
- **2.** In absolute grading, simply marks are expressed in equivalent grades using Normative standard tables and grade points are easily convertible to equivalent percentage of marks and hence demerits of marking system are partially overcome by this absolute grading.
- **3.** Kothari Commission recommended the introduction of grading for the uniformity and objective evaluation system at the higher stage. Still in some universities grading system is not adopted ex. Pondicherry university adopted grading system for some courses and not for all.
- **4.** In present situation teachers are not clearly understood the grading system. It is necessary that, structure of grading system is understood clearly to all concerns. To make this grading familiar to all concerns, grading procedure should clearly be explained in our course curriculum. All concerned to be made acquainted with the grading rules and the proper attitude should be cultivated through

- workshops/seminars so that grading system make successful.
- **5.** Grades are relative statement of quality and value, therefore grades should be followed by using relative description.
- **6.** All universities has its own pattern of evaluation. In Aligarh Muslim University B. Tech. full time course adopted 7-point grade system and grade is described. In Mumbai university grade is not used to describe with quality. Aligarh Muslim University award excellent grade requires 75% plus while Pondicherry University requires 80% plus. Mumbai University requires 81% plus. In IIT and VIT Vellore universities refers cumulative grading to all overall GPA. In some universities like Pondicherry University grading system is adopted for some courses. In the same if number of students who have secured 50 marks and above is less than 10, then grading system is different than that of another students. UGC's grading is absolute one. In Mumbai University grading is 7-point grade assigned to particular percentage of mark interval. This shows that the universities have their own pattern evaluation. Some universities award excellent grade requires 85% plus while vet other would award excellent grade at above of 70%(8). Therefore the direct comparison of grade obtained by different universities are quite difficult. Owing to diversity in the evaluation system followed by different varsities, students face problems in pursuing higher studies or applying for jobs.
- 7. At university level however percentage between 69 and 79 are considered excellent grade and are quite difficult to obtain, particularly in the subjects related to language and social sciences. In some instances the score close to 90% is very rare and is virtually impossible. While the subject likes mathematics there are some students who score 100% marks. It will create controversy over achievement of students in different subjects. In grading on the curve grades are assigned according to the relative status of the students taking a test, all of whom have been exposed to similar instructions. By using grading on the curve this error could be avoided.
- **8.** The position of a person in the group is considered more important than the actual marks awarded. In a federal country like ours it is necessary to have a common system adopted for uniformity and comparability of students of different universities to bring and maintain balance in the evaluation procedure in all educational institutes of higher learning.

Diversity in the evaluation system followed by different varsities, students face problems in pursuing higher studies or applying for jobs. All universities should adopt cumulative grading uniformly which indicates overall performance in full course. At the end of the course final position of the student should be given on grading on the curve which assigned according to the relative status of the pupils taking a test, all of whom have been exposed to similar instructions. This will helps to bring uniformity and comparability in the system of evaluation in higher education.

Table 1 Grade Distribution According to the Mark Range

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Mark Range	Grade	Grade Point
91 -100	A1	10.0
81 - 90	A2	9.0
71 - 80	B1	8.0
61 - 70	B2	7.0
51 - 60	C1	6.0
41 - 50	C2	5.0
33 - 40	D	4.0
21 - 32	E1	
20 and below	E2	

source: CBSE website www.cbse.ac.in

Table II Depiction of Nine Level 'Confidence Band' Grade Scale

Quality	Percentage of average group	Nine Confidence Band Grades
Excellent	4%	A
Very Good	4.5%	AB
Good	12%	В
Satisfactory	3.5%	BC
Fair	20%	С
marginal	2.5%	CD
Unsatisfactory	12%	D
Poor	1.5%	DE
Very Poor	4%	E

Table III

Range of Marks	Grade	Grade Point	Description	
75 and above	A	10	Outstanding	
60 and above but less than 75	В	8	Very Good	
45 and above but less than 60	С	6	Good	
35 and above but less than 45	D	4	Satisfactory Work	
Less than 35	E	2	not satisfactory (fail)	
	F	0	Detained due to shortage of - attendance	
	Ι	0	Incomplete/Absent in the semester examination	
	Z	0	Cancelled due to other reason	

source: website www.ctengg.amu.ac.inc

Table IV

Range of marks in %	Letter Grade	Points for calculation of GPA/CGPA
X to (X-K)+1	A+	10
X-K) to $(X-2K)+1$	A	9
(X-2K) to $(X-3K)+1$	A-	8
(X-3K) to $(X-4K)+1$	B+	7
(X-4K) to $(X-5K)+1$	В	6
(X-5K) to 50	С	5
Below 50	F	0
Failure due to lack of attendance	FA	0

source:www.nordiccentreindia.com

Table V

Range of Marks in %	Letter Grade	Points for calculation of GPA/CGPA
81 -100	A+	10
71 - 80	Α	9
66 - 70	A-	8
61 - 65	B+	7
56 - 60	В	6
50 - 55	С	5
Below 50	F	0

source:www.nordiccentreindia.com

Table VI

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Letter	% of marks	Grade	performance
Grade	obtained	Point	
0	80 and above	10	Outstanding
A	75 to 79.99	9	Excellent
В	70 to 74.99	8	Very Good
С	60 to 69.99	7	Good
D	55 to 59.99	6	Fair
E	50 to 54.99	5	Average
P	45 to 49.99	4	Pass
F	Less than 45.00	0	Fail

Source: famt.ac.in/universitymumbai.org

Table VII Cumulative Grade Point Average with 0-10 Point Scale

Letter Grade	Grade Point	In words
S	9-10	Excellent(top students)
A	8-9	Very Good
В	7-8	Good
С	6-7	Satisfactory Work
D	4-6	Sufficient (passed)
E	3-4	Not sufficient (fail)
U	0	Unfair Behavior

Source: www.vit.ac.in and www.iitk.ac.in

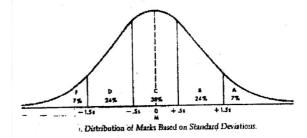


Figure I Distribution of marks based on standard deviation

Conclusion

Grading system is lesser prone to error than marking. All universities have their own pattern of evaluation. Therefore direct comparison of student of one university with that of another is difficult. Diversity in evaluation system followed by different varsities, students face problem in pursuing higher studies or applying for jobs. In a federal country like ours it is necessary to have a common pattern of evaluation. To bring comparability maintain uniformity, and balances in the evaluation procedure in all the educational institutes of higher learning the study reveals that:

- 1. All universities in India should adopt common range of marks to determine grades on the basis of percentage.
- 2. All universities should grade the academic achievement of the students on relative grading.
- 3. All universities should be adopt cumulative grading to bring uniformity and maintain balances in the evaluation.
- 4. Grades should be followed by relative statement of quality and value by using relative description.
- 5. In some subjects particularly related to language and social sciences it is difficult to get excellent grade while in the subject like mathematics there are some students who score 100%. It will create controversy over grading in different subjects. Grading on the curve is better solution to overcome the problem and it will help to bring uniformity and comparability.
- 6. To make grading system uniform and familiar to all concerns grading system should be clearly explained in our curriculum. All concerns to be made acquainted with grading rules and proper attitude should cultivated through workshops/seminars so that grading system should be successful and maintain uniformity, comparability of academic achievement of the students at higher learning.

Significance of the Study

- 1. This study is guided to make training programme for Teachers to be made acquainted with grading rules and proper attitude should cultivated at all level of education so that grading system should be successful and maintain uniformity, comparability in academic achievement of the students.
- 2. The study focused on diversity in evaluation system followed by different varsities, students face problem in pursuing higher studies or applying for jobs. It is very important in the current situation keeping pace with the positive impact of globalization on Indian employment.

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