Koneru Lakshmaiah Education Foundation
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OFFICE OF DEAN ACADEMICS

Policy Document

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Title: Relative Grading System

1. Policy:

Relative grading or norm-referenced grading is the process of-assigning letter grades to students on the basis of ranking them on their relative level of achievement in a particular group. This grading method should be adopted in courses where there is a need to benchmark the scores of the students classified to achieve outcomes through higher-order evaluation methods (i.e., application, creation, and evaluation).

2. Outcomes:

2.1 Enables students to work competitively with peer groups.

2.2 Promotes exploratory learning among the students

2.3 Encourages students to challenge themselves based on their relative position with other students in the group.

3. Guidelines for Relative Grading System:

3.1 In the Relative Grading System evaluation, we rank the student in a group on the basis of a higher relative level of achievement. Based on the semester performance, each student is awarded a final letter grade at the end of the semester in each course. In this method of grading, the decision on the median grade is made in relevance to the average scores of the students, and the other grades are derived in relevance to the median grade.

3.2 The difficulty level of the test does not affect this type of grading because it is based on the outcome of the comparative performance

3.2.1 Grading is on the normal curve, comparability across the curricular areas is easily possible

3.2.2 Undue emphasis on the raw score is minimized

3.2.3 Inter examiner variations are also minimized through this grading scheme.

3.2.4 The most common method of grading is of assigning grades based on a normal curve. That is why this type of grading is often called grading on the curve. The normal curve has certain characteristics as follows:

3.2.4.1 The curve is symmetrical around its vertical axis called ordinate and is asymptotic (expends from - ∞ to + ∞).

3.2.4.2 For the same distance above and below the mean, same percentage of cases lie, and it is always fixed provided that the distance is measured in standard deviation unit

3.3 Keeping in view the above two characteristics we may divide the curve into the desired number of parts each representing a specific category having relative ranking in terms of the level of achievement. For example, we may make the five categories on the curve as shown below:

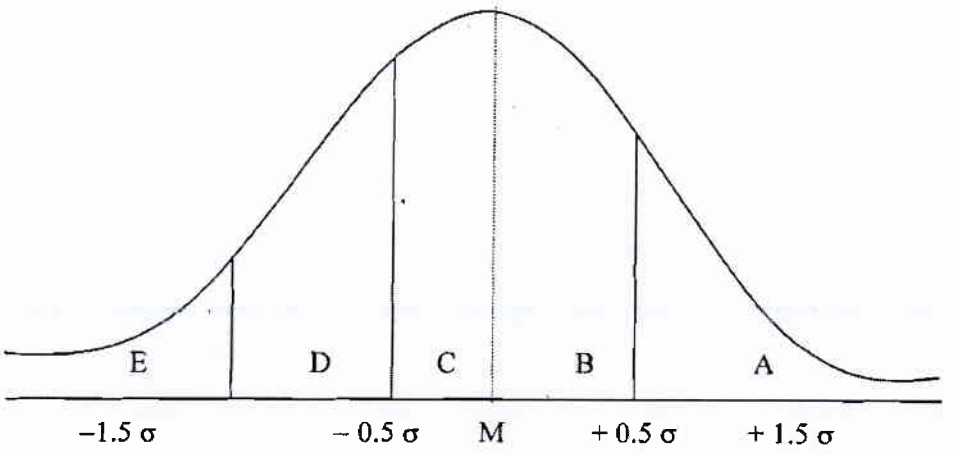

Figure 1. Normalization curve

3.4 Based on the marks obtained by a student in the internal and end semester examination in each theory and practical course, he/she is awarded with a letter grade.

3.5 At the end of each semester, based on the individual performance in a theory/practical course relative to the performance of the class in the particular course, each student is awarded a final letter grade.

3.6 Method of Awarding Letter Grades:

3.6.1 A final meeting of the Class Committee without the student members will be convened within seven days after the last day of the End-Semester Examination. The letter grades to be awarded to the students for different courses will be finalized at the meeting.

3.6.2 Along with the summary sheet, a copy of the result sheet (Grade Sheet) for each course, containing the absolute marks, the final grade and attendance code will be submitted by the Course teacher/Class Coordinator to the Class Committee Chairman concerned.

3.6.3 After finalization of the grades at the Class Committee meeting, the Grade Summary Sheet and the Grade Sheet of the individual courses will be endorsed and forwarded by the Class Committee Chairman to the Dean (Academic).

3.7 Model Student Performance Interpretation:

3.7.1 We may assign A, B, C, D, and E to these five categories as shown below:

Intervals of curve	Letter grade	Grade value
1.5 σ to ∞	A	4
0.5 σ to 1.5 σ	B	3
- 0.5 σ to 0.5 σ	C	2
- 1.5 σ to - 0.5 σ	D	1
- ∞ to 1.5 σ	E	0

3.7.2 Similarly, the curve may be divided into seven or nine parts. The grade-wise distribution of cases for nine-point grade system is illustrated below:

Intervals of curve	Letter grade	Grade value
1.75 σ to ∞	O	10
1.25 σ to 1.75 σ	A+	9
0.75 σ to 1.25 σ	A	8
0.25 σ to 0.75 σ	B+	7
- 0.25 σ to 0.25 σ	B	6
- 0.75 σ to - 0.25 σ	C	5
- 1.25 σ to - 0.75 σ	P	4
- 1.75 σ to - 1.25 σ	F	0
- ∞ to 1.75 σ	Ab	0

From the above two illustrations that in the method of grading on the curve, a fixed percentage of subjects depending upon their relative performance in a test, is awarded a particular grade.

4. Preparation of students for PBL through relative grading system:

4.1 The fair relative grading system should contain three factors:

4.1.1 It should accurately reflect differences in student performance

4.1.2 Grading should be clear to students so that they can chart their own performance

4.1.3 Grading should be fair allowing the students to exhibit their attainment through various forms.

4.2 In order to make sure a fair relative grading system in academics, the following procedures can be adopted:

4.3 Early to start a semester, a pretest on the relevant subject area is to be conducted to understand the level of knowledge among the students on the background of the subject and it includes:

4.3.1 Communication skills

4.3.2 Subject-related background and

4.3.3 Pre-requisites (if any)

4.4 Based on the performance in the pretest, bridge courses or workshops are to be arranged appropriately in order to ensure that the distribution of the students is as required in the planned range for the course.

4.5 Further, the bridge course helps students to make a successful transition into their new grading system by providing them with the necessary background knowledge.

4.6 Similarly, bridge courses can also help students to develop the skills and abilities that they need to succeed in their relative grading system.

4.7 The section should form a pool of peers with high, average, and below-average students and it must distribute equal proportions in a section.

4.8 The equal proportions of students in a section will play a vital role in their relative performance

4.9 In view of courses offered in advanced mode and Relative grading

4.9.1 Starting activity level for the advanced course must start with "apply"

4.9.2 Accordingly, the activities are to be categorized as level 1 (apply), level 2 (create), and level 3 (evaluate) for the course, and appropriate sensitization is done among the students on the level of activities planned across the various learning outcomes of the course.

4.9.3 Choosing the activities appropriate to the level of the students and moderating the same be done at regular intervals based on the performance and the feedback of the students.

4.9.4 Reflect on the level-based performance through the distribution of the scores and ensure that at the basic level, the distribution is better than the planned distribution.

4.9.5 Identification of the slow learners at the early stages through the level 1 activities be done and appropriate remedial classes be conducted to ensure their coping with the rest of the class students.

4.10 Upon the performance of the students found satisfactory by analyzing the outcomes of the activities planned appropriate to the level 1, the faculty may plan for the further activities with level 2 and measure the outcome attainment on the same.

4.11 The process may be repeated until the outcome attainment is satisfactory and higher most level be reached. However, there is no compulsion that in all the PBL based activities, the highermost level be ensured.

5. Planning for the Project-Based Learning

5.1 Teachers to undergo necessary training during the SRP by involving industry personnel or experts in the relevant domain

5.2 Identify the background knowledge required and other associated content the student should be assessed on in order to enhance the effectiveness of the course to be offered.

5.3 Identify the bridge courses the students be recommend in cases where their performance with respect to background knowledge is not satisfactory.

5.4 Plan the activities of the courses in all the categories viz level 1, 2 and 3

5.5 Prepare the necessary benchmarks for the activities viz coding competitions, hackathons, etc. appropriate to the level.

5.6 Prepare a plan for the distribution with respect to the levels and compare them with the actual attainment to know the gaps.

5.7 Prepare a plan for the remedial action to be taken after the activities and the ways to handle slow learners.

5.8 In cases of transition from the non-PBL to PBL mode of learning, analyze the performance of the students on their previous subjects with a weightage towards the courses to be offered through PBL. In all such cases, the performance of the students on the Higher Order Thinking skills-based questions acts as an indicator to determine their readiness for PBL.

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